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Radosveta Dimitrova
Nora Wiium *Editors*

Handbook of Positive Youth Development

Advancing Research, Policy, and Practice
in Global Contexts

 Springer

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Radosveta Dimitrova • Nora Wiium
Editors

Handbook of Positive Youth Development

Advancing Research, Policy,
and Practice in Global Contexts

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Foreword

For a long time, the “deficit” view on the development of young people has dominated the field of adolescent psychology, where adolescents are seen as “problems to be fixed”. Under such a view, researchers overlook the developmental potentials of young people as well as the importance of developmental contexts such as risk and protective factors in shaping adolescent development. Since the past few decades, there has been an alternative view highlighting developmental plasticity and potentials of young people as well as the important role of developmental contexts in adolescent development. Positive youth development (PYD) represents such a perspective with different approaches focusing on adolescent developmental possibilities and thriving.

Unfortunately, there are several limitations of PYD research and applications in the scientific literature. First, most of the studies are “WEIRD” research with over-representation of participants recruited from Western, educated, industrial, rich and democratic societies. In contrast, studies conducted in non-Western and relatively “less” educated, industrial, rich and democratic societies are few. Besides, as cultural ideals for adolescent development vary greatly across cultures, there is a need to understand the role of PYD in adolescent development with reference to the “cultural universality versus relativity” issue. Second, most of the studies in this field are quantitative research with few studies adopting mixed-methods research approach. Besides, although there are some validated PYD tools in the field, most studies recruited adolescents from Western societies. Methodologically speaking, measurement is the heart of quantitative research. Hence, without validated tools, research and applications of PYD cannot be properly done. Third, while researchers in different fields such as prevention science, psychology, education and public health have worked on PYD research and applications, there is no intensive inter-disciplinary collaboration amongst researchers and practitioners in different fields. Fourth, although PYD intervention programmes are common in the West (particularly in the United States), very few validated programmes exist in non-Western contexts. Besides, the extension of research and intervention to youth policies is not strong. Fifth, most PYD studies are confined to adolescents with few attempts extending them to emerging adulthood. As late adolescence is closely related to emerging adulthood, there is a need to expand the work on PYD in adolescence to emerging adulthood. Sixth, although there are many PYD models, not much work has attempted to integrate different theoretical models particularly with reference

to cultural variations. Finally, more work is needed to understand how different developmental contexts (such as personal, school, family, community factors) contribute to positive youth development. For example, how family processes contribute to PYD remains to be demonstrated in different cultures.

With reference to the above limitations, this handbook is a very constructive and valuable response. Regarding the limitation of WEIRD research, this handbook has research examples from many parts of the world, including India, Indonesia, Pakistan, Malaysia, China, Ghana, Colombia, Peru, Mexico, Belize, Brazil, Albania, Kosovo, Macedonia, Serbia, Turkey, Italy, Spain, Iceland, Norway, Australia, New Zealand, Bulgaria and Romania ($N = 22,083$). Collection of data across different countries is an obvious breakthrough in the field of PYD. The findings can inform us about the culturally universal versus relative role of PYD in the development of young people. Concerning diversity of research methods, besides quantitative research studies, this handbook has a chapter on the evaluation of a PYD programme based on mixed-methods study. Besides, there are several chapters covering the psychometric properties of PYD assessment tools in different societies. Such work is very important because development of objective measures of PYD can facilitate research and applications in this field. As far as the involvement of experts in different fields is concerned, this handbook is an exemplar illustrating how PYD researchers and practitioners in different disciplines can work together to promote the scholarship and applications of PYD theories and research findings. This is very important because cross-disciplinary and cross-cultural collaboration amongst colleagues in different disciplines is not intensive in the field of PYD.

Another attractive feature is that in 19 chapters of the handbook, intervention models and related work in different societies are outlined, including works in China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, Jamaica, South Africa, Slovenia, Lithuania, Finland, Norway, Canada and the United States. Again, such experience and findings are important to evaluate the application of PYD theories across different societal and cultural contexts. Theoretically, several chapters in this handbook discuss the 7Cs and developmental assets models of positive youth development in several countries as well as the usefulness of the 7Cs model to enhance mindfulness in emerging adults. There is also a chapter that discusses the 5Cs model and the Project P.A.T.H.S. in different Chinese contexts, which utilizes 15 PYD constructs. These chapters are important as far as theory development in the field of PYD is concerned. Finally, several chapters in this handbook clarify how different developmental contexts and factors influence PYD in young people. These chapters have increased our understanding of the antecedents and consequences of PYD, particularly in different cultural contexts.

In short, this handbook has three important contributions to the PYD field. First, it significantly promotes our understanding of the conceptual and empirical knowledge foundations across the globe. Second, the related work promotes our understanding of the measurement issues surrounding the assessment of PYD in neglected societies. Finally, the handbook highlights

the value of applying PYD theories and research to intervention programmes to promote the well-being of adolescents and emerging adults.

This handbook constitutes an important milestone in the scientific literature on PYD. I highly recommend this valuable work to researchers, practitioners, policy makers, students and other stakeholders who are committed to the advancement of scholarship of PYD and promotion of thriving in adolescents and emerging adults.

Daniel T. L. Shek, PhD, FHKPS, BBS, SBS, JP
Chair Professor of Applied Social Sciences,
Li and Fung Professor in Service Leadership Education,
Associate Vice President (Undergraduate Programme),
Changjiang Scholar (Changjiang Chair Professor)
The Hong Kong Polytechnic University,
Hung Hom, Hong Kong

Handbook Flyer

The *Handbook of Positive Youth Development* (PYD) presents the most comprehensive collection of empirical evidence on PYD among youth and emerging adults yet assembled. Several unique and outstanding features set this handbook apart from current books on PYD strength-based developmental approaches. Novel contributions, large samples from underrepresented parts of the world, and global approaches to research, policy, and practice are all championed and contained within this volume.

Key Features

- Promotes the new generation of PYD scholarship across vast geographic regions (e.g., Europe, Asia, Africa, Middle East, Australia, New Zealand, and North and Latin America) in 38 countries with empirical contributions that total responses from 22,083 youth and emerging adults living in various parts of the globe
- Offers an unprecedented collection of cutting-edge contributions by prominent scholars from different corners of the world who incorporate PYD models in their respective research traditions and countries, especially in underrepresented and under-researched contexts
- Advances theoretical and empirical knowledge base on PYD in global contexts as well as methodological issues and PYD measurement in under-researched contexts
- Integrates PYD scholarship with relevant research, policy, and practice
- Documents stellar accomplishments in the current PYD field, while providing promising avenues about where and how future outlook and initiatives can be most fruitfully and effectively implemented

Readership

- A broad spectrum of readers and a wide range of social scientists, students, professionals, policy-makers, and practitioners from a variety of disciplines, such as positive, developmental, cross-cultural, social and community psychology; well-being; child and family studies; education; prevention; intercultural relations; anthropology; sociology; methodology; counseling; emerging adulthood; and intervention and implementation science

About the Handbook

This handbook advances positive youth development (PYD) scholarship among youth and emerging adults from a global international perspective. Its outstanding feature is the focus on a strength-based conception of development in large, underrepresented cultural groups. The volume stands apart from current books on PYD by focusing on vast geographic regions (e.g., Europe, Asia, Africa, the Middle East, Australia, New Zealand, and the Americas) and fresh international perspectives. Noteworthy highlights are (1) advancement of theoretical and empirical knowledge base on PYD in global contexts; (2) refinement of methodological issues and PYD measurement in under-researched contexts; (3) integration of PYD scholarship with relevant research, policy, and practice. A prominent theme regards the promotion of the new generation of PYD scholarship in underrepresented global contexts. The handbook is organized along two major categories for a total of 37 chapters across 38 countries representing voices from 22,083 youth and emerging adults living in various parts of the world. *Part I: PYD in Global Contexts* presents 17 chapters with new PYD conceptualizations (the 7Cs model) and research examples from India, Indonesia, Pakistan, Malaysia, China, Ghana, Colombia, Peru, Mexico, Belize, Brazil, Albania, Kosovo, Macedonia, Serbia, Turkey, Italy, Spain, Iceland, Norway, Australia, New Zealand, Bulgaria, and Romania. *Part II: PYD Applications and Interventions* presents 18 chapters on innovative approaches, reviews, and programs in a noteworthy diverse contexts in China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, Jamaica, South Africa, Slovenia, Lithuania, Finland, Norway, Canada, and the United States. With unique contributions, diverse samples, and global approaches to research, policy, and practice, this handbook offers a comprehensive and inclusive collection of PYD conventional and contemporary perspectives to a wide range of social scientists, students, professionals, policy-makers, and practitioners from a variety of disciplines (positive, developmental, cross-cultural, social and community psychology, well-being, child and family studies, education, prevention, intercultural relations, anthropology, sociology, methodology, counseling, emerging adulthood, and intervention and implementation science).

Acknowledgments

This handbook is a product of many years of work by scholars, professionals, and colleagues who contributed to this volume through scientific contributions and extraordinary support. Much appreciation is extended to each of the contributors for the wonderful collaboration in creating this volume. The editors are profoundly grateful to their dedication to integrate PYD topics in their research and represent a variety of cultural contexts. Compiling such a large volume with a multidisciplinary global scope and outreach was an ambitious and substantial undertaking, and we acknowledge their commitment in patiently working through the complex subject matter represented in each chapter.

A heartfelt gratitude goes to all youth and emerging adults who participated in the projects and studies represented in this volume. Their participation gave us an unique opportunity to work together and share their experiences and achievements. The commitment of colleagues in various projects represented here and the contribution of young people in each country were exceptional, without which this volume could not exist.

A particular gratitude is expressed to Daniel Shek (The Hong Kong Polytechnic University) for writing the foreword and John Geldhof, Svea Olsen, and Asia Thogmartin (Oregon State University, USA) for writing the concluding chapter of this volume.

We are also deeply grateful to leading scholars in a variety of disciplines, such as developmental science, human development, international and cross-cultural psychology, emerging adulthood, and prevention and intervention science, for providing the set of extraordinary endorsements for this volume: John Berry (Emeritus Professor of Psychology at Queen's University, Canada and Research Professor at the Higher School of Economics, Russian Federation), Gregor Burkhart (Principal Scientific Analyst at the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)), Cynthia García Coll (Adjunct Professor at the University of Puerto Rico Medical Science Campus), and Charles Pitts Robinson and John Palmer Barstow (Professor Emerita, Brown University, USA), Christine McCauley Ohannessian (Professor of Pediatrics and Psychiatry, University of Connecticut School of Medicine and Director, Center for Behavioral Health Research Connecticut Children's Medical Center, USA), Anne C. Petersen (Research Professor at the University of Michigan, USA), Ype H. Poortinga (Emeritus Professor of Cross-Cultural Psychology, Tilburg University, the Netherlands and Catholic University of Leuven, Belgium), Grant J. Rich

(Senior Contributing Faculty Walden University, USA), Eugene C. Roehlkepartain (Senior Scholar, Search Institute, USA), Seth J. Schwartz (Professor of Public Health Sciences at the Leonard M. Miller School of Medicine, University of Miami, USA), Laurence Steinberg (Distinguished University Professor of Psychology, Temple University, USA), Kazumi Sugimura (Professor of Psychology at Hiroshima University, Japan), Peter F. Titzmann (Professor for Developmental Psychology at Leibniz University Hanover, Germany), John Toumbourou (Professor and Chair in Health Psychology, Centre for Social and Early Emotional Development, Deakin University, Australia), and Hirokazu Yoshikawa (Courtney Sale Ross Professor of Globalization and Education, Co-Director, Global TIES for Children (Transforming Intervention Effectiveness and Scale) Center, New York University, USA)).

The editors of this volume have been particularly fortunate to have scholarly support and editorial guidance from Professor Nirbhay N. Singh, the Editor of the Springer *Child and Family Studies* series and feel honored to have this *handbook* in his series. Special acknowledgements go to Judy Jones, Senior Editor and Arjun Narayanan, Project Books Coordinator at Springer. Their support, wonderful foresight, and wise editorial guidance enabled the efficient accomplishment of this volume.

The contributors of this handbook have benefited from the scholarly guidance of a multidisciplinary international team of external reviewers, whose expert feedback is deeply acknowledged. We are particularly grateful to Alfonso Osorio (University of Navarra, Spain), Ana Kozina (Educational Research Institute, Slovenia), Arzu Aydinli-Karakulak (Bahçeşehir University, Turkey), Ayfer Dost-Gözkan (Ozyegin University, Turkey), Betty Tjipta Sari (Tilburg University, the Netherlands), Byron Adams (Tilburg University, the Netherlands), Chris Napolitano (Illinois College of Education, USA), Corine Tyler (Oregon State University, USA), Danielle Fernandes (Addictions Research Group, India), David Sam (University of Bergen, Norway), Diana Miconi (McGill University, Canada), Diego Gomez-Baya (University of Huelva, Spain), Fitim Uka (University of Prishtina “Hasan Prishtina” and Psycho-Social and Medical Research Centre, Kosovo), Francesca Lionetti (Queen Mary University of London, UK), Gabriela Jiskrova (Virginia Commonwealth University, USA), Goda Kaniušonytė (Mykolas Romeris University, Lithuania), Grant Rich (Walden University, USA), Guilhelme Welter Wendt (Western Paraná State University, Brazil), Inga Truskauskaite (Vilnius University, Lithuania), John Geldhof (Oregon State University, USA), Jun Wang (Texas A&M University, USA), Kaltrina Kelmendi (University of Prishtina, Kosovo), Laura Ferrer-Wreder (Stockholm University, Sweden), Linda Hoxha (University of Prishtina, Kosovo), Magaly Aceves Martins (University of Aberdeen, UK), Magdalena Bobowik (Pompeu Fabra University, Spain), Marianna Kotic (Scientific-Cultural Institute Mandàla, Italy), Martie Skinner (University of Washington, USA), Meenal Rana (Humboldt State University, USA), Mihaela Gotea (Transilvania University of Brasov, Romania), Nicole Ja (Applied Survey Research, USA), Oriola Hamzallari (Aleksander Moisiu University, Albania), Sara Johnson (Tufts University, USA), Sena Cure Acer (Bahçeşehir University, Turkey),

Shaobing Su (Boston College, USA), Stefanos Mastrotheodoros (Utrecht University, the Netherlands), Steven Krauss (Universiti Putra Malaysia, Malaysia), and Yoko Yamamoto (Brown University, USA).

This volume has been finalized with the invaluable editorial assistance and help of Denisse Manrique-Millones, Diana Miconi, Laura Ferrer-Wreder, Alejandra del Carmen Domínguez Espinosa, Oriola Hamzallari, Corrado Fumis, and Alberto Tebaldi, who are greatly acknowledged for their diligent work.

Endorsements

“The cross-cultural examination of any behavioral domain benefits our understanding of them by expanding our knowledge base and thus by providing the possibility of discovering some general, general principles of human development and activity. This volume achieves these goals by examining positive youth development in numerous societies, and synthesizing the evidence into novel theoretical frames, and empirical generalizations.”

John Berry
Emeritus Professor of Psychology
Queen’s University, Canada
Research Professor
Higher School of Economics
Russian Federation

“At the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), we have been monitoring prevention for over 25 years and are promoting evidence-based prevention interventions in Europe and its neighborhood countries. I very much welcome this *Handbook* as an important step towards a further approximation and field integration between health promotion and prevention. Here, on the one hand, we need a more positive framing for prevention: the classical association of “prevent something bad from happening” is difficult to communicate to the public as a motivational message. On the other hand, we need a more concrete, measurable and operational concept than “health promotion”. Positive Youth Development is a promising term and approach for these conceptual challenges and it is good to see in this *handbook* that it is applicable across all cultures and contexts.”

Gregor Burkhardt, MD, MPH
Principal Scientific Analyst
European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)
Portugal

“This is an exciting collection of studies that make a great contribution to the field of child and adolescent development. It surmounts one of the main criticisms of our science: the preponderance of studies conducted with WEIRD populations. It is not only important in increasing our understanding of how to promote positive developmental outcomes in very diverse populations, but

it documents the mechanisms in many understudied populations. I congratulate the editors and contributors on opening our eyes on how developmental science should operate!”

Cynthia García Coll, PhD
Adjunct Professor
University of Puerto Rico
Medical Science Campus
Charles Pitts Robinson and
John Palmer Barstow Professor Emerita,
Brown University, USA

“The *Handbook of Positive Youth Development* explores psychosocial, individual and contextual factors associated with Positive Youth Development (PYD) using a broad, global, cultural lens. The contributions are based on diverse samples and are innovative in regard to theory and methodology. The comprehensive *Handbook* of PYD provides a solid foundation for future research, and has implications for prevention and intervention programs, policy, and clinical practice. It is an essential resource for scholars, educators, health professionals, policy makers, and clinicians devoted to improving the health of youth worldwide!”

Christine McCauley Ohannessian, PhD
Professor of Pediatrics and Psychiatry
University of Connecticut School of Medicine, USA

“This groundbreaking volume, with 37 chapters including data from 38 countries globally, presents an expanded conceptual model for positive youth development, 7Cs that captures strengths of young people in many different geographic contexts globally, with an emphasis on low and middle income countries. Radosveta Dimitrova, editor of the volume with Nora Wiium, has developed research collaborations with most of the authors presenting data and other authors working in this field with similar concepts. This outstanding volume, with authors and data as well as deep cultural knowledge from all six populated continents, provides an outstanding platform for subsequent research globally.”

Anne C. Petersen, PhD
Research Professor (Adjunct)
University of Michigan, USA

“In several respects this *Handbook* sets a standard for research in an exciting phase of life, young adulthood. Most striking is that the reported research is inclusive, not being limited to affluent countries and groups. Other commendable features include emphasis on positive developmental assets; empirical studies organized around a common framework with attention to methodological and psychometric issues of cross-cultural comparison; and the simultaneous probing of a set of dimensions important for psychosocial functioning everywhere.”

Ype H. Poortinga
Emeritus Professor of Cross-Cultural Psychology
Tilburg University, Netherlands
Catholic University of Leuven, Belgium

“This *Handbook* focuses upon a critical and timely issue: positive youth development in international context. The editors have carefully crafted a well-written and informative selection of chapters on this theme, sensibly organizing and integrating quality research from diverse perspectives, with representation from many less examined nations in psychology, from Belize and Jamaica, to Albania, Peru and South Africa. In sum, the 37 chapters impressively represent responses from over 22,000 youth and adolescents around the globe, making a significant contribution to psychological knowledge relevant for researchers, educators, policy makers and all interested in the well-being of young people.”

Grant J. Rich, PhD
Senior Contributing Faculty
Walden University, USA

“The *Handbook of Positive Youth Development* marks a transformative moment in burgeoning field of positive youth development. In the early 1990s, the founders of the PYD movement could, and sometimes would, sit around a single conference table – inevitably in the United States. Three decades later, we could say that many of the leaders have gathered in this volume, and they definitely could not sit around a conference table, and they definitely would not be in the United States. They come from almost 40 countries around the world, bringing a rich and diverse tapestry of theoretical, empirical, policy, and practice insight that both reflect and reinforce the core, guiding principles of PYD while also dramatically expanding and deepening our understanding of youth development and thriving. What started as a small group of practitioner-scholars challenging deficit-focused interventions has grown – as this *volume* documents – into an international movement that is now foundational to how we understand adolescence in the twenty-first century.

Nowhere is this transformation more evident than in the ways the scholars in this *volume* affirm emphasizing cultivating strengths as universally relevant for human development, while also emphasizing the need to simultaneously contextualize the approach to young people’s unique culture and context. By showing this integrative process at work in specific populations in Asia, Africa, Europe, and elsewhere, these scholars demonstrate the power of approaching young people with an assumption of strengths and doing so with a commitment to listening to their voices and understanding their lives, challenges, needs, and aspirations with specificity, rather than through the lenses of our own cultures, assumptions, and biases.

From the beginning, another core principle of positive youth development has been to contextualize youth development in a broader system or ecology of development. In other words, young people grow up in and are shaped by a

wide range of relationships and experiences in all areas of their lives, from their family to their friends to their village or community to social media. We can extrapolate from this principle a critique of the early research on positive youth development: U.S. scholars and practitioners – not to mention U.S. leaders, corporations, and citizens – have too often failed to position ourselves as co-equal partners in a global, interconnected system or network of knowledge, scholarship, and mutual discovery regarding human development. That myopia has undermined the quality and applicability of our work across diverse populations, even within the United States.

So the deep commitment of the scholars behind this *handbook* is a tremendous contribution that fills critical gaps, and I certainly hope that this *volume* unleashes another generation of significant and groundbreaking scholarship and practice that enhances PYD work around the world. At the same time, perhaps selfishly, I hope that this *handbook* and the new scholarship that follows also captures the attention and reframes the perspectives of every PYD scholar and practitioner in the United States. We, too, must stop to listen to and learn from these and other important voices from around the world. Not only will it enrich our own work in the United States, but I hope it moves us to understand ourselves as collaborative colleagues in a global network of colleagues seeking to understand and strengthen the systems, opportunities, and relationships that cultivate the unique strengths and reduce the specific risks facing young people in each part of the world so they can thrive and become transformational leaders in a world of increased complexity and interconnectedness.”

Eugene C. Roehlkepartain, PhD
Senior Scholar, Search Institute
Minneapolis, Minnesota, USA

“This *volume* brings together international scholarship on positive youth development across a variety of disciplines. Chapters explore the structure of positive youth development; its embeddedness within family, peer, and community contexts; and interventions to promote positive youth development within a variety of national and regional contexts. The *volume* is indispensable for anyone seeking to understand and utilize positive youth development from a global perspective.”

Seth J. Schwartz, PhD
Professor of Public Health Sciences
Leonard M. Miller School of Medicine
University of Miami, USA

“By and large, research on positive youth development has focused on young people from Western, developed nations and, especially from the United States, England, and Australia. This *handbook*, which gathers research from leading scientists around the world, including those from Africa, Asia, Europe, and North and South America, is a much needed corrective. The

volume is an invaluable resource for scholars interested in how to facilitate positive development during this critical developmental period.”

Laurence Steinberg, PhD
Distinguished University Professor of Psychology
Temple University, USA

“The *Handbook of Positive Youth Development* not only provides the most comprehensive knowledge of innovative research and practice on optimal youth development across the globe, but it also stimulates us – researchers, practitioners, and policymakers – to further make commitments to young people in respective cultures and societies. This *handbook* is full of resources for making youth thrive in their social world, and many of these resources developed by scholars in one country can be applicable for scholars in other countries – regardless Western and non-Western cultures.”

Kazumi Sugimura, PhD
Professor of Psychology
Hiroshima University, Japan

“This unique *volume* will substantially advance our understanding of development in a multicultural world. It is the first handbook that presents a truly global perspective on Positive Youth Development with scientific views from all continents. As development always takes place in continuous exchange between the developing individual and the surrounding cultural context, scientists and practitioners have to take these views into consideration when conducting research or planning interventions – for country comparisons, but also within increasingly multicultural societies.”

Peter F. Titzmann
Professor for Developmental Psychology
Leibniz University Hanover
Germany

“This *handbook* includes multi-disciplinary contributions of Positive Youth Development (PYD) research and practice across the globe. The wide range of international contributors enables constructs and applications to be assessed across diverse cultural contexts. The *handbook* will provide a firm basis to encourage PYD in the aftermath of the global Covid-19 pandemic.”

John Toumbourou, PhD
Professor and Chair in Health Psychology
Centre for Social and Early Emotional Development
Deakin University, Australia

“This landmark *handbook* shatters prevailing assumptions that youth development research is based in risk, pathology, and Western values. By presenting rich data and implications for practice and policy from 38 countries

around the world, this *volume* forms a collective blueprint for how the positive development of youth, grounded in culture and local contexts, can form the foundation of sustainable societies.”

Hirokazu Yoshikawa, PhD

Courtney Sale Ross Professor of Globalization and Education

Co-Director, Global TIES for Children

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New York University, USA

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Part I

**Positive Youth Development in Global
Contexts**



Handbook of Positive Youth Development: Advancing the Next Generation of Research, Policy and Practice in Global Contexts

Radosveta Dimitrova and Nora Wiium

Abstract

This chapter introduces the Handbook of Positive Youth Development (PYD) aiming to advance PYD scholarship among youth and emerging adults from a global international perspective. Noteworthy highlights regard (1) advancement of the theoretical and empirical knowledge base on PYD in global contexts; (2) refinement of methodological issues and measurement in under researched contexts; (3) integration of PYD scholarship with relevant research, policy, and practice. A prominent theme is the advent of a new generation of PYD scholarship in underrepresented global contexts and vast geographic regions (e.g., Africa, Asia, Australia, Europe, Middle East, New Zealand, North and Latin America). The *handbook* is composed by *Part I PYD in Global Contexts and Part II PYD Applications and Interventions* with a total of 37 chapters

across 38 countries. Several chapters have an original empirical basis and involve in total, responses and voices from 22,083 youth and emerging adults in diverse parts of the world. With unique contributions, large samples and global approaches to research, policy and practice, this volume presents the most comprehensive and inclusive collection of empirical evidence on PYD among youth and emerging adults yet assembled. The outstanding cast of contributors clearly documents stellar accomplishments in the current PYD field, while providing creative and promising avenues about where future outlook and initiatives would be most fruitfully and effectively implemented.

Keywords

PYD · 5Cs model · 6Cs model · 7Cs model · Developmental assets · PYDAC project · Adolescents · Emerging adults · Research · Policy · Practice

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Over the past decades, Positive Youth Development (PYD) scholarship has exploded within the social and health sciences, delineating the conditions and specifying the processes integrated into developing optimal well-being, thriving and success among young people. Reasons

for this explosion of interest involve the operationalization of PYD as an approach to understand pathways to successful social and individual well-being, including the evidence that PYD can have substantial psychological and health benefits and improve a range of developmental competences among young people. Insights and evidence from such scholarship have provided a greater understanding of how PYD mechanisms develop, leading to new individual and population level strategies to optimize health and well-being by minimizing the impact of adversity, increasing protective factors, and targeting PYD-promoting interventions. This rise in the scope and significance of the PYD field has opened up new avenues for policy and practice to connect and be informed by this rapidly expanding evidence base that is relevant and derived from evidence in psychology, public and mental health, education, community development, social welfare, prevention and implementation science. Concomitantly, there is a strong impetus among researchers to continue to fill the substantial gaps in PYD scholarship as to ensure inclusive, methodologically sound and novel research coverage among young people in global contexts that appropriately reflect relevant findings and applications in social, psychological, clinical, public health, or public policy settings.

In response to this burgeoning knowledge, this *handbook* represents a groundbreaking effort to expand the PYD field globally with innovative conceptual and methodological approaches as to provide researchers, policymakers and practitioners with guidance regarding the kinds of interventions and actions that can be beneficial, and to lay the foundation for a research agenda that identifies high priority areas for further investigations to strategically target resources and advance PYD scholarship. In so doing, the *handbook* presents contributions that advance a new generation of PYD scholarship globally and in marginalized understudied contexts, organizing newly produced scientific knowledge and areas of growth in PYD across the globe, making available resources known for those interested in this work. Throughout the volume, the focus is on being culturally inclusive and responsive to the

diverse needs and experiences of young people in a global perspective as to provide a better contextual understanding of the variety of life experiences and settings and promote positive development as a global science.

This introductory chapter begins by providing an overview of the main models of PYD represented in the volume namely, the developmental assets (Scales, Roehlkepartain, & Shramko, 2017), the 5Cs and 6Cs models of PYD (Burkhard, Robinson, Murray, & Lerner, 2019; Geldhof et al., 2015) and the newly developed 7Cs model of PYD among young people in a variety of cultural contexts (Dimitrova, Fernandes, et al. [this volume](#)). Further, a rationale for the publication, the vision and structure of this volume is provided with information about sections and contributions of the various experts with multidisciplinary backgrounds and diverse disciplines of psychology, public health, environmental science, sociology, family studies, prevention and intervention science. This section is supplemented by a content overview including the main scope and three major aims addressed in the volume (1) advance the theoretical and empirical knowledge base on PYD among young people as well as processes by which PYD affects their developmental outcomes in a global perspective; (2) expand understanding on methodological issues and provide knowledge base on PYD measurement in under researched and neglected contexts globally; (3) integrate scholarship on PYD with relevant research, policy and practice. Finally, readers are provided with a brief overview of the unique assets and incremental contributions of the volume to the PYD field, and conclusions on some of the challenges and next steps for further field building.

Positive Youth Development Models Represented in the Current Volume

This volume embodies conceptual and empirical contributions based on the currently most widespread and influential frameworks for understanding and strengthening positive youth

development—the developmental assets (Scales et al., 2017) and the 5Cs and 6Cs models of PYD (Geldhof et al., 2015). Further, the volume advances such scholarship by introducing a newly developed 7Cs model of PYD among youth and emerging adults in a variety of cultural contexts (Dimitrova, Fernandes, et al. [this volume](#)). Despite diversity of operationalization and applications, these models share similarities in the emphases on youth strengths and potentials as well as internal and external developmental assets.

The developmental assets model emphasizes the alignment between individual strengths, external opportunities and supports that help young people to achieve optimal development and adequate functioning (Scales et al., 2017). The model proposes 40 developmental assets (20 internal and 20 external assets) defined as individual strengths and environmental resources, which concern developmental process, experiences, social relationships, contexts and interactions beneficial for PYD. *Internal assets* refer to the individual positive traits such as commitment to learning (young people’s appreciation of the importance of continuous learning and belief in own capabilities, including achievement motivation, school engagement, school bonding); positive values (guiding principles to make healthy life decisions, including caring, social justice, integrity, honesty, responsibility); social competencies (skills for establishing effective interpersonal relationships and adapting to novel or challenging situations, including planning and decision-making, interpersonal/cultural competence, and peaceful conflict resolution) and positive identity (a sense of control and purpose as well as recognition of own strengths and potentials, including personal power, self-esteem, positive outlook). *External assets* reflect the positive features of environmental, contextual, and socializing systems of young people such as support (social and emotional support, care and acceptance including family support, positive family communication, and other adult relationships, caring neighborhood and school climate and parent involvement in schooling); empowerment (being valuable agent in making a contribution to

others and community, including community values and resources for young people, service to others and safety); boundaries and expectations (clear regulations for conduct with consequences for violating rules, and encouragement for young people to do their best, including family, school and neighborhood boundaries, adult role models, positive peer influence and high expectations); constructive use of time (opportunities to enjoy and develop new skills outside of school including creative activities and religious community; Scales et al., 2017).

In the past three decades, targeted instruments have been developed to measure the assets model such as the Attitudes and Behaviors: Profiles of Student Life and the Developmental Assets Profile used to survey more than five million young people around the world (Syvertsen, Scales, & Toomey, 2019). A substantial amount of cross-sectional and intervention work has provided strong empirical support for the utility of the assets model (Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#); Uka et al., [this volume](#); Wium & Kozina, [this volume](#)) consistently documenting that high levels of assets were related to fewer multiple risk behaviors and more thriving regardless of gender, ethnicity, socioeconomic status and geographic area (Scales et al., 2017; Syvertsen et al., 2019).

The 5Cs model developed by several researchers building on one another’s work emphasizes internal characteristics of youth that help them to grow into healthy adults. Initially the model comprised 4Cs of competence, character, connection and confidence (Pittman, Irby, & Ferber, 2000) supplemented by the 5C of caring (Lerner, 1995) and the 6C of contribution (Pittman et al., 2000). *Competence* includes cognitive, social, academic and vocational competences. Cognitive competence denotes problem-solving skills, and decision-making. Social competence refers to conflict resolution skills. Academic competence reflects school grades, school attendance and achievement. Vocational competence indicates work habits and the ability to explore different

career choices. *Confidence* refers to the individual's view of own positive value and capacities. *Connection* concerns an individual's positive and healthy relationships with other people and organizations. *Character* denotes morality, integrity, internal value standards for right behaviors and respect for social and cultural regulations. *Caring* represents the ability to sympathize and empathize with others. *Contribution* signifies the need for young people to engage with their communities and the society (Geldhof et al., 2015).

As for the assets model, targeted instruments such as the PYD Short Form and the PYD Very Short Form have been developed to measure the 5Cs and 6Cs model (Geldhof et al., 2014). These instruments have been widely used in cross-sectional, longitudinal and intervention research consistently documenting that the 5Cs and 6Cs promote better developmental outcomes among adolescents in the United States (Dvorsky et al., 2019; Geldhof et al., 2014, 2015; Shek, Dou, Zhu, & Chai, 2019), Europe (Conway, Heary, & Hogan, 2015; Dimitrova, Buzea, et al. [this volume](#); Dimitrova, Fernandes, et al. [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Erentaitė & Raižienė, 2015; Kozina, Wium, Gonzalez, & Dimitrova, 2019), Latin America (Dominguez, Wium, Jackman, & Ferrer-Wreder, [this volume](#); Manrique-Millones et al., [this volume](#)), Africa (Kabir & Wium, [this volume](#); Wium, Ferrer-Wreder, Chen, & Dimitrova, 2019), Asia (Abdul Kadir et al., [this volume](#); Chen, Wium, & Dimitrova, 2018; Dimitrova, Fernandes, et al., [this volume](#); Li, He, & Chen, [this volume](#)) and the Caribbean (Hull, Ferguson, Fagan, & Brown, [this volume](#); Hull, Powell, Fagan, Hobbs, & Williams, 2020).

The *7Cs model* expands on the 6Cs of PYD (competence, confidence, character, caring, connection and contribution) to include *creativity* conceived as a novel and adaptive, problem-solving ability meaningful within a social and cultural context (Batey, 2012; Said-Metwaly, Kyndt, & Van den Noortgate, 2017). The conceptualization of creativity is of particular relevance for the *7Cs model* complementing the 6Cs with the vital of solving individual, organizational and social problems and potential to enhance optimal

development (Barbot & Heuser, 2017; Lubart, Zenasni, & Barbot, 2013). Such conceptualization embedded in the *7Cs model* provides a supplement to currently predominant PYD models with a set of skills and knowledge to develop novel and original solutions that are useful and adaptive for success among young people in culturally diverse contexts.

The basic premise of the *7Cs model* emphasizes its potential to accelerate a PYD approach to global research, policy and practice agendas. In fact, the present volume contains pioneering empirical contributions on the *7Cs model* among youth and emerging adults across global cultural contexts in Asia (India, Indonesia, Malaysia and Pakistan) and Latin America (Colombia and Peru). These contributions provide evidence for the reliability and validity of the *7Cs model* in terms of measurement invariance (psychometrically reliable measurement across different populations), utility (appropriate use of measures), generalizability (applicability to various populations) as well as insightful and meaningful relations with the developmental assets, increased mindfulness, hopeful expectations for the future and reduced risky behaviors among culturally diverse samples of young people (Abdul Kadir et al., [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Manrique-Millones et al., [this volume](#)).

Origin, Vision, Organization and Targeted Audience of the Handbook

This *handbook* originates from the *Positive Youth Development across Cultures (PYDAC)* project initiated by the editors as a collaborative effort to gather wide international PYD research network. Inspired by the PYD perspective, the project applies a strength-inspired conception of development that is rooted in and relevant to a more global and culturally informed study of adolescence. The project gathers researchers interested in expanding PYD research, measurement and applications in a global international perspective (International Test Commission, 2017; van de

Vijver et al., 2019). The project represents partners from over 30 countries with expertise in diverse disciplines (e.g., psychology, public health, environmental science, sociology, family studies, prevention and intervention science), career development and publishing opportunities such as the special issue on PYD across cultures in *Child & Youth Care Forum* (Wium & Dimitrova, 2019).

Editorial Vision of this Handbook

This volume was conceived with a specific editorial vision to promote and enhance visibility and work by scholars across the globe predominately from outside of the United States or Western Europe. This vision is in line with the burgeoning PYD movement and the key advances that have been made in measurement in underrepresented and under researched countries, thanks to the voluntary work and strong motivation of leading scholars in these countries. Relatedly, a very clear vision for the *handbook* is to break the mold from a traditional handbook to champion and advance a more global voices, perspectives and impact, while promoting the new generation of PYD scholars globally and in largely neglected contexts. The chapter authors include many prominent scholars from different corners of the world who incorporate the available scientific literature in their respective countries. In fact, the contributors have been prominent in their fields even if their prominence and creative contributions are in some cases unknown to international readership.

Other equal priorities were to have a multidisciplinary perspective presented in the *handbook* as a source of new ideas and findings that represent the state of the science and are cutting edge and innovative. A cutting edge and expert oriented priority is not fundamentally at odds with speaking to a multidisciplinary audience, if appropriate attention and support is given to authors to walk this delicate balance. The aspiration to speak to experts and break down disciplinary barriers is fitting, given that developmental science is at its heart a multidisciplinary science,

and PYD is well rooted in contemporary developmental science. With these priorities in mind, contributors of the volume were encouraged and able to successfully navigate the tension between a striving to represent the state of the science and allowing for multidisciplinary communication, outreach, and impact.

Based on the editorial standpoint presented here, it is possible that the vision for this volume can be viewed as a different work in the sense that new voices from less heard parts of the world have a chance to speak. Equally important, a diligent editorial work had an eye to ensure the highest scientific quality level, and represent the state of the science in each chapter produced by contributing authors in this *handbook* in line with most recent scientific writing standards (American Psychological Association, 2020). The editors are confident that a culturally sensitive readership and global impact-oriented scholarship may conform to the editorial vision for this volume and open fruitful avenues for further replications and refinements.

Organization and Targeted Audience of the Handbook

This volume addresses relevant gaps in the literature by organizing chapters that reflect critical themes in advancing culturally responsive PYD scholarship and promoting key realms of research, policy and practice, while exploring interconnections across these realms. A major scope is to promote and advance a new generation of PYD scholars globally and specifically in traditionally underrepresented and understudied global contexts. The list of contributors is not exhaustive. For example, the number of PYD researchers in Asia is rapidly expanding. Nevertheless, through a range of contributors, this volume presents the current status of the research on culturally sensible PYD work with young people in a variety of contexts supplemented by innovative PYD approaches within these contexts.

This volume opens up with a *foreword* by Daniel Shek (The Hong Kong Polytechnic

University), one of the leading scholars in PYD research and intervention especially in Asia. In his brief overview, Shek summarizes a number of unique features and relevant conceptual and methodological contributions of this volume. The core of these contributions regards the significant advancement of our understanding of the conceptual and empirical knowledge and PYD foundations across the globe; the measurement issues surrounding the assessment of PYD in neglected societies and cultures as well as the application of PYD theories and research to intervention programs to promote well-being of adolescents and emerging adults globally.

In addition, the volume is supplemented with commentaries by a stellar cast of leading scholars from various disciplines such as developmental science, human development, international and cross-cultural psychology, prevention and intervention science, assessment, emerging adulthood studies, relevant research, policy and practice. These colleagues further expand on the unique features, breadth and depth of PYD oriented research, policy and practice in a global international perspective. Together, these contributions provide a set of extraordinary endorsements for this volume by John Berry (Emeritus Professor of Psychology at Queen's University, Canada and Research Professor at the Higher School of Economics, Russian Federation), Gregor Burkhart (Principal Scientific Analyst at the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Cynthia García Coll (Adjunct Professor at University of Puerto Rico Medical Science Campus and Charles Pitts Robinson and John Palmer Barstow Professor Emerita, Brown University, USA), Christine McCauley Ohannessian (Professor of Pediatrics and Psychiatry, University of Connecticut School of Medicine and Director, Center for Behavioral Health Research Connecticut Children's Medical Center, USA), Anne C. Petersen (Research Professor at University of Michigan, USA), Ype H. Poortinga (Emeritus Professor of Cross-Cultural Psychology, Tilburg University, the Netherlands and Catholic University of Leuven, Belgium), Grant J. Rich (Senior Contributing Faculty, Walden University, USA), Eugene

C. Roehlkepartain (Senior Scholar, Search Institute, USA), Seth J. Schwartz (Professor of Public Health Sciences at the Leonard M. Miller School of Medicine, University of Miami, USA), Laurence Steinberg (Distinguished University Professor of Psychology, Temple University, USA), Kazumi Sugimura (Professor of Psychology, Hiroshima University, Japan), Peter F. Titzmann (Professor for Developmental Psychology, Leibniz University Hanover, Germany), John Toumbourou (Professor and Chair in Health Psychology, Centre for Social and Early Emotional Development, Deakin University, Australia) and Hirokazu Yoshikawa (Courtney Sale Ross Professor of Globalization and Education, Co-Director, Global TIES for Children (Transforming Intervention Effectiveness and Scale) Center, New York University, USA).

The chapters of the *handbook* are organized along two major categories for a total of 37 chapters with empirical contributions which include a substantial number of youth and emerging adults ($N = 22,083$) in major geographical continents, many of which are neglected in the research literature on adolescence. Part I *Positive Youth Development in Global Contexts* and Part II *Positive Youth Development Applications and Interventions* were structured to represent first the mostly neglected cultural contexts and populations around the globe.

Part I Positive Youth Development in Global Contexts is composed by 17 chapters starting with newly developed models and conceptual chapters (the 7Cs model) followed by PYD work in less represented contexts of Asia (India, Indonesia, Pakistan, Malaysia), Africa (Ghana), Latin America, Eastern Europe, as well as contributions from more established adolescent research literatures within Southern and Northern Europe, Australia, New Zealand, and two final chapters on multi-country comparisons. Most contributions contain empirical research examples from newly conducted PYD research in culturally diverse samples of young people across the globe from the *PYDAC* project. Part I begins with a chapter by the leading editor introducing the newly developed 7Cs model of PYD expand-

ing on the 6C indicators of PYD (competence, confidence, character, caring, connection and contribution) to include *creativity* by advancing conceptual and methodological contributions to the PYD field with relevant multidisciplinary applications.

Key contributions across the subsequent chapters include exploring the structure of the developmental assets, the 5Cs and the 7Cs models of PYD across cultures as a central context for healthy development, examining linkages with relevant developmental constructs (e.g., mindfulness, risky behaviors, personality traits, environmental concerns, healthy life styles, family relationships, academic achievement, identity formation, social competence, happiness, self-esteem, life satisfaction, school connectedness and engagement and hopeful expectations for the future), considering the importance of culture and gender in relation to PYD models and constructs. Collectively, the chapters in Part I elucidate the nature and relevance of PYD promotive contexts for young people, using creative quantitative and qualitative methodologies to understand the unique ways that PYD models and relevant developmental constructs relate to each other in adolescents and emerging adults across the globe. The collection of chapters composing Part I is an outstanding representation of a variety of global and cultural contexts with PYD research and empirical examples in India, Indonesia, Pakistan, Malaysia, China, Ghana, Colombia, Peru, Mexico, Belize, Brazil, Albania, Kosovo, Macedonia, Serbia, Turkey, Italy, Spain, Iceland, Norway, Australia, New Zealand, Bulgaria and Romania.

Part II Positive Youth Development Applications and Interventions is composed by 18 chapters starting with a multi-country conceptual chapter on nine country international project (China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, and the United States) followed by neglected, less studied regions and cultural contexts of the Caribbean and Africa supplemented by contributions within Southern and Northern Europe, Canada, the United States and two conceptual review chapters by leading scholars on digital settings, pre-

vention and intervention for global research, policy and practice. This second part presents innovative approaches, reviews current programs and strategies that successfully focus on PYD applications and interventions from diverse contexts. Specific topics and innovations focus on work within schools and communities that consider engagement, self-efficacy, classroom climate, violent radicalization, parenting knowledge and practices, family competence, digital settings. The chapters also focus on specific PYD interventions by addressing the above mentioned topics related to culturally responsive research, policy and practice with marginalized, ethnic minority and ethnically diverse populations. The ultimate goal was to enhance the promotion of culturally competent assessment of PYD models and increase empirically sound evidence on PYD applications and interventions through a cross-cultural and contextually global lens. Together, these chapters present meaningful evidence that PYD interventions matter for optimal health, well-being and development by offering different perspectives on how PYD applications and models are intimately tied to the quality of life of young people around the world. Similar to Part I, the collection of chapters in Part II has noteworthy diversity in cultural contexts with PYD applications and interventions in China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, Jamaica, South Africa, Slovenia, Lithuania, Finland, Norway, Canada and the United States.

Parts I and II are supplemented by a final conclusive chapter by leading scholars in the PYD field. The final chapter by John Geldhof, Svea Olsen, and Asia Thogmartin (Oregon State University, USA) represents a conceptually relevant overview that draws together these unique contributions in the PYD field establishing current achievements and future steps for research, policy and practice in global contexts. The chapter reviews and integrates the main findings and implications presented in the preceding chapters by highlighting key issues prominent in the field in that (a) PYD implies a systems-level perspective; (b) PYD includes both strength promotion and deficit reduction; (c) there is no “best” model

of PYD; (d) defining PYD requires specificity; (e) PYD is holistic; (f) specificity applies to all contexts, and (g) we need to integrate etic and emic approaches.

Overall, the contributions to this *handbook* reflect a vibrant and increasingly stimulating areas of PYD scholarship that ultimately help build on the unique strengths and assets of young people to create more pathways to their optimal development, health and thriving. With unique contributions, large samples and global approaches to research, policy and practice, this *handbook* may be of interest to a wide range of social scientists, psychological, mental and public health professionals, researchers, policymakers and practitioners interested in better understanding the impact that multiple aspects of PYD can have on young people and systems in culturally diverse and global contexts. The *handbook* may be a resource for students, researchers, and youth leaders who are interested in promoting PYD scholarship and related youth activities. Leading scientists and program developers from a variety of disciplinary backgrounds (positive psychology, well-being studies, developmental psychology, child and family studies, cross-cultural psychology, education, prevention, intervention, intercultural relations, social psychology, anthropology, sociology, methodology, counseling, community psychology, emerging adulthood and applied developmental science) may further benefit from the contributions of this volume. Finally, this *handbook* may assist current professionals in the PYD and related fields interested in strengthening their PYD grounded competencies for conducting research and providing psychological services to culturally diverse groups of young people in global contexts.

Positive Youth Development in Global Contexts: The Handbook

A primary consideration of this volume was to advance a multidisciplinary science scholarship on PYD toward a more inclusive understanding of the psychological experiences, mechanisms and correlates of positive development among young people in a global perspective. The volume

includes specifically selected chapters that are innovative and diverse in theoretical and methodological approaches (e.g., cross-cultural, multinational, experimental, longitudinal, mixed-methods) as well as inclusive with participants from diverse cultural, ethnic and sociodemographic backgrounds, enlarging the broad U.S. literature with fresh international perspectives.

There were four specific issues covered by each contribution that each author has been asked to address where applicable. First, a careful description of the *local context* in terms of geographical, socio-political, cultural features as well as current issues affecting youth, PYD programs, available studies, PYD policy and intervention. Second, an overview of *novelty and incremental contributions*, detailing the ways in which each chapter offers unique insights, methodological and conceptual contributions to the PYD field. Third, *context/cultural specifics and universal mechanisms of PYD*, delineating what is unique in each chapter and how the knowledge provided can also be useful to understand and apply to other contexts. Fourth, a separate section dedicated to *implications for research, policy and practice*. In addition, each chapter has been enriched and supplemented by the newest and most recently published research materials inherent to various topics represented.

Based on the above considerations, this volume had three major aims to (1) advance the theoretical and empirical knowledge base on PYD among young people as well as processes by which PYD affects developmental outcomes in a global perspective; (2) expand understanding on methodological issues and provide knowledge base on PYD measurement in under researched and neglected contexts globally and (3) integrate scholarship on PYD with relevant research, policy and practice implications.

Advancing Theory and Knowledge on Positive Youth Development in Global Contexts

The chapters that appear in Part I supplemented by some in Part II of this *handbook* focus primarily on the first aim, namely, what we know on

PYD among young people and the processes by which PYD affects their developmental outcomes in a variety of international settings. This is a timely and novel knowledge base to the multidisciplinary science scholarship on PYD adding to the still relatively small work in a global perspective.

The chapters included here expand upon earlier work with a more targeted and explicit framing and focus on PYD in specific cultural settings and groups of young people. Insofar, PYD processes in myriad forms structure the global and local environments in which young people live, learn, and grow as documented and framed by the chapters covering a wide array of culturally diverse populations and geographic regions around the world (i.e., Asia, Africa, Europe, Latin America, Australia and New Zealand). Also, consistent with scholarship embodying new conceptualizations of PYD is the range of conceptual perspectives and methodological approaches included across the volume. This includes the newly proposed 7Cs model of PYD as well as novel methodological approaches to the study of the assets and the 5Cs models of PYD in a range of developmental outcomes, mechanisms and correlates of positive development among young people (e.g., risky behaviors, mindfulness, environmental concerns, personality traits, healthy life style behaviors, family processes and parenting knowledge, violent radicalization, classroom climate, vocational competence, scouting, digital settings). In so doing, the chapters in this volume address specific strengths of youth development (e.g., identity, school and student engagement, mindfulness, self-efficacy, and hopeful future expectations) that in combination with contextual resources (e.g., parents, peers, schools, neighborhoods, youth programs and interventions) provide the bases of PYD.

Additional methodological strengths regard chapters in the volume including both experimental and survey methods as well as qualitative and mixed-methods approaches. Complementary with Part I are relevant contributions from Part II incorporating longitudinal data and permitting stronger tests of process and developmental change. Yet, it is worth noting that despite the

variability in conceptual and methodological approaches, a vast majority of the contributions represent cross-sectional and correlational data thereby limiting the causal inferences on major findings. Nevertheless, this is the first in its kind globally inclusive volume on PYD with unique contributions from new and understudied contexts and samples of young people.

Expand Understanding and Provide Knowledge on PYD Measurement in Globally Under Researched and Neglected Contexts

A second aim of this *handbook* was to advance understanding on methodological issues and provide knowledge base on PYD measurement in under researched and neglected contexts from a global perspective. In fact, a key focus of the volume regards the measurement of PYD applicable to international settings marked by the use of psychometrically strong measures. Traditionally, PYD scholarship has been based on and pertinent with a quantitative paradigm because methodological issues and comparative work have been more thoroughly studied and documented in quantitative than in qualitative studies. Accordingly, this volume offers methodological advances from the roots of PYD measurement and enlarging global comparative research. Although the field of PYD methods may look as slowly developing, this volume has clarified noteworthy progress from different perspectives. The most obvious regard the tremendous increase in number and sophistication in statistical procedures such as Structural Equation Modeling (SEM) and measurement invariance procedures.

Invariance is a concept denoting the level of comparability of measurement outcomes across cultures (van de Vijver, 2019). In international and cross-cultural comparative work, the emphasis is on three levels of invariance regarding the comparability of constructs (e.g., whether PYD measurement is the same in all cultures/groups), comparability of items and measurement procedures (e.g., whether items of PYD measures have the same meaning across cultures/groups), and

comparability of scores (e.g., whether items measuring PYD have the same meaning within and across cultures/groups). Relatedly, there are three types of invariance embedded in these levels referred to construct, metric (or measurement unit), and scalar (or full score). Levels of invariance need to be empirically confirmed usually by means of SEM and multi-group path models across main groups of comparison, and adequate fulfillment of cut-off criteria for main fit indices for the models tested (Rutkowski & Svetina, 2017).

Construct invariance is observed when there is evidence that the measured construct (PYD) has the same psychological meaning across groups or cultures. Metric invariance assures that the metric of a scale is identical across groups/cultures. This level of invariance is important because indicates that the scores of the measured construct (PYD) can be compared within cultures but not across cultures. The establishment of scalar invariance means that the scores of the measured construct (PYD) can be directly compared within and across cultures, and/or groups and that individual and cultural/group score differences have the same meaning. Scalar invariance is mandatory for conducting comparisons of means in analyses of variance or *t* tests (van de Vijver, 2019). Where applicable, all contributions included in this volume advance understanding of measurement issues and provide evidence pertaining to invariance and adaptation of PYD measures across diverse cultures and groups.

Integrate Scholarship on PYD with Relevant Research, Policy and Practice

The third aim of this *handbook* was to indicate ways in which scientific knowledge on PYD can better inform research, policy and practice aimed at ensuring optimal health and well-being of adolescents and young people globally. All chapters in this volume discuss the implications of their work for research, policy and practice in a range of topic areas (e.g., family, school, neighbor-

hood, digital settings, mental health, well-being, and environment) with the scope that this knowledge base continues to grow and facilitate prosperous prevention and intervention efforts. The goal of this effort was to provide relevant stakeholders with valuable knowledge to help make informed decisions regarding the viability and applications of PYD models across diverse research, policy and practice environments.

Based on these considerations, a relevant implication regards the fact that PYD promotes more complete models of youth intervention within the perspective of an integrated intervention science (Eichas, Ferrer-Wreder, & Olsson, 2019). As most chapters in this volume clearly indicate, there exists a strong conceptual and empirical base for connecting PYD with prevention and intervention science. Promoting contextual and individual resources within the PYD perspective facilitates desired change in problematic behaviors and mitigates potentially adverse effects of such behaviors. The contributions in this volume with fresh advancements in the PYD field have the potential to realize a more fully integrated intervention science. An integrated intervention science can foster a more complete set of intervention tools and equip relevant professionals to capitalize on the strengths of young people in global, culturally diverse real-world practice settings (Ferrer-Wreder, 2013).

On the basis of these major aims, the volume furthers global research, policy and practice promoting PYD among young people across the globe. Our hope is that this *handbook* may represent valuable point of reference and useful resource for the next generation of researchers, policymakers, practitioners, and the general public interested to enhance the lives of young people globally. We view this as an imperative, given that, with a few notable exceptions, a majority of the current knowledge base derives from White, Western, educated, industrialized, democratic and rich (WEIRD) countries neglecting relevant contextual and cultural settings around the globe (Muthukrishna et al., 2020).

Unique Assets and Incremental Contributions to the PYD Field

This volume is the first of its kind representing the largest collection to date in terms of geographical distribution, theory, research and conceptual coverage on PYD across the globe. Being not a traditional *handbook*, the wide scope of contributions cover the first large international collection of PYD work conceived by a new generation of scholars globally and in traditionally understudied contexts. In so doing, the volume offers unique conceptual and methodological contributions to the PYD field with relevant applications in a variety of settings and disciplines including social and applied sciences.

Major conceptual contributions include the development of new PYD models and the innovative application of existing models sustained by a wide research coverage and empirical evidence on neglected young populations across the globe. The inclusion of individual and/or comparative focus on diverse contexts and groups of young people, provides unique contributions to the field that prompt inferences about context specific and universally applicable features of PYD across these contexts. The volume also contributes with a wide range of PYD research, programs and interventions that identify key positive youth development constructs and the potential of PYD applications and interventions in building strengths and benefits for young people. The goal has been to contribute to the achievement of a global PYD inspired science that incorporates PYD concepts and empirical evidence from global contexts to promote human betterment.

Additional conceptual contribution of the volume regards the focus on successful development and ways to promote optimal developmental pathways in emerging adulthood covering ages 18–29. The features of this developmental stage include identity exploration, instability, later entry into stable work, later marriage, and later parenthood (Arnett, 2018). PYD is particularly relevant to these young people because of the significant potential for positive change and redirection of life pathways during this developmental period. This is a challenging transitional life

stage, characterized by both capacity for positive change and a high incidence of adaptation issues or mental health problems (Arnett, 2018; Mehta, Arnett, Palmer, & Nelson, 2020). This volume covers large samples of emerging adults in addition to youth in variety of contexts (culture, family, school, and community) and indicates how these contexts can raise young people ready to enter adulthood and contribute to own and societal prosperity on the global stage. It is with this backdrop that the current volume is an important contribution in preparing schools, families, communities, researchers, policymakers and practitioners to link theoretical and practical models to promote a wide array of positive development indicators among young people.

Major methodological contributions of this volume include the wide array of statistical methods and tools for PYD research, policy and practice from global, culturally unique and comparative perspectives. The volume presents fine applications of well-developed methodological tools and models that have been tested and refined in newly investigated samples by providing a globally relevant empirical basis for advancing such tools and models. Importantly, major contributions tackle the pressing need to develop, test and adapt PYD measures in culturally diverse samples of young people. In so doing, the volume provides evidence base for adequate measurement tools and PYD models in new understudied samples and broader areas of developmental growth.

Conclusions and Next Steps

This *handbook* presents the most comprehensive collection of empirical evidence on PYD among youth and emerging adults yet assembled. This unprecedented collection of cutting-edge contributions promotes visibility and work by scholars across underrepresented and under researched contexts who offer the best science available on the positive development of young people globally. Collectively, the contributions provide a comprehensive view of the advancements in conceptualization, measurement and research within

the PYD field. In so doing, the volume advances a clear set of recommendations and implications for researchers, policymakers and practitioners interested in improving the lives of young people by identifying and promoting strengths and opportunities of this population globally. At the same time, the chapters presented here represent a call for more multidisciplinary and global research, policy and practice sustained by intervention to better determine what young people at different ages in variety of cultural contexts are capable of experiencing PYD and its related constructs.

The outstanding cast of contributors clearly document stellar accomplishments in the current field, while providing creative and promising avenues about where future PYD outlook would be most fruitfully implemented. We are in the midst of an extremely exciting, albeit challenging times for PYD inspired research, policy and practice. Social scientists, policymakers, practitioners and the general public interested in promoting optimal development among young people in global contexts, are putting efforts to further advance our understanding of what successful development looks like across these populations and contexts. In line with this priority, professionals of the PYD community need to work together to identify opportunities for advancing relevant scholarship in the promotion and cultivation of PYD. Moving beyond purely academic perspective, such work efforts find exciting possibilities for the application of the PYD knowledge in real-world contexts of young people. The application of this knowledge may occur when scholars are able to translate their findings to meet the needs of specific populations and contexts by making these findings appealing and accessible throughout sensitive research and dissemination process. Relatedly, scholars should consider the unique features of their specific context and most effectively cultivate PYD opportunities and outcomes for young people.

Yet, there is still much to accomplish and learn in the PYD field. Through the chapters of this volume, the contributors have indicated the way forward to advance research productivity and impact, as well as translation to programs, policy, and practice. Globally, scholars are increasingly

joining together from a variety of fields to create interdisciplinary and multidisciplinary working teams and networks. As documented through various contributions in the *handbook*, these networks and teams must include young scholars around the globe supported by generative mentors as a means to establishing a promising PYD scholarship. This volume is a prime example of the initiation of such teams being critical to the advancement of our knowledge of PYD globally. It is our conviction that this *handbook* has the potential to prompt future outlook and initiatives with research, policy and practice refinements as a means to further strengthen the cultivation of the next generation of PYD scholarship in global contexts.

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The 7Cs and Developmental Assets Models of Positive Youth Development in India, Indonesia and Pakistan

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Abstract

The present chapter advances PYD scholarship by introducing a newly developed 7Cs model of PYD among youth and emerging adults in three Asian LAMICs (Low-And Middle-income Countries) such as India ($n = 218$), Indonesia ($n = 234$), and Pakistan ($n = 400$). The 7Cs model expands on the 6C indicators of PYD (competence, confidence, character, caring, connection and contribution) to include *creativity* conceived as a novel and adaptive, problem-solving ability meaningful within social and cultural contexts. The chapter provides solid evidence for (a) the reliability and effectiveness of the 7Cs model in terms of measurement invariance (psychometrically reliable measurement across differ-

ent populations), utility (appropriate use of measures), universality (applicability to various populations) and (b) structural relations between the 7Cs and the developmental assets models that jointly promote thriving of young people. In conclusion, the 7Cs model has the potential to move forward a PYD priority in research, policy and practice agenda. With this priority in mind, the chapter offers unique conceptual and methodological contributions to the PYD field with relevant applications in international, cross-cultural, developmental, community psychology, and applied developmental science.

Keywords

The 7Cs model · Developmental assets · India · Indonesia · Pakistan

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Positive youth development (PYD) scholarship, interested in fostering positive development in a broad sense, has argued for the pressing need to develop new conceptualization and measurement frameworks as important guides for moving forward PYD research, policy and practice in a global international perspective (Koller & Verma, 2017). The present chapter provides a timely response to this urgent call by introducing a newly developed 7Cs model incorporating relevant and previously understudied domains of PYD that extends research into broader aspects of developmental growth. In so doing, the chapter offers uniquely incremental conceptual and methodological contributions to the PYD field.

To date, the 5Cs/6Cs (Burkhard, Robinson, Murray, & Lerner, 2019; Geldhof et al., 2015) and the developmental assets (Roehlkepartain & Blyth, 2020; Scales, 2011; Scales, Roehlkepartain, & Shramko, 2017) are the most influential PYD models that have been considered separately rather than simultaneously in one conceptual model. In combining both models, this chapter introduces the 7Cs model that moves beyond previous conceptualizations of PYD by focusing on competence, confidence, character, caring, connection, contribution, and a new dimension of PYD, *creativity*. The chapter provides considerable evidence for the reliability and validity of the 7Cs model in terms of measurement invariance (psychometrically reliable measurement across different populations), utility (appropriate use of measures), and universality (applicability to various populations). Next, the chapter furthers evidence on the conceptual relations between the 7Cs and the assets models as important components of healthy development among culturally diverse samples of young people. In fact, most PYD work to date has focused on middle-income American adolescents, and this chapter extends this scholarship to determine whether positive strengths are evident in a sample of youth and emerging adults from three LAMICs (Low-And Middle-income Countries) in the Global South.

The chapter starts with a brief conceptualization and measurement of PYD focused on the two most influential models dominating the field

to present the 7Cs model particularly suited for the study of PYD among young people from LAMICs. The exposition of socio-cultural, political and economic features of India, Indonesia and Pakistan helps to frame this new conceptualization of PYD and provide rationale for the ways in which such context comparison is novel, relevant and advances incremental knowledge to the field. Next, the chapter provides empirical evidence for the validity of the 7Cs model as well as structural relations with the assets model that collectively promote thriving among young people in culturally diverse contexts. The chapter concludes by highlighting the major conceptual and methodological contributions offered to the field as well as relevant implications for research, policy and practice in a local and global perspective.

Conceptualization and Measurement of PYD

Positive youth development (PYD) is an increasingly growing field concerned with internal and external factors that help young people to lead successful lives. Supports, opportunities and communities are critical for youth to improve their capacity to become successful young people and adults. Based on these premises, the past two decades have seen a considerable growth in conceptualization and measurement of PYD. The developmental assets and the 5Cs/6Cs models of PYD have become acknowledged as the most widespread and influential frameworks for understanding and strengthening positive youth development.

The assets model focuses on youth strengths with the assumption that increasing those strengths fosters positive behaviors and optimal development. The assets are grouped into external (i.e., environmental, contextual, and socializing systems such as support, empowerment, boundaries and expectations, and constructive use of time) and internal (i.e., skills, competencies, and values such as commitment to learning, positive values, social competencies, and positive identity). Although the assets model has been

applied in some countries in Africa, Asia, Latin/North America and Europe (Adams, Wium, & Abubakar, 2019; Chen, Wium, & Dimitrova, 2018; Desie, 2020; Drescher, Johnson, Kurz, Scales, & Kiliho, 2018; Kaur et al., 2019; Pashak, Handal, & Scales, 2018; Soares, Pais-Ribeiro, & Silva, 2019; Uka et al., [this volume](#); Vera-Bachmann, Gálvez-Nieto, Trizano-Hermosilla, Salvo-Garrido, & Polanco, 2020; Wium, Dost-Gözkán, & Kosic, 2019; Wium & Kozina, [this volume](#)), relatively little work has examined variations in the model across multiple culturally diverse samples and demographic contexts (Scales, 2011; Scales et al., 2017). Additional gaps regard the application of the model in a cross-cultural comparison perspective and Structural Equation Modeling (SEM) testing (Syvertsen, Scales, & Toomey, 2019).

The 5Cs/6Cs model concerns internal characteristics of youth that help them to grow into healthy adults. The model has been developed by several researchers building on one another's work seeking to identify the characteristics necessary for youth to thrive. Initially the model comprised 4Cs of competence (literacy, employment skills, ability to contribute), connection (caring human relationships, mentoring, tutoring, counseling), character (values of responsibility, honesty, equity) and confidence (self-esteem and hope) (Pittman, Irby, & Ferber, 2000) supplemented by the 5C of caring (empathy and sympathy) (Lerner, 1995) and the 6C of contribution signifying the need for young people to engage with their communities and the society (Pittman et al., 2000). The 5Cs/6Cs model has been validated using SEM and longitudinal designs on large national samples of young people primarily in the United States (Dvorsky et al., 2019; Geldhof et al., 2014; Shek, Dou, Zhu, & Chai, 2019) with emerging research in Europe (Årdal, Holsen, Diseth, & Larsen, 2018; Conway, Heary, & Hogan, 2015; Dimitrova et al., [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Erentaitė & Raižienė, 2015; Holsen, Geldhof, Larsen, & Aardal, 2017; Kaniušonytė & Truskauskaitė-Kunevičienė, [this volume](#); Kozina, Wium, Gonzalez, & Dimitrova, 2019; Truskauskaitė-Kunevičienė, Romera, Ortega-

Ruiz, & Žukauskienė, 2020), Africa (Kabir & Wium, [this volume](#); Wium, Ferrer-Wreder, Chen, & Dimitrova, 2019), Asia (Chai et al., 2020; Li, He, & Chen, [this volume](#); Ye, Wen, Wang, & Lin, 2020), Latin America (Dominguez, Wium, Jackman, & Ferrer-Wreder, [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)), New Zealand (Fernandes, Fetvadjev, Wium, & Dimitrova, [this volume](#)) and the Caribbean (Hull, Ferguson, Fagan, & Brown, [this volume](#); Hull, Powell, Fagan, Hobbs, & Williams, 2020).

Such relevant cross-sectional and longitudinal work has also consistently shown that both the assets and the 5Cs/6Cs models promote better developmental outcomes among youth, including high levels of thriving and success (Shek et al., 2019; Tirrell et al., 2019). Importantly for the present chapter, hopeful expectations for the future have been shown to play an important role in the positive development of young people, including their contributions to the society (Sun & Shek, 2012). Hopeful future expectations have been shown to relate to the 6Cs of PYD and particularly to contribution (Schmid et al., 2011). The present chapter furthers our understanding of the two most influential PYD models by simultaneously examining their relations with hopeful expectations for the future among culturally diverse samples of youth and emerging adults.

Importantly, although the 5Cs/6Cs and the assets models have rich scientific support from large samples and fine study designs, research on both models among young people from varied global settings, including the Global South (low and middle income newly industrialized or in the process of industrializing countries in Asia), are emerging (Scales et al., 2017; Shek et al., 2019). This paucity of global comparative research is a concern given the potential benefits of using a PYD framework internationally and the suitability of the assets and 5Cs/6Cs measurement for cross-cultural research (Scales, 2011). Such paucity may also reflect the unreasonable research focus on the American context, to the detriment of the other 95% of the population of this planet (Arnett, 2008). The disparity is particularly vivid within the LAMICs given the lack of policies on

child and adolescent health, insufficient financial resources and a scarcity of culturally appropriate assessment tools for this population (Babatunde, van Rensburg, Bhana, & Petersen, 2019).

Despite relevant calls to encourage research and promote success among young people in LAMICs, we were not able to retrieve a single PYD investigation applying both PYD models simultaneously in India, Indonesia and Pakistan. Of note to the present chapter, which focuses on youth and emerging adults in LAMICs from the Global South, both assets and the 6Cs models are examined together and implicated in the PYD of these young people. In so doing, the chapter advances further understanding on PYD models that are especially important for diverse and understudied cultural groups to attain positive outcomes and avoid problematic behaviors. In addition, this chapter elaborates the distinction among major PYD models and the importance of the separate components on which these models focus. A core distinction in that regard is the introduction of the newly developed 7Cs model representing a new conceptualization and measurement in the PYD field with the potential to optimize research, policy and practice in a global international perspective.

The 7Cs Model of PYD

Notable scholarship has argued that PYD models are just beginning to be tested, and there is still a great need for indicators of many instantiations of PYD (Koller & Verma, 2017; Lippman, Moore, & McIntosh, 2011; O'Hare, 2012). The present chapter introduces a new operationalization of PYD that expands on the 6C indicators of PYD (competence, confidence, character, caring, connection and contribution) to include *creativity* defined as novel-original and useful-adaptive, problem-solving ability meaningful within a social and cultural context (Batey, 2012; Said-Metwaly, Kyndt, & Van den Noortgate, 2017).

Of relevance for the present chapter is the conceptualization of creativity as a precious asset for solving individual, organizational and social problems with the potential to enhance optimal

development (Barbot, Besançon, & Lubart, 2015; Lubart, Zenasni, & Barbot, 2013). We also adopt the notion of creativity conceived as the generation of ideas, insights, or problem solutions that are novel and potentially useful (Baas, De Dreu, & Nijstad, 2008). Such conceptualization embedded in the 7Cs model supplements dominant PYD models with the notion of creativity as a set of skills and knowledge to develop novel and original solutions that are useful and adaptive for success among young people across three Asian contexts hardly considered in PYD work. A particularly pressing issue in these contexts is the question of how to promote PYD given the dynamic socio-cultural demands and developmental challenges of young people in an increasingly global society and particularly in LAMICs. As we demonstrate in subsequent sections, the 7Cs model supplemented by creativity has the potential to optimize and vitalize PYD scholarship into broader aspects of developmental growth of young people for relevant developmental and conceptual considerations (Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Manrique-Millones et al., [this volume](#)).

From a *conceptual perspective*, creativity is a popular and widespread phenomenon with demonstrated potential to promote flourishing among young people. Relevant theoretical and empirical work has associated creativity to enhancement of social and emotional development, cognitive functioning, positive identity and well-being (Barbot & Heuser, 2017; Conner, DeYoung, & Silvia, 2018; Richardson & Mishra, 2018). Creativity represents relevant and useful developmental nutrient that enhances thriving and well-being, mental health (Gillam, 2018), and strengthens resilience (Alayarian, 2019), while also preventing from internalizing behaviors (depression and withdrawal), externalizing behaviors (restlessness) as well as lowering the risk of social and behavioral maladjustment (Fancourt & Steptoe, 2019).

The potentially wide-ranging impact of creativity is further supported by diverse meta-analytic studies that reported consistent effects in a range of developmental domains, including positive mood (Baas et al., 2008; Davis, 2009),

mindfulness (Lebuda, Zabelina, & Karwowska, 2016), intrinsic motivation (Neves de Jesus, Rus Babeş, Lens, & Imaginário, 2013), innovation (Sarooghi, Libaersa, & Burkemper, 2015), self-efficacy (Haase, Hoff, Hanel, & Innes-Ker, 2018), divergent thinking (Gralewska & Karwowski, 2019), emotional intelligence (Xu, Liu, & Pang, 2019), leadership (Koh, Lee, & Joshi, 2019), social competence (Gråstén, Kokkonen, Quay, & Kokkonen, 2019), academic achievement (Gajda, Karwowski, & Beghetto, 2017), and career success (Raine & Pandya, 2019).

Further, creativity is an asset easily retrievable within the capacity of communities, schools and youth to proactively develop creative skills and experiences. Creative skills promote social and emotional well-being and optimal development in several ways. These include opportunities for fun and a gateway from daily stresses and positive emotional experiences that may improve larger social relationships and self-confidence. In fact, creativity has the potential to provide youth with positive experiences in social relationships, which may lead to improvements in their developmental competencies. For instance, creativity has been demonstrated to enhance social competence in terms of the ability to achieve personal goals in social interaction while developing and maintaining positive relationships with others (Gråstén et al., 2019). Relatedly, creativity provides opportunities for youth to engage in a variety of social and recreational interactions with peers and adults as well as positive experiences for those contending disadvantaged and difficult circumstances (Alayarian, 2019).

From a *developmental perspective*, the substantive importance of creativity is recognized by recent advancements in a broad lifespan perspective, positing that creativity reflects developmental processes that have age-related parallels in infancy, childhood, and young adulthood. Creativity can be found across developmental periods (Saggar et al., 2019) along with evidence of its generalizability across various cultural and social contexts (Glăveanu, 2019; Yong, Mannucci, & Lander, 2020). Importantly, youth and emerging adults in general and in LAMICs in particular

face challenges of defining their identity, future goals and prospects in a scarcely resourceful or supportive socio-economic environment (Abbas, 2012). In such environment, creativity is important to identity formation which in turn fosters healthy adult development and successful life. In fact, creativity plays crucial role in supporting the development of the self in general, and the formation of identity in adolescence, in particular. The reciprocal relation between creativity and identity is evidenced by the fact that creativity involves thinking, commitment and self-expression that foster identity formation in several ways. Creativity strengthens thinking processes involved in identity formation in terms of exploration, commitment, and differentiation-individuation; provides social and personal attributes for self-definition that enhance positive self-esteem; fosters resiliency in terms of adaptive self-expression (well-being, self-confidence, mental health) of young people usually confronted with uncertainties about the self, internal distress, and external pressures that may otherwise lead to maladaptive self-expression (problem behaviors, aggression, violence) (Barbot & Heuser, 2017). Therefore, adopting creativity as a core PYD indicator may strengthen original and useful skills for positive self-definition and creative solutions to existential problems that enhance self-esteem and success in young adulthood. Accordingly, this chapter provides an integrated model capitalizing on the creative potential as an important indicator of success among young people in three Asian LAMICs.

Three Asian LAMICs – India, Indonesia and Pakistan

The study and promotion of the 7Cs and positive developmental assets are particularly relevant in LAMICs, where young people face a disproportionate burden of health risk and problematic behaviors. Nearly 90% of the world's 1.2 billion youth aged 10 and 19 live in LAMICs, where they experience life adversities, poor educational and work prospects (United Nations World Youth Report, 2018). Available PYD studies have pro-

vided some evidence that PYD models and interventions work similarly in LAMICs as in high-income countries by reducing hardships and promoting thriving for youth (Alvarado et al., 2017; Catalano et al., 2019; Scales et al., 2017). Yet, PYD work in LAMICs is rare and as these countries grow, increasing concerns stress the need to foster positive development among young people. This chapter also tackles concerns regarding the generalizability of increasingly adopted PYD models in three specific LAMICs in Southern (India and Pakistan) and Southeast Asian (Indonesia) region that have been chosen for relevant socio-cultural context specifics as South Asia is home to almost 30% of the 1.8 billion world's young people aged 10 and 24 years old (United Nations World Youth Report, 2018).

Among countries in the region, *India* has the world's largest youth population (356 million) followed by China (269 million), Indonesia (68 million), and Pakistan (59 million). In fact, India after China is the second-most populous country in the world (1,326,093,247) (Central Intelligence Agency, 2020) of which 30% are young people aged 10–24 years (United Nations World Youth Report, 2018). As in any densely populated developing country, young people face a plethora of challenges, with at least 20% experiencing some form of mental illness such as depression, suicidal ideation, anxiety, mood disturbances and substance abuse. Relatedly, economic deprivation and limited availability of healthcare and education have resulted in high rates of violence, unemployment and problem behaviors (Sharma, Mehari, Kishore, Sharma, & Duggal, 2020).

In recent years the Indian government has recognized the vast economic potential of the largely youthful population and formulated a National Youth Policy aiming to empower young people to utilize their full potential (National Youth Policy, 2014). While several grassroots initiatives have been launched under this policy framework, there are only a few that adopt a positive developmental approach. Several PYD strength-based approach programs and studies have been conducted, while highlighting a significant paucity on PYD in India (Hameed & Mehrotra, 2017; Saha, 2018; Srikala & Kishore, 2010).

Indonesia is the world's largest island country and the most populous Muslim-majority country (Central Intelligence Agency, 2020; French et al., 2013). There are 68 million young people aged 10–24 years, representing one of the largest youthful populations in the world (Widiadana, 2019). While Indonesia is one of the largest economies in South-East Asia with steadily increasing rates of youth education, there has been a spike in unemployment among 15–24 year olds (The World Bank, 2020). Additionally, mental disorders (Hosseinpoor, Nambiar, & Schlottheuber, 2018) and substance use (Kusumawardani, Tarigan, Suparmi, & Schlottheuber, 2018) are major issues among youth. In recognition of these challenges, the government is currently implementing a National Action plan towards improving youth developmental outcomes (Nambiar, Rajbhandary, Koller, & Hosseinpoor, 2019).

Notably, while developmental research in the Indonesian context has not touched on PYD, there are several studies that examine the role of PYD related constructs and outcomes such as religious involvement, social competence and adjustment (French et al., 2013; French, Eisenberg, Vaughan, Purwono, & Suryanti, 2008), happiness and life satisfaction (Sujarwoto, Tampubolon, & Pierewan, 2018). Considering the limited literature on developmental pathways and outcomes, there is a need to add to the PYD evidence base in this context.

Pakistan is the world's sixth-most populous country with a population of 233,500,636 people and the world's second most populous Muslim-majority country after Indonesia (Central Intelligence Agency, 2020). Young people constitute more than 30% of the country's population and face numerous challenges in a rather hard economic situation, unemployment, lack of political empowerment and limited access to education and health facilities (Almas, Iqbal, Sabir, Ghani, & Kazmi, 2020; Soomro & Shukui, 2015; Zeeshan et al., 2018). Nevertheless, Pakistani youth are optimistic about their role in bringing prosperity in the country despite the lack of programs and policies offering them the opportunity to work and contribute to the society (Dawn, 2020). In

2009 Pakistan adopted its National Youth Policy promoting mentoring to help youth identify and utilize their potential to overcome challenges (National Youth Policy, 2009). Such national policy poses the ground for promoting PYD policy and practice upon solid PYD based investigations as the one provided in this chapter.

In summary, the three Asian LAMICs have similar economic backgrounds and host the largest segment of young people in the world. They also share similar cultural values, being collectivistic cultures emphasizing the needs of a group or a community over the individual (Suh & Lee, 2020). Young people from these contexts face the challenge of maintaining interactions with an increasingly modernized world while remaining embedded in a deeply traditional and conservative culture. Lastly and most importantly, these countries share a large young population affected by numerous hardships, which necessitates investment in resources to support their healthy and productive adult life. All these features of the three Asian LAMICs offer a novel and unique context to study PYD in understudied culturally diverse samples that allows valid foundations for the cross-cultural applicability of the 7Cs and the assets models of PYD.

This Chapter

The present chapter advances PYD scholarship by introducing a newly developed 7Cs model of PYD that extends research into broader aspects of developmental growth among culturally diverse samples of youth and emerging adults. The model postulates that competence, confidence, connection, character, caring, contribution and creativity represent core elements of PYD structurally valid and invariant across samples in the three countries under investigation. By testing the model, two main goals are proposed. The first goal is to provide solid evidence for the reliability and effectiveness of the 7Cs in terms of measurement invariance (psychometrically reliable measurement across different populations), utility (appropriate use of measures), and universality (applicability to various populations). The sec-

ond goal is to examine simultaneous relations between the 7Cs and the assets models as important components of healthy development in one conceptual model.

These goals were addressed by means of Structural Equation Modeling (SEM) that examined the 7Cs model factorial structure and measurement invariance (degree to which the model exhibits identical psychometric properties in different groups (Meade, Johnson, & Braddy, 2008; Rutkowski & Svetina, 2017)). The 7Cs model was tested in a Multigroup Confirmatory Factor Analysis (MG-CFA) at structural invariance (all items/factors are associated with the 7Cs allowing for subsequent tests to be conducted), construct invariance (all items/factors are associated with 7Cs in the same way allowing the comparison of relations between these factors and other constructs), and scalar invariance (constrains factor loadings and intercepts to be equal among groups allowing to compare mean differences on the measured factors) (van de Vijver et al., 2019). Goodness of fit for the models was assessed with the Root-Mean-Square Error of Approximation (RMSEA; recommended < .08) and the Comparative Fit Index (CFI; recommended > .95) (Meade et al., 2008; Rutkowski & Svetina, 2017).

Youth and Emerging Adults from the Three Asian Countries

This chapter draws on a larger international study on PYD across cultures covering more than 30 countries around the world (Dimitrova & Wium, [this volume](#); Wium & Dimitrova, 2019). The chapter presents data of 852 young people ($M_{\text{age}} = 20.48$ years, $SD = 3.05$) in India ($n = 218$), Indonesia ($n = 234$), and Pakistan ($n = 400$), who provided information on their ethnic background, gender, age and a set of self-reported measures. Standard procedures were adopted in each country to conform to established guidelines for linguistic equivalence and measure adaptation in cross-cultural research by applying committee approach (e.g., collaborative, consensus translation that decreases the introduction of cultural bias inherent in the native language; International

Test Commission, 2017; van de Vijver et al., 2019). The measures have been chosen as the best tools to capture major constructs of interest designed, tested and validated in culturally diverse samples of young people (Geldhof et al., 2014; Haugan, Utvær, & Moksnes, 2013; Scales et al., 2017).

In addition, all measures presented good reliability (Table 1) and have been tested for measurement invariance in terms of change in the Comparative Fit Index (ΔCFI) with values lower than .01 indicative for best fitting models as χ^2 tests are sensitive to sample size (Little, 2013). In establishing measurement invariance, the recommended procedure was adopted by examining the size of the loadings and intercepts and the difference between the constrained and unconstrained models obtaining $\Delta CFI < .01$ (Cheung & Rensvold, 2002; Rutkowski & Svetina, 2017).

Table 1 Study variables and samples across countries

| | India (<i>n</i> = 218) | Indonesia (<i>n</i> = 234) | Pakistan (<i>n</i> = 400) |
|-----------------------------------|----------------------------|--------------------------------|-------------------------------|
| Age, M (SD) | 24.01 (3.65) | 19.58 (1.17) | 19.07 (1.58) |
| Gender, % females | 50 | 86 | 59 |
| The 7Cs, α | | | |
| Competence | .66 | .64 | .70 |
| Confidence | .86 | .67 | .72 |
| Character | .77 | .86 | .82 |
| Caring | .83 | .89 | .67 |
| Connection | .81 | .91 | .70 |
| Contribution | .63 | .70 | .64 |
| Creativity | .92 | .93 | .88 |
| Developmental assets, α | | | |
| Support | .83 | .75 | .59 |
| Empowerment | .84 | .73 | .72 |
| Expectations | .89 | .78 | .82 |
| Constructive use of time | .70 | .58 | .60 |
| Commitment | .89 | .80 | .60 |
| Positive values | .90 | .80 | .72 |
| Social competencies | .76 | .76 | .75 |
| Positive identity | .55 | .78 | .82 |
| Hope, α | .91 | .70 | .84 |

Note. M = Mean; SD = Standard Deviation;
 α = Cronbach's alpha reliability coefficient

Subsequent analyses evidenced very good invariance at construct level indicating equal associations of items composing each construct (the 7Cs, the assets and hope) across cultural samples. Table 2 presents the selected model with a good fit for each measure referring to the measurement weights model indicating construct invariance. A set of multi-group models comparison between the unconstrained and constrained measurement models for all measures used showed $\Delta CFI \leq .01$, guaranteeing configural and construct invariance.

Based on our operationalization of PYD, the 7Cs model was tested with measures drawn from several primary sources. The widely known PYD Short Form ([PYD-SF]; Geldhof et al., 2014) comprising 34 items distributed in 5 subscales was employed to measure *competence* (6 items related to class work at school/university), *confidence* (6 items referring to individual happiness and self-worth), *character* (8 items referring to various management abilities), *caring* (6 items referring to empathic and caregiving behaviors), and *connection* (8 items related to encouragement at school/university etc.). Response options on a 5-point Likert scale were calculated as means with high score indicating high levels of each C.

Contribution was measured with 6 items (Geldhof et al., 2014) exploring the frequency of time spent helping others (i.e., friends and neighbors) and providing service to the community (i.e., volunteering, mentoring, peer advising, participating in school government). Responses were answered on a 5-point Likert scale with a composite mean score and high scores indicating high levels of contribution.

Creativity was measured with 9 items from The Reisman Diagnostic Creativity Assessment ([RDCA]; Reisman, Keiser, & Otti, 2016) found to be a reliable and valid assessment tool identifying areas of creative strengths. The items were representative of the definition of creativity operationalized as a core dimension of the 7Cs model in terms of mind/brainstorming skills in generating original ideas/answers to own challenges. Responses were answered on a 5-point Likert scale calculated as a composite mean score and high scores indicating high levels of creativity.

Table 2 Invariance models for the 7Cs, developmental assets and hope

| | Model fit | | |
|----------------------------|---------------|-------|------|
| | χ^2 (df) | RMSEA | CFI |
| The 7Cs model | | | |
| Competence | 37.24 (4) | .089 | .976 |
| Confidence | 91.00 (12) | .088 | .934 |
| Character | 210.66 (48) | .063 | .920 |
| Caring | 132.76 (20) | .081 | .931 |
| Connection | 175.29 (54) | .051 | .940 |
| Contribution | 57.84 (9) | .080 | .950 |
| Creativity | 366.55 (61) | .077 | .933 |
| Developmental assets model | 209.97 (53) | .059 | .930 |
| Support | 187.88 (39) | .067 | .902 |
| Empowerment | 99.91 (22) | .061 | .041 |
| Expectations | 295.36 (80) | .056 | .910 |
| Constructive use of time | 47.15 (9) | .071 | .931 |
| Commitment | 220.63 (40) | .073 | .902 |
| Positive values | 407.54 (116) | .054 | .900 |
| Social competencies | 215.75 (38) | .074 | .928 |
| Positive identity | 128.29 (28) | .065 | .913 |
| Hope | 783.76 (123) | .080 | .901 |

Note. χ^2 = Chi-Square significant at $p < .01$; df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation. The represented models for each construct refer to the measurement weights model indicating construct invariance across samples

The assets were measured with The Developmental Assets Profile ([DAP]; Scales, 2011), which comprised 58 items related to young people’s experience of developmental assets grouped in eight categories: Support (e.g., seeking advice from parents, teachers), empowerment (feeling valued and appreciated by others), expectations and boundaries (having encouraging lecturers/teachers to develop and achieve more), constructive use of time (involvement in creative things such as music, theater or arts), commitment to learning (learning new things), positive values (taking responsibility of own actions), social competencies (being sensitive to the needs and feelings of others) and positive identity (feeling good about oneself). Responses were answered on a 5-point Likert scale transformed in composite mean and high scores indicating high levels of experienced assets. DAP has been applied in several cultural and language groups in nearly 31 countries, involving more than 25,000 young people aged 9–31 years (Scales, 2011; Scales et al., 2017).

Hope was measured with the Herth Hope Index ([HHI]; Herth, 1991) comprising 12 items referring to having short and/or long range goals, positive outlook toward life, seeing possibilities in the midst of difficulties. Responses were answered on a 4-point Likert scale transformed in composite mean with high scores indicating more hopefulness.

The 7Cs Model Test

The 7Cs model of PYD was tested in two MGCFA across samples in India, Indonesia and Pakistan. Preliminary model test aimed to explore whether all 7Cs loaded into one PYD factor. Thus, we specified a model of PYD as one latent variable represented by 7 measured variables of competence, confidence, character, connection, caring, contribution and creativity. The analyses conducted for all groups across the three countries provided support for the factorial structure of the 7Cs model PYD (Fig. 1a). The multi-group path model showed good fit and that the 7Cs were

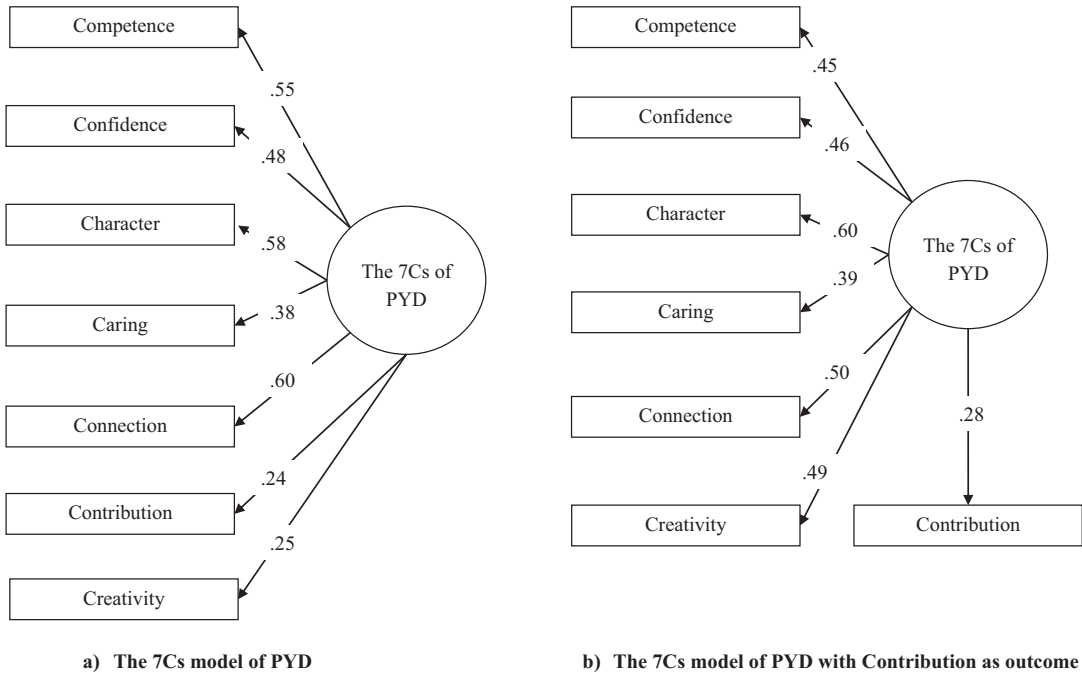


Fig. 1 The 7Cs model in India, Indonesia and Pakistan (Note. Values represent standardized coefficients for the measurement weights model and are significant at $p < .001$. Coefficients refer to the mean score of all samples)

significantly and positively related to one PYD factor, $\chi^2(40, 852) = 149.61, p < .001, RMSEA = .057, CFI = .917$.

A second model test aimed to explore whether all Cs of competence, confidence, character, connection, caring, and creativity load into one PYD factor leading to contribution. As explicated in the introduction, this model test followed prior PYD conceptualizations treating the 6C of contribution as an outcome variable associated with the other Cs (Pittman et al., 2000; Shek et al., 2019). This second model represented PYD as one latent variable composed by 6 measured variables of competence, confidence, character, connection, caring, and creativity directly related to contribution (Fig. 1b). A good fit was established for the measurement weights model, $\chi^2(39, 852) = 152.50, p < .001, RMSEA = .059, CFI = .914$. Standardized factor loadings for both models are reported in Fig. 1 suggesting that both models represent reliable and valid representation of PYD among youth and emerging adult samples in the three Asian LAMICs under investigation.

The 7Cs, Developmental Assets and Hope

A preliminary model tested structural relations between the 7Cs and the assets models of PYD. The specified model was given by one 7Cs latent factor with seven measured variables (i.e., competence, confidence, character, connection, caring, contribution and creativity) and one assets latent factor with eight measured variables (i.e., support, empowerment, expectations and boundaries, constructive use of time, commitment to learning, positive values, social competencies and positive identity). The multi-group path model showed a good fit indicating construct invariance across cultural samples, $\chi^2(233, 852) = 565.87, p < .001, RMSEA = .041, CFI = .901$. The model provided empirical support for the existence of strong positive and significant relations between the 7Cs and the assets models ($\beta = .45, p < .001$).

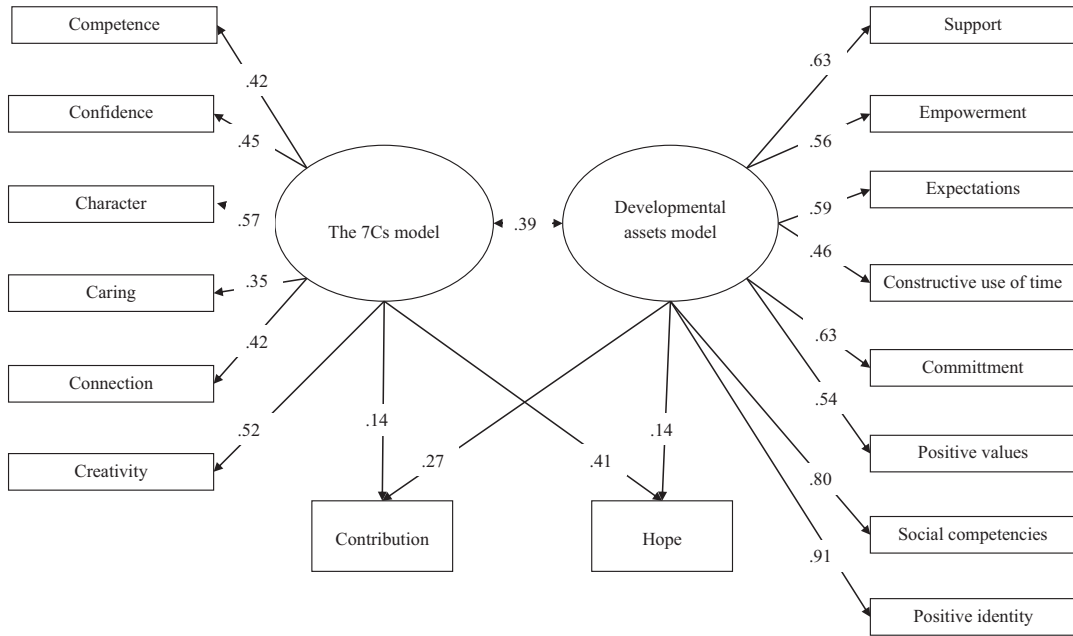


Fig. 2 The 7Cs and developmental assets models in India, Indonesia and Pakistan (Note. Values represent standardized coefficients for the measurement weights

model and are significant at $p < .001$. Coefficients represent mean score of all samples)

Next, we followed the 7Cs model test as indicated in the previous section and specified the same model but with contribution as an outcome variable. The model tested the relations between one 6Cs factor with six measured variables and one assets factor with eight measured variables and how both models are associated with contribution. Similar to prior results, there was a very good model fit across cultural samples, $\chi^2(266, 852) = 590.96, p < .001, RMSEA = .038, CFI = .912$.

In a final step, we fitted a model testing the relations of the 7Cs, the assets and hope. This final model examined ways in which both PYD models (one 6Cs factor with six variables and one assets factor with eight variables) were associated with hope and contribution (Fig. 2). The model showed good fit, $\chi^2(266, 852) = 590.96, p < .001, RMSEA = .038, CFI = .912$. As can be seen from Fig. 2, there were strong and positive relations among both PYD models ($\beta = .39, p < .001$) that in turn were positively associated with hope and contribution.

Conclusions

This chapter offers unique conceptual and methodological contributions to the field by introducing and providing empirical evidence for the applicability and validity of the 7Cs model of PYD in India, Indonesia and Pakistan. Relevant arguments highlight the significance for this chapter on PYD in these countries. First, despite that India, Indonesia and Pakistan host the largest segment of young people in the world, a sample from this Asian region is an under-researched population and this chapter contributes to the internationalization of PYD field. Second, the focus on positive development is timely given marked vulnerabilities and increasing rates of youth behavioral problems in these countries (United Nations World Youth Report, 2018). Third, there continues to be a dearth of quality research in the Asian context on youth and a lack of understanding about the correlates of positive developmental outcomes and pathways.

With a conceptualization of PYD rooted in the 6Cs but extended to include *creativity*, this chapter showed that competence, confidence, character, caring, connection, contribution and creativity represent core PYD indicators of thriving leading to favorable outcomes among young people. Creativity is a popular and widespread phenomenon with demonstrated potential to promote positive development. Research aimed at understanding the processes at work in youth creativity should be guided by solid conceptual models that incorporate relevant theoretical perspectives. To this end, this chapter has introduced a conceptual model that portrays creativity as the 7th C intertwined with the 6Cs of PYD that jointly represent and promote positive development among culturally diverse samples of youth and emerging adults in three Asian LAMICs. The chapter further extended our understanding of how PYD models work in tandem to impact an additional component of PYD thriving measured by hope. Finally, we demonstrated for the first time the existence of strong structural relations between the 7Cs and the assets models that jointly promote thriving among young people across culturally diverse contexts.

This chapter provides support for the 7Cs and the assets models of PYD and their factor structure at construct invariance promoting both novel and more nuanced knowledge base than prior work. All models tested achieved strong structural and construct invariance across groups, suggesting functional similarity of PYD models across different samples. Yet, the lack of scalar invariance suggests that mean comparisons of the dimensions composing the models may not be conducted for group comparisons in the countries investigated here. Thus, the 7Cs and the assets models can be embedded in cross-cultural studies exploring correlations between PYD and relevant constructs of interest across samples from India, Indonesia and Pakistan.

Implications for Research, Policy and Practice

The 7Cs and the assets models are important guides for moving forward a PYD priority in research, policy and practice agenda. As to research, this chapter advances global PYD

research by developing and validating a new PYD model to ensure both reliable applications and ways in which the model addresses and promotes healthy development in youth and emerging adults in Asian LAMICs. In so doing, the chapter tackles a particularly challenging issue of ensuring the cultural invariance of PYD measures allowing valid adaptation and widespread use of PYD measurement tools. International and local researchers from India, Indonesia and Pakistan can effectively use the 7Cs and developmental assets measures as indicators of positive youth development. These scholars can also benefit from the expansion of the PYD models to a conceptually relevant developmental stage of emerging adulthood (Arnett, 2018) beyond original PYD conceptualizations among younger children and adolescents (Dvorsky et al., 2019; Pashak et al., 2018).

This chapter promotes an easily applicable model of youth thriving for policy makers, and youth-serving professionals who are often limited by issues of practicality and utility for concise, valid, and reliable tools of youth development. The PYD models tested for the first time in three Asian LAMICs provide direction and purpose for policy makers knowledgeable on the core components of healthy development who can guide global and local programming towards PYD achievement. Policy makers can also apply the 7Cs and the assets models as accurate frameworks to identify outcomes and evaluate youth development programs.

The spread of the 7Cs and the asset models to LAMICs investigated here fosters relevant opportunities for practice. PYD oriented teachers, principals, volunteers and community staff members are essential for raising asset-rich thriving young people. Schools, after-school programs, and community-building initiatives are among the formal settings to benefit in using the PYD models and capitalize on creativity as a new PYD strength together with parents and guardians and assure PYD-building community resources. The PYD models may be used by school and community personnel as an assessment tool for young people or youth programs as to identify potential areas for intervention. The 7Cs and the assets models help also to identify different dimensions and contexts of PYD as to tailoring programs to

meet specific youth needs in a given community which is especially important in understudied LAMICs like India, Indonesia and Pakistan.

In conclusion, the present chapter advances PYD scholarship by developing and validating a new PYD conceptualization of the 7Cs model among youth and emerging adults in understudied Asian LAMICs. The 7Cs model has the potential to move forward a PYD priority in research, policy and practice agenda. With this priority in mind, this chapter offers unique conceptual and methodological contributions to the PYD field with potentially relevant applications in international, cross-cultural, developmental, community psychology, and applied developmental science.

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The 7Cs of Positive Youth Development in Colombia and Peru: A Promising Model for Reduction of Risky Behaviors Among Youth and Emerging Adults

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Abstract

The present chapter promotes PYD scholarship in Latin America by testing the 7Cs model of competence, confidence, character, caring, connection, contribution and creativity in Colombia and Peru. Young peo-

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ple in these countries represent a particularly vulnerable group due to significant rates of risky behaviors such as alcohol and drug use, violence and suicide. This chapter applies the 7Cs of PYD as a potentially powerful model to reduce these risky behaviors among this vulnerable population. A total of 755 youth and emerging adults from Colombia ($n = 248$) and Peru ($n = 507$) provided data on the 7Cs and their experience of alcohol and drug use, violence, and suicide attempts. The results of the structural equation modeling provided solid evidence for the reliability and validity of the 7Cs model as psychometrically reliable measurement across these populations and meaningful relations between the 7Cs and risky behaviors. The 7Cs represent a promising model promoting thriving of young people in Colombia and Peru by reducing their experience of alcohol and drug use, violence, and suicide attempts. The chapter offers unique conceptual and methodological contributions to the PYD field with relevant applications for research, policy and practice in Latin America and globally.

Keywords

The 7Cs model · Colombia · Peru · Risky behaviors · Youth · Emerging adults

The present chapter provides a timely response to the recent call for novel conceptualization and measurement frameworks for moving forward PYD scholarship internationally (Koller & Verma, 2017). A new 7Cs model of PYD is tested among youth and emerging adults from understudied Latin American countries by incorporating relevant and previously ignored domains and correlates of PYD to extend research, policy and practice with vulnerable young people in Colombia and Peru. Thereby, the chapter offers several incremental conceptual and methodological contributions to the PYD scholarship in Latin America as well as globally.

Conceptually, the chapter applies the 7Cs model that moves beyond previous conceptualizations of PYD by focusing on competence, confidence, character, caring, connection, contribution, and *creativity* (Dimitrova et al., [this volume](#)). The notion of creativity defined as novel-original and useful-adaptive, problem-solving ability represents a powerful asset to enhance optimal development (Barbot, Besançon, & Lubart, 2015; Lubart, Zenasni, & Barbot, 2013), particularly relevant for vulnerable, high risk and low resourceful contexts of growth for young people (Batey, 2012; Said-Metwaly, Van den Noortgate, & Kyndt, 2017). Therefore, the 7Cs model is especially suitable to vulnerable groups of youth and emerging adults in Latin America experiencing high rates of violence, substance and alcohol abuse, suicide attempts and depression (Cunningham, McGinnis, García Verdú, Tesliuc, & Verner, 2008; Hanssen, 2018). In fact, the main weakness of PYD scholarship has been indicated in the scarcity of models with contextual analyses linking individuals and their environment and exclusive focus on positive aspects neglecting negative consequences of

adverse conditions (van de Vijver, 2017). This chapter addresses these weaknesses and furthers evidence on the 7Cs among culturally diverse young people with a particular focus on their risky behaviors. Since relevant PYD scholarship has focused primarily on middle-income American adolescents and various indices of well-being, it is of utmost importance to extend this scholarship to understudied Latin American countries as to explore ways in which the 7Cs promote thriving and reduce risky behaviors among young people in Colombia and Peru.

In addressing these issues, the chapter adopts a comparative perspective on these two cultural contexts with samples of youth (ages 16–18) and emerging adults (ages 18–29), the latter representing specific and developmentally intriguing stage since past research has primarily addressed childhood and adolescence (Arnett, 2018). In that endeavor, the chapter brings incremental methodological contribution to the PYD field by providing evidence for the reliability and validity of the 7Cs model in terms of measurement invariance allowing future scholarship to use psychometrically reliable measurement across these populations in Latin America.

The chapter begins by introducing the 7Cs model with relevant connections, role and meaning in promoting thriving and reducing risky behaviors. This new conceptualization and measurement in the PYD appears particularly suited to extend the field among young people in Latin America. In fact, the brief presentation of the local contexts of growth and development for young people in Colombia and Peru strengthens the application and usefulness of the 7Cs model by promoting relevant advancements to the PYD field. Further, the chapter presents empirical evidence for the validity of the 7Cs model and its relevance in reducing risky behaviors among young people in these culturally diverse contexts. The closing section argues for developmental suitability and cultural applicability of the 7Cs with the potential to promote encouraging research, policy and practice.

The 7Cs and Risky Behaviors Among Young People

The 7Cs model has been proposed in response to the need for new, developmentally suited and culturally applicable indicators of PYD (Syvertsen, Scales, & Toomey, 2019; van de Vijver, 2017). The 7Cs build on the most influential 5Cs model of PYD of competence, confidence, character, caring, connection plus the 6C of contribution, seen as an outcome of the development of the other Cs (Shek, Dou, Zhu, & Chai, 2019). This new operationalization expands on the 6Cs of PYD to include *creativity* as an asset in promoting flourishing among young people, defined as novel-original and useful-adaptive, problem-solving ability meaningful within a social and cultural context (Batey, 2012; Said-Metwaly et al., 2017).

The 7Cs model has been proposed and validated in several cross-cultural studies, demonstrating that the 7Cs supplemented by creativity have the potential to optimize and vitalize PYD scholarship into broader aspects of developmental growth for relevant developmental and conceptual considerations (Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#)). From a *conceptual perspective*, core theoretical and empirical contributions have shown that creativity enhances social and emotional development, positive identity and well-being (Barbot & Heuser, 2017; Conner, DeYoung, & Silvia, 2018; Richardson & Mishra, 2018; Shen, Hua, Wang, & Yuan, 2020). Creativity is an asset within the capacity of communities, schools and young people to proactively develop positive experiences in social relationships and developmental competencies especially for those exposed to disadvantages and difficult circumstances (Alayarian, 2019; Gråstén, Kokkonen, Quay, & Kokkonen, 2019).

From a *developmental perspective*, creativity reflects relevant processes across various developmental periods with age-related parallels in infancy, childhood, and young adulthood (Saggar et al., 2019) and generalizability across various cultural and social contexts (Glăveanu, 2019; Yong, Mannucci, & Lander, 2020). Further, creativity plays a crucial role for identity formation -

the most salient developmental task for young people usually facing challenges of defining their identity, future goals and prospects. In this relevant developmental period, creativity assumes asset-building function to identity formation which in turn fosters healthy adult development and successful life (Barbot & Heuser, 2017).

The 7Cs model postulates that when all 7Cs are promoted and experienced by young people, they have the potential to optimize broader aspects of developmental growth, well-being and thriving. When contexts promote competence (academic, social, vocational skills), confidence (sense of mastery, positive identity, and self-worth), character (integrity, moral commitment, and personal values), connection (healthy relation to community, friends, family, and school), caring (empathy and sympathy), contribution (community/society volunteering, help participation) and creativity (useful-adaptive, problem-solving ability), the evidence for positive behavior increases with fewer indications of problematic behaviors. Creativity as a core PYD indicator promotes useful skills for positive self-definition and creative solutions to existential problems that enhance thriving and success (Dimitrova et al., [this volume](#)). This is particularly salient for vulnerable young people facing challenges and living in risky and un-resourceful environments as those in Colombia and Peru. Young people in these countries are at-risk of being exposed to several acute and chronic stressors related to the armed conflict, drug production, trafficking, violence and crime, poverty, high levels of inequality and social exclusion (Brook, Brook, & Whiteman, 2007; Hanssen, 2018; UNICEF, 2016). Substance use is high with increasing abusive behaviors, deaths and injuries from youth violence constituting a major social, economic, and public health problem. These young people are victims of crime and violence in the region, registering the world's highest homicide rate in the ages of 15 and 29 years old (Cunningham et al., 2008). In this context, the relation between adolescents' risky behaviors and ill well-being is of particular relevance, given the adverse psychological effects of living in distressed and violent environments.

To this end, this chapter applies the 7Cs model capitalizing on the creative potential of youth and emerging adults in two arduous contexts in Latin America as to explore ways of reducing a common burden of this group experiencing significant rates of problematic and risky behaviors. The chapter focuses on three types of risky behaviors and their associated negative outcomes—engaging in crime and violence, abusing alcohol and substances, and suicide attempts. The focus on these types of risky behaviors is due to their particular salience for young people in Colombia and Peru and strong co-occurrence within a cluster of deviant behaviors (Craig, Zettler, Wolff, & Baglivio, 2019). Such risky behaviors impose enormous costs on the society and therefore merit significant attention and investment to help at-risk youth to address broader poverty and inequality challenges in their contexts. Alcohol and drugs use, crime and violence, along with consequential mental health conditions pose a substantial disease burden and impact on individuals and societies, accounting for roughly two-thirds of deaths worldwide and 80% of all deaths in the Latin American region (Chaskel et al., 2015).

As worrying as current rates of alcohol, drugs use, crime, violence and mental health conditions are, trends in the relevant risk factors for these conditions suggest that an increase in these rates is only likely to follow. Bearing in mind the multiple socio-cultural and political forces driving the drug market, violence and crime in Latin America, there is a pressing need to identify specific factors that contribute to the reduction and abstinence of risky behaviors among young people. By applying the 7Cs model of PYD to this vulnerable young population, this chapter aims to elucidate the role that individual, interpersonal and contextual assets play in promoting resistance of risky behaviors as to enhance further understanding of the phenomenon of involvement in such behaviors and promote local priorities for research, policy and practice.

The Context of Young People in Colombia and Peru

The application and promotion of the 7Cs model find a perfect match in Latin America where young people experience significant rates of violence, crime, mental health and behavioral problems in a scarcely resourceful context (Catalano et al., 2019; Scales, Roehlkepartain, & Shramko, 2016). In fact, available work in the region has shown that the PYD perspective is useful in enhancing positivity and thriving among youth in Belize (Fagan et al., [this volume](#)), Brasil (Dutra-Thomé & Ponciano, [this volume](#)), Chile (Araya et al., 2013), Colombia (Luengo Kanacri et al., 2017), the Dominican Republic (Ibarraran, Ripani, Taboada, Villa, & García, 2014), Ecuador (Andrade et al., 2014), El Salvador (Tirrell et al., 2019), Mexico (Dominguez, Wium, Jackman, & Ferrer-Wreder, [this volume](#); Marsiglia et al., 2013; Marsiglia, Kulis, Booth, Nuño-Gutierrez, & Robbins, 2015), Panama (Aramburú et al., 2012) and Peru (Diaz & Rosas, 2016). Despite this pioneering work, PYD scholarship in Latin America is to be furthered due to disproportionate levels of hardships and life stressors among young people. Therefore, the present chapter expands the applicability and usefulness of culturally suited PYD approach in two countries in the region with relevant socio-cultural and context uniqueness.

Both countries share a common border and heritage as part of the Spanish Empire in the past with Spanish as official language along with similar threats from terrorism and battles against drug cartels (Cornejo Salinas, Martínez, & Vidal-Ortiz, 2020; Millán-Quijano, 2020). Importantly, national reports have constantly shown that the rates of consumption of alcohol and drugs in adolescents are a real problem in both countries accompanied by high rates of risk behaviors, such as violence, crime, suicide attempts and mental illness (Benjet et al., 2019; Chaskel et al., 2015; Cortes-McPherson, 2020; González Peña & Dorussen, 2020; Pérez-Gómez, Lanziano, Reyes-Rodríguez, Mejía-Trujillo, & Cardozo-Macías, 2018; Prieto-Damm et al., 2019).

The Republic of Colombia occupies the North-Western part of the South American continent, bordered by Venezuela, Brazil, Peru and Ecuador. The national population amounts in nearly 50 million of which 8.5 million are young people aged 15–24 years (Central Intelligence Agency, 2020). These young people have grown in a historical context of 60 years of armed conflict overlaid upon high rates of homicide, gang activity and prevalent gender-based and intra-familial violence (Cornejo Salinas et al., 2020; Cuartas & Roy, 2019; Miller, 2020). Colombia is the primary cocaine source for drug markets worldwide with significant rates of alcohol and drug use disorders. In fact, alcohol is the most common substance of misuse and the population burden of alcohol misuse and illicit drug use is significant (Chaskel et al., 2015). Further comparative work showed that the rate of drug use among youth in Colombia exceeds rates observed in other Latin American countries (Inter-American Drug Abuse Control Commission, 2006).

Colombia has gone through the longest conflict in Latin America for almost 60 years. The civilian population became the main victim of crossfire among “guerrillas”, paramilitary groups, drug traffickers and military forces (Centro Nacional de Memoria Histórica, 2013). In 2016 there were 7.6 million people registered as victims of the conflict in the National data of Colombia and 2.5 million children and youth (UNICEF, 2016; Unidad de víctimas, 2017). These young Colombians were victims of forced recruitment, sexual crimes and forced displacement by illegal armed groups, facing family loss, poverty and the abandonment of the state during the armed conflict. They have had to face the legacy of political violence without their voice being recognized.

The Republic of Peru is a Western-South American country bordering with Bolivia, Brazil, Chile, Colombia, and Ecuador. The current population amounts in 32 million of which 8.5 million are young people between 15 and 29 years of age (Organisation for Economic Cooperation and Development (OECD), 2018). The country is still struggling with the consequences of a two-decade conflict from 1980 to 2000 between the state and

terrorist groups and has a substantial production of cocaine (BBC, 2018).

Nevertheless, the country has met sustainable development in the last 15 years, reducing poverty, which had other positive consequences, such as lowering the rates of chronic malnutrition. Yet, one important issue with a big impact on Peruvian youth making them a particularly vulnerable group is violence. Based on recent reports, 81% of adolescents aged 12–17 years were victims of psychological or physical violence (UNICEF, 2018). Another concern relates to the mental health of young people, particularly depression and suicide. The suicide rate is the second highest cause of death for adolescents and young adults in the world and the fourth in Peru (Pan American Health Organization, 2017; World Health Organization, 2014).

In summary, Colombia and Peru have similar socio-cultural backgrounds and common history of internal conflicts, violence, and large at-risk population of young people. Both countries are also permeated by crime, violence, and illegal drugs putting enormous financial and psychological costs on young people and on their societies. Nevertheless, there is evidence that youth and emerging adults in the region can be productive and contributing members of society (Cunningham et al., 2008). Although these young people have suffered prolonged political and social conflict, changes have been observed, such as the central importance assigned to democratic values (Pew Research Centre, 2017) and optimistic approach toward life and the future (Cork & Malbon, 2019). PYD perspective as an approach to life of young Colombians and Peruvians has the potential to shift the perceptions of their social environment and promote positivity and well-being. Realizing the potential of these young people is essential for their well-being, as well as long-term welfare of the Latin American region. The 7Cs model of PYD provides useful avenues to young people’s families, communities, governments and organizations to help youth reach their potential. How to promote thriving and successes by preventing and reducing problems among young populations in the region is the subject of this chapter.

The Present Chapter

The present chapter extends PYD scholarship in Latin American context to stress the thriving capacity of young people in such severely violent and psychologically harmful context. More than half of all young people in the region can be considered at-risk because exposed to contexts that lead them to engage in behaviors or experience events that are harmful to them, their societies and the future generations. These behaviors include engaging in alcohol and substance abuse, behaving violently, initiating crime activities and committing suicide attempts (Chaskel et al., 2015). The newly developed 7Cs model extends PYD scholarship among vulnerable young people in Colombia and Peru by embracing their current potential to promote well-being and make substantive contributions to their respective societies.

The model affirms the 7Cs as a new way of conceptualizing PYD that needs to be developed, promoted and experienced by young people who in turn are more likely to follow a life trajectory marked by positive developmental outcomes and are also less likely to be on a trajectory of risky behaviors, such as alcohol and substance abuse, crime, and suicide attempts. Therefore, main assumptions of this chapter deal with the notion that (1) competence, confidence, connection, character, caring, contribution and creativity represent structurally valid and reliable PYD indicators among youth in Colombia and Peru; (2) when these youth experience and develop the 7Cs, they may increase a trajectory for continued life success by reducing risky and problematic behaviors.

In line with these assumptions, the chapter investigated the reliability and structural validity of the 7Cs model in terms of measurement invariance and applicability of the 7Cs as a promising model to reduce the emergence of risky behaviors in both cultural samples. Measurement invariance refers to the degree to which the 7Cs model exhibits identical psychometric properties across groups (Meade, Johnson, & Braddy, 2008). Goodness of fit for the model was assessed with the Root-Mean-Square Error of

Approximation (RMSEA; recommended $< .08$) and the Comparative Fit Index (CFI; recommended $> .95$) (Meade et al., 2008; van de Vijver et al., 2019). Invariance was tested in a set of Multigroup Confirmatory Factor Analysis (MG-CFA) following established procedure (i.e., examining the size of the loadings and intercepts and the difference between constrained and unconstrained models obtaining $\Delta CFI < .01$) at structural invariance (all items/factors are associated with the 7Cs allowing for subsequent tests to be conducted), construct invariance (all items/factors are associated with 7Cs in the same way allowing the comparison of relations between these factors with other constructs), and scalar invariance levels (allowing to compare mean differences on the 7Cs).

Youth and Emerging Adults from Colombia and Peru

This chapter presents data from a larger international study on PYD across cultures covering more than 30 countries around the world (Dimitrova & Wiium, [this volume](#); Wiium & Dimitrova, 2019). Data were drawn from 755 young people (M age = 19.72 years, SD = 3.93) from Colombia (n = 248) and Peru (n = 507), who provided information on their ethnic background, gender, age, and parental education. Socio-economic status (SES) was computed by creating a composite score of participants' responses on educational levels (primary, secondary, and university degree) of both parents. This score was recoded into three levels by adopting established SES criteria resulting in three levels of low, middle, and high SES (Diemer, Mistry, Wadsworth, López, & Reimers, 2013). In addition, participants filled out self-reported measures on the 7Cs and risky behaviors.

The 7Cs were measured with the following set of measures. First, The PYD Short Form ([PYD-SF]; Geldhof et al., 2014) comprising 34 items distributed in 5 subscales was used to measure *competence* (6 items related to class work at school/university), *confidence* (6 items referring to individual happiness and self-worth), *charac-*

ter (8 items referring to various management abilities), *caring* (6 items referring to empathic and caregiving behaviors), and *connection* (8 items related to encouragement at school/university). Response options were given on a 5-point Likert scale and calculated as means with high score indicating high levels of each C. Second, *Contribution* was measured with 6 items exploring the frequency of time spent helping others (i.e., friends and neighbors) and providing service to the community (i.e., volunteering, mentoring, peer advising, participating in school government) (Geldhof et al., 2014). Responses were answered on a 5-point Likert scale with a composite mean score and high scores indicating high levels of contribution. Third, *Creativity* was measured with 9 items from The Reisman Diagnostic Creativity Assessment ([RDCA]; Reisman, Keiser, & Otti, 2016) identifying areas of creative strengths. These items represent creativity as a core dimension of the 7Cs model conceived as mind/brainstorming skills in generating original ideas/answers to own challenges answered on a 5-point Likert scale with high scores indicating high levels of creativity.

Risky behaviors were measured with 10 items from a previously adopted PYD survey (Geldhof et al., 2015) related to drinking habits, substance use, violence and suicide attempts. Response options were calculated as a composite mean with high scores indicating more experienced risky behaviors.

The measures have been tested and validated in culturally diverse samples of youth and young adults (Geldhof et al., 2014; Haugan, Utvær, & Moksnes, 2013) and showed good internal reliability in the present samples as well (Table 1). In addition, all measured constructs have been tested for measurement invariance. This was done through a set of multi-group comparisons between the unconstrained and constrained measurement models for each measure used and obtaining $\Delta CFI \leq .01$, guaranteeing configural and metric invariance. Table 2 presents the fit statistics of the

Table 1 Young people in Colombia and Peru

| | Colombia (n = 248) | Peru (n = 507) |
|---------------------------------|-----------------------|-------------------|
| Age, M (SD) | 19.42 (2.81) | 19.86 (4.37) |
| Gender, % females | 64 | 60 |
| SES, % | | |
| Low | .04 | – |
| Medium | 55 | 38 |
| High | 45 | 62 |
| The 7Cs, M (α) | | |
| Competence | 3.27 (.70) | 3.36 (.77) |
| Confidence | 3.83 (.89) | 3.90 (.91) |
| Character | 4.06 (.80) | 3.85 (.84) |
| Caring | 3.77 (.81) | 3.60 (.88) |
| Connection | 3.58 (.75) | 3.57 (.81) |
| Contribution | 2.63 (.63) | 1.40 (.70) |
| Creativity | 3.64 (.89) | 3.64 (.90) |
| Risky behaviors, M (α) | | |
| Alcohol use | .60 (.61) | .26 (.60) |
| Drug use | .77 (.62) | .13 (.62) |
| Violence | .76 (.60) | .13 (.68) |
| Suicide attempt | .85 | .12 |

Note. M = Mean; SD = Standard Deviation; SES = Socioeconomic Status; α = Cronbach’s alpha reliability coefficient; α values for suicide attempt were not performed because measured with one item only

Table 2 Invariance models for the 7Cs and risky behaviors

| | Model fit | | |
|-----------------|--------------|-------|------|
| | $\chi^2(df)$ | RMSEA | CFI |
| The 7Cs model | | | |
| Competence | 52.45 (13) | .063 | .965 |
| Confidence | 132.28 (27) | .072 | .965 |
| Character | 153.31 (45) | .057 | .937 |
| Caring | 52.90 (19) | .049 | .983 |
| Connection | 152.48 (43) | .058 | .944 |
| Contribution | 64.78 (14) | .069 | .915 |
| Creativity | 177.01 (56) | .054 | .969 |
| Risky behaviors | 7.51 (5) | .026 | .963 |

Note. χ^2 = Chi-Square tests significant at $p < .01$; df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation. The represented models for each construct refer to the measurement weights model indicating construct invariance across samples

measurement weights model indicating construct invariance for each measure across samples. Thus, all measures employed have shown good invariance at construct level indicating equal associations of items composing each construct (the 7Cs and risky behaviors) for both samples.

Invariance and Factorial Validity of the 7Cs Model

In line with the first goal of testing the invariance of the 7Cs model, two MGCFAs were run across samples in Colombia and Peru. The first model represented the 7Cs as 7 measured variables (competence, confidence, character, connection, caring, contribution and creativity) loading to an overall PYD factor. The results provided support for the factorial validity of the 7Cs model and a good fit at construct level of invariance, $\chi^2(28, 755) = 73.84, p < .001, RMSEA = .047, CFI = .972$ (Fig. 1a).

An additional model was implemented following prior PYD conceptualizations presented in the introduction treating the 6C of contribu-

tion as an outcome variable associated with the other Cs (Shek et al., 2019). This second model aimed to explore whether all 6Cs load into one PYD factor leading to contribution. This model represented PYD as one latent variable composed by 6 measured variables (competence, confidence, character, connection, caring, and creativity) directly related to contribution (Fig. 1b). As in the first model test, the results of this second model indicated a good fit at construct invariance across samples, $\chi^2(30, 755) = 104.92, p < .001, RMSEA = .058, CFI = .954$. Standardized factor loadings are reported in Fig. 1 suggesting that both models can be used as a reliable and valid representation of the 7Cs model of PYD for young people in Colombia and Peru.

The 7Cs as a Promising Model for Reduction of Risky Behaviors Among Youth and Emerging Adults

In line with the second assumption on conceptual relations between the 7Cs and risky behaviors, two MGCFAs were implemented across cultural

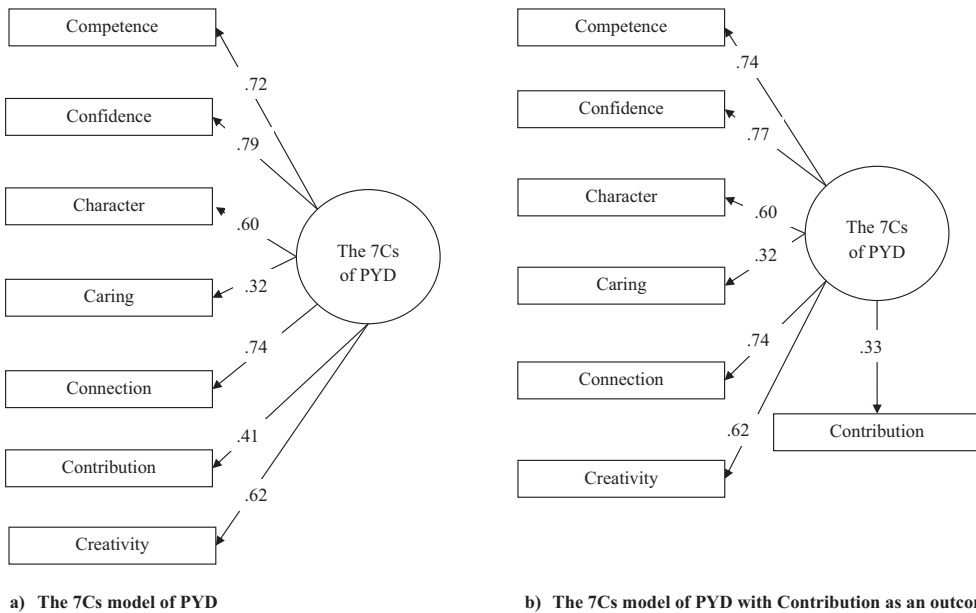


Fig. 1 The 7Cs model in Colombia and Peru (Note. Values represent standardized coefficients for the measurement weights model and are significant at $p < .001$. Coefficients refer to the mean score of both samples)

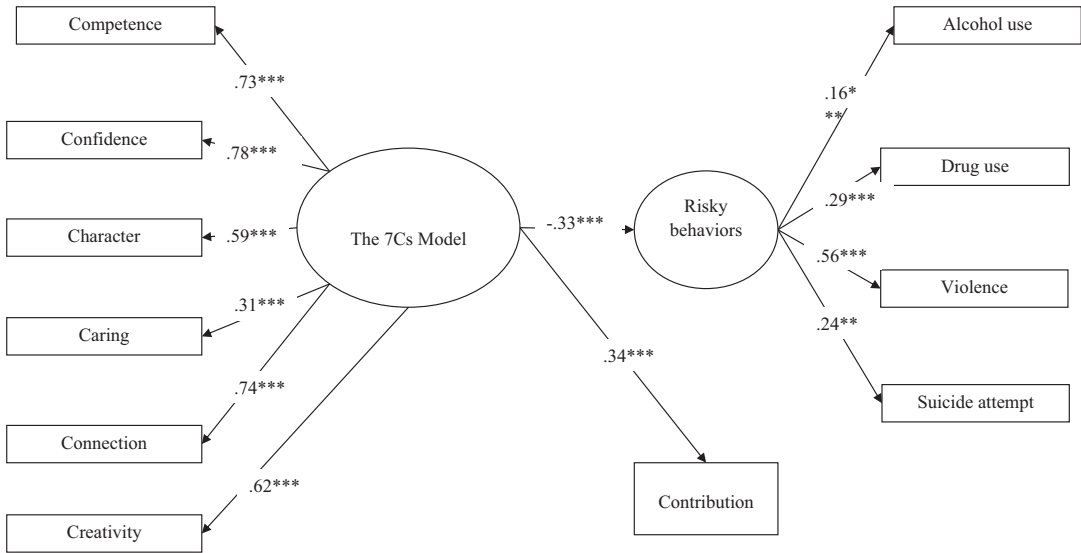


Fig. 2 The 7Cs and risky behaviors in Colombia and Peru (Note. Values represent mean score of both samples as standardized coefficients for the measurement weights model. * $p < .05$; ** $p < .01$; *** $p < .001$)

samples. The first model represented direct relations between the 7Cs factor with 7 measured variables (competence, confidence, character, connection, caring, contribution and creativity) and one risky behaviors factor with 4 measured variables (alcohol use, drug use, violence and suicide attempts). The model fit was good and suggested that the 7Cs factor of PYD was negatively related to risky behaviors, $\chi^2(87, 755) = 228.59, p < .001, RMSEA = .046, CFI = .922$. The second model tested direct relations between the 6Cs factor with 6 measured variables (competence, confidence, character, connection, caring, and creativity) with one contribution factor and one risky behaviors factor with 4 measured variables (alcohol use, drug use, violence and suicide attempts). Similarly to the first model, the good fit suggested that the 7Cs factor of PYD was positively related to contribution to the society and negatively related to risky behaviors of young people in Colombia and Peru, $\chi^2(87, 755) = 237.23, p < .001, RMSEA = .049, CFI = .919$ (Fig. 2).

Conclusions

Young people are an important asset to all societies, but in Latin America, they are exposed to a tremendous social burden as part of a devastating reality plaguing the region. Alcohol and substance abuse, illegal drugs, armed conflict, crime and violence permeate the region and remain a persistent problem with alarmingly increasing rates (Cortes-McPherson, 2020; Cuartas & Roy, 2019; Millán-Quijano, 2020; Pan American Health Organization, 2017). In such context, the relation between risky behaviors and models to prevent and reduce their occurrence is of particular relevance.

This chapter applies the 7Cs model of PYD to gain a deeper understanding of risky behaviors among young people in Colombia and Peru and use this model to reduce the occurrence of these behaviors. The chapter argues that the 7Cs is a promising model to apply to young people involved in the societal ills described above. Thus, by developing the 7Cs among young peo-

ple, it is possible to prevent them from engaging in risky behaviors or transform those already engaged in such behaviors. By gaining a better understanding of the processes through which these young people may become successful and thriving, researchers, policy makers and practitioners can better shape actions to prevent and mitigate risky behaviors.

The main conceptual contribution to the PYD field of this chapter regards the application of the 7Cs model including *creativity* that along with competence, confidence, character, caring, connection, and contribution represent core PYD dimensions with the potential to ameliorate unfavorable behaviors and outcomes. Enhancing the experience of the 7Cs leads to less risky behaviors in terms of alcohol and substance use, engagement in crime and violence and commitment of suicide attempts. In such conditions, young people are more likely to follow pathways of continued life success and contributions to their societies. This is of particular relevance for troubled young people in Latin America as the effects of the 7Cs model also indicated that such PYD approach has meaningful impact among these vulnerable and disadvantaged groups (Flanagan, Zaff, Varga, & Margolius, 2020; McBride, Johnson, Olate, & O'Hara, 2011).

The main methodological contribution to the PYD field of this chapter regards the strong empirical evidence on the structural validity and reliability of the 7Cs model across samples of young people in Colombia and Peru. This chapter provides support for strong construct invariance, suggesting functional similarity of the 7Cs model across these samples. Yet, the lack of scalar invariance indicates that mean comparisons of the 7Cs composing the model may not be conducted for group comparisons in the countries investigated here. Hence, the established invariance at construct level allows applications of the 7Cs model in cross-cultural studies exploring associations between the 7Cs and relevant constructs of interest among samples from Colombia and Peru.

Implications for Research, Policy and Practice

By applying the 7Cs model for the first time among vulnerable and at-risk young populations in severely harmful contexts in Colombia and Peru, this chapter indicates salient pathways for research, policy and practice. Accordingly, the chapter furthers international PYD scholarship with a special focus on Latin America by adopting and validating the 7Cs model in vulnerable and at-risk young people. The establishment of cultural invariance of the 7Cs and measures used to test these PYD indicators advances valid adaptation and widespread research applications of this new PYD model. As a result, international as well as researchers from Colombia and Peru can reliably adopt the 7Cs model and its measures to study PYD among culturally and developmentally diverse populations of youth and emerging adults.

This chapter promotes the 7Cs model intended to deepen our conceptual thinking about young people living in adverse contexts by adopting new tools that will allow for a more accurate and culturally embedded overview of this population, and extending the boundaries of policy actions and reforms. As young people in Latin America are at risk, adopting policies that enhance their experience of the 7Cs is likely to have a positive impact on their well-being and involvement in risky behaviors. In turn, such policies are very likely to produce global impact on the social and economic development in the region, both today and well into the future. Further, the co-occurrence of many types of risky behaviors implies that policy makers need to promote programs that target these types of behaviors to be more efficient than those that target only one. As negative consequences of risky behaviors of young people have significant costs to both the individual and society, public policies in Colombia and Peru need to invest on positive aspects of young people as core assets of the national investment in economic and social

development. Reducing this kind of behaviors would also reduce social costs as young people would have greater human capital and productive capacity. Policies promoting the 7Cs would help young people to build greater psychological potential and a chance of enjoying life.

The adoption of the 7Cs model has relevant impact on practice. It is essential that PYD research and policy are aligned with youth development professionals as to promote the type of interaction between science and practice that has been urged for in applied developmental science. These professionals can benefit from this chapter to monitor and prevent the emergence of risky behaviors while also designing programs that maximize individual and collective growth through the 7Cs.

Realizing the potential of Latin America's young people is essential not only to their well-being, but also to the long-term welfare and prosperity of the whole region. The present chapter delineates ways to build on the successes in this regard by promoting the 7Cs model of competence, confidence, character, caring, connection, contribution and creativity in Colombia and Peru. Because young people in these countries represent particularly vulnerable group due to significant rates of risky behaviors such as alcohol and drug use, violence and suicide, adopting a PYD approach to capitalize on their strengths appears a promising avenue to promote well-being and reduce such risky behaviors in this vulnerable population. Families, schools, communities, governments and youth organizations can build on the 7Cs model of PYD to help these young people reach their potential.

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Promoting Mindfulness Through the 7Cs of Positive Youth Development in Malaysia

Nor Ba'yah Abdul Kadir, Rusyda Helma Mohd, and Radosveta Dimitrova

Abstract

Mindfulness is one of the most widely regarded constructs of human development and positive psychological experiences representing a significant area of growth within the larger field of positive psychology. Mindfulness involves the awareness of the present moment sustained by a mindset of openness to novelty and ability to draw novel distinctions reflected in novelty seeking, novelty producing and high overall engagement. Mindfulness promotes psychological well-being, thriving and success with relevant rela-

tions to Positive Youth Development (PYD). This chapter applies the 7Cs of PYD (e.g., competence, confidence, character, caring, connection, contribution and creativity) as a promising model to enhance mindfulness among emerging adults ($N = 400$) in Malaysia. In so doing, the chapter provides evidence for the reliability and validity of the 7Cs model that in turn enhances mindfulness in young people from Malaysia. Finally, the chapter offers relevant conceptual and methodological advancements to the PYD field by outlining promising research, policy and practice implications.

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Keywords

The 7Cs model · Mindfulness · Malaysia · Emerging adults

Promoting Mindfulness Through the 7Cs of Positive Youth Development in Malaysia

Mindfulness is one of the most widely regarded constructs of human development and positive psychological experiences involving a mindset of awareness, openness, novelty seeking, novelty producing and high overall engagement (Analayo, 2003; Langer, 1989). Further, mindfulness repre-

sents a significant area of growth within the larger field of positive psychology and powerful determinant of psychological well-being, thriving and success. This chapter focuses on mindfulness and its relevant relations to Positive Youth Development (PYD) among young people in under-researched Asian context. In so doing, the chapter tackles the pressing need for novel conceptualization and measurement frameworks for promoting PYD scholarship internationally (Gomez-Baya, Reis, & Gaspar de Matos, 2019; Koller & Verma, 2017; van de Vijver, 2017) by applying the 7Cs of PYD (competence, confidence, character, caring, connection, contribution and creativity; Dimitrova et al., [this volume](#)) as a well suited model to enhance mindfulness among emerging adults in Malaysia.

While the literature is beginning to converge toward a more comprehensive assessment of both mindfulness and PYD models, it has largely focused on assessing these constructs separately and in English speaking populations, primarily in the USA. Given the exponentially increasing interest in mindfulness-based therapies, PYD interventions and their assessment, work and conceptualization concealing both constructs internationally and in non-English speaking populations are warranted. Thereby, the chapter addresses these issues by offering relevant incremental conceptual and methodological contributions to mindfulness and the PYD scholarship in Asia and globally. First, the chapter builds on a new conceptual definition of PYD by applying a newly developed 7Cs model of PYD in Asia. Second, it provides an inclusive model on ways in which PYD can promote mindfulness in emerging adults in addition to adolescent samples that have so far mostly been applied in research, policy and intervention settings. Thirdly, the chapter presents valid and reliable scales that advance research on mindfulness and PYD in Asia as well as in clinical, social, and organizational contexts. In addition to facilitating academic research on mindfulness and the 7Cs of PYD, these scales may be useful in practical, self-assessment contexts both for practitioners and decision makers as well as training purposes.

The chapter begins by introducing the concept of mindfulness and the 7Cs model and their relevant contribution in promoting thriving and successful life experiences among young people. Next, a brief overview of the local context of young people in Malaysia is offered, followed by presentation of the sample and measures applied in that context. Further, the chapter follows with empirical evidence for the cultural applicability of the concept of mindfulness and its strong relation to the 7Cs among young people in Malaysia. The concluding section builds on main contributions of the chapter to PYD scholarship in Asia and globally with research, policy and practice implications.

Conceptualization and Measurement of Mindfulness

Mindfulness is one of the most widely regarded constructs of human development and positive psychological experiences representing a significant area of growth within the larger field of positive psychology. The conceptualization of mindfulness refers to a sustained and receptive awareness of the present moment with a mindset of openness to novelty in which the individual actively constructs novel categories and distinctions (Analayo, 2003; Langer, 1989). Mindfulness is characterized as both a trainable mental quality (Denkova, Zanesco, Rogers, & Jha, 2020; Oldfield, Stevenson, & Ortiz, 2020) and a relatively stable disposition (Galles, Lenz, Peterson, & Sampson Jr, 2019; Park & Nam, 2020). Despite the variety of operationalization, mindfulness has become a general term referring to practices, processes, or features that involve attention, acceptance, flexibility, emotionality, and self-awareness (Creswell, 2017; van Dam et al., 2018).

Research on mindfulness has proliferated in recent years with the vast majority studies of intervention or programs implemented in schools, communities, health centers, or clinical settings (Emerson, Nabinger De Diaz, Sherwood, Waters, & Farrell, 2020; Schonert-Reichl & Roeser, 2016). Main reasons for this explosion of interest are based on the evidence that mindfulness has substantial psychological and physical health benefits

(Cheang, Gillions, & Sparkes, 2019; Clear, Zimmer-Gembeck, Duffy, & Barber, 2020; Spadaro & Provident, 2020) as a personal strength that promotes resilience (Cortazar & Calvete, 2019; Galla, Tsukayama, Park, Yu, & Duckworth, 2020). Overall, these studies have reported strong positive relation between mindfulness, better well-being and less emotional distress (Calvete, Orue, & Sampedro, 2017; Pepping, Duvenage, Cronin, & Lyons, 2016; Xu et al., 2018). Mindfulness has also been associated with greater connection and closeness in relationships as well as positive interpersonal qualities, reduced relationship stress, loneliness, and overall healthy relational functioning (Jin, Zhang, Yang, & An, 2020; Sagui-Henson, Levens, & Blevins, 2018). Taken together, this body of work suggests that mindfulness increases the likelihood for positive relations by acting as a resource for positive functioning. Thus, mindfulness has broad potential related to the individual experience of competence, confidence, character, caring, connection, contribution and creativity as core PYD components. More specifically mindfulness promotes high quality of social relationships as well as mindful reinterpretation of developmental tasks and challenges typical for young people such as defining own identity, goals, and prospects (Alahari, 2017; Gómez-Olmedo, Valor, & Carrero, 2020).

Despite burgeoning work on the benefits of mindfulness and mindfulness training, there has still been little research on naturally occurring mindfulness (i.e., untrained mindfulness features) that can be reliably measured in emerging adulthood spanning ages from 18 to 29 years (Cano et al., 2020; Duprey, McKee, O'Neal, & Algoe, 2018). More specifically, there is a dearth of knowledge on whether adult mindfulness conceptualizations and measures can be extended down to younger age groups (Dion, Paquette, Daigneault, Godbout, & Hébert, 2018; Zimmer-Gembeck, 2020). In fact, advances in the assessment of mindfulness in adolescents and emerging adults have lagged somewhat (Goodman, Madni, & Semple, 2017; Pallozzi, Wertheim, Paxton, & Ong, 2017). The application of reliable and valid assessments of mindfulness in these age groups is important as to provide knowledge base on

whether current conceptualizations of mindfulness geared prevalently toward adults, track the expression of mindfulness in young people. Further, because mindfulness is primary mechanism promoting beneficial changes in well-being and health through mindfulness training, valid and reliable measures to test treatment effects are critical for advancing current conceptualizations in the field (Johnson, Burke, Brinkman, & Wade, 2017; Zimmer-Gembeck, 2020). This chapter addresses the above presented measurement issues by testing the reliability and validity of a mindfulness scale in a large sample of emerging adults in Asia and exploring its meaningful relations with the 7Cs of PYD.

Mindfulness and the 7Cs Model of PYD

This chapter applies the notion of mindfulness as most appropriate individual strength with meaningful relations to PYD as further conceptualized in this section. The scope of this chapter also tackles the growing interest in mindfulness as a way to enhance psychological and clinical treatment leading to prolific work aimed to operationalize and measure mindfulness (Chen, Liu, Chiou, & Lin, 2019; Ostafin, Robinson, & Meier, 2015). Such work has also testified the relevance and particular interest to scholars and practitioners on how people can develop high levels of mindfulness (Coleman & Coleman, 2019; Röthlin, Horvath, Birrer, & Grosse Holtforth, 2016) so this chapter provides a conceptual model to enhance mindfulness through the 7Cs of PYD. The 7Cs build on the most influential 6Cs model of PYD of competence, confidence, character, caring, connection and contribution (Lee & Horsley, 2017; Shek, Dou, Zhu, & Chai, 2019). This new operationalization expands on the 6Cs indicators of PYD to include creativity as an asset in promoting flourishing among young people, defined as novel-original and useful-adaptive, problem-solving ability meaningful within a social and cultural context (Batey, 2012; Said-Metwaly, Kyndt, & Noortgate, 2017).

The 7Cs model has been proposed and validated in several cross-cultural studies that clearly show the relevance and meaningful relations of creativity to PYD (Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). Further theoretical and empirical contributions have systematically demonstrated that creativity enhances social and emotional development, positive identity and well-being (Conner, DeYoung, & Silvia, 2018; Frick & Brodin, 2020; Richardson & Mishra, 2018). Creativity has a strong developmental valence and generalizability across infancy, childhood, and young adulthood (Hui, He, & Wong, 2019; Saggar et al., 2019) as well as various cultural and social contexts (Glăveanu, 2019; Yong, Mannucci, & Lander, 2020). Finally, creativity facilitates identity formation being the most salient developmental task for young people who struggle to define their identity, future goals and prospects. In such challenges, creativity fosters healthy adult development and successful life by promoting identity formation (Barbot & Heuser, 2017; Frick & Brodin, 2020).

The mindfulness-creativity link is particularly salient in a PYD perspective because promotes flourishing through useful skills for positive self-definition and creative solutions to existential problems that enhance self-esteem and success (Coleman & Coleman, 2019; Conner et al., 2018). This is particularly relevant for young people in Malaysia because mindfulness and creativity were found to be associated with stress reduction, increase of resilience and overall psychosocial functioning (Conner et al., 2018; Ramli, Alavi, Mehrinezhad, & Ahmadi, 2018; Zenner, Herrnleben-Kurz, & Walach, 2014). Jointly, mindfulness and creativity can serve as protective strengths for young people, given that the Malaysian society, government, and community actions do not promote these relevant strengths (Al-Sultan Abdullah, 2019). Therefore, sustaining mindfulness and creativity among young people in Malaysia can prompt them to be open to new information and diverse perspectives and actively participate in everyday life events with full attention and awareness to find unique solutions to these events. Investigating the

relations between the 7Cs model of PYD and mindfulness is crucial to promote the beneficial function and impact of these relations.

The Context of Young People in Malaysia

Malaysia is a Southeastern Asian peninsula bordering Thailand, the island of Borneo, Indonesia, Brunei, South China Sea, and Vietnam. The population estimation accounts for 32,652,083 people of which 9.1 million (52% males) are young people aged 18–30 years old (Department of Statistics, , 2020). The majority ethnic group is Bumiputra (68%), comprising a majority of Malays and a minority of other indigenous people and ethnic groups such as Chinese (23%) and Indian (7%) (Department of Statistics Malaysia, 2018). Malaysia is a Muslim majority country but many people identify as Buddhist, Christian, Hindu and other traditional Chinese religions (Central Intelligence Agency, 2020).

Following their independence from Great Britain in 1957, Malaysians see young people as future business and government leaders with the potential to increase the country's global economic and technological standards. Thus, the view of young people as active contributors to society has begun to take hold (Krauss et al., 2012; Zeldin, Gauley, Krauss, Kornbluh, & Collura, 2017). Although recently moderate economy growth has been reported (Economic Planning Unit, 2019), unemployed young people aged 15–24 years old account for nearly 6 million people facing economic hardship (Tengku Kamarul Bahrin, Hassan Azahari, Zulkarnal, Sallehudin, & Mohd Yusop, 2019; Welsh & Cheng, 2020).

Besides unemployment, other relevant issues affecting Malaysian young people are social problems and health risk due to drug abuse and suicide being major concerns for policymakers, researchers and stakeholders (Cheah, Azahadi, Phang, & Manaf, 2018; Chua, 2020; Othman et al., 2018). Epidemiological estimates show that mental health problems in Malaysia have doubled over the last 20 years and now affect

40% of the adult population (National Institutes of Health, 2020). Young people in Malaysia are particularly at-risk of developing mental health problems as the estimated prevalence of these problems destined to increase (Institute for Public Health, 2020; Khoo, 2017) especially among young people (Ahmad et al., 2015; Cheah, Azahadi, Phang, & Abd Manaf, 2020; Wong, Zulkefly, & Tan, 2020) exceeds the average worldwide rates (Polanczyk, Salum, Sugaya, Caye, & Rohde, 2015).

In response to these concerns, in 2016, the fourth edition of the Malaysian Youth Index has been developed to measure the indicators of the Malaysian youth's well-being in eight domains (self-development, social relationship, identity, self-potential, leisure, health, media engagement, deviant behavior). These indicators were used to develop the prevention and intervention programs in line with Positive Youth Development (PYD) to promote better well-being for Malaysian youth (Zeldin, Krauss, Kim, Collura, & Abdullah, 2016; Zeldin et al., 2017). Further, the government launched the National Youth Development Action Plan outlining 11 focus areas emphasizing social, entrepreneur, and leadership development, and creating more opportunities for youth and adults (Twelfth Malaysia Plan, 2020). The National Youth Development Action Plan adopted three components of PYD (i.e., personal efficacy, empowerment, and community connections) strengthened by the idea that emphasis and application of these components will prepare youth for productive roles in the country's economy, by also allowing them to take active roles in community development, social issues, and global citizenship (Ahmad, Rahim, Pawanteh, & Ahmad, 2012; Krauss et al., 2013).

In Malaysia, the current policy supports a youth development agenda through initiatives and plan for the future in the period of 2015 to 2035 (Malaysian Youth Policy, 2015). Therefore, youth policy actions aim at strengthening leadership development process, citizenship, well-being and broad competencies in line with the PYD perspective (Arshad & Hong, 2019). Yet, available reports underscore the need for more

attention and application of the PYD principles. The most recent Malaysian Youth Index, reports a sense of empowerment index score of 70.34 (out of 100), suggesting that contemporary Malaysian youth lack a strong sense of influence in their organizations, communities and daily lives (Institute for Youth Research Malaysia, 2017). Another nationwide study on the effectiveness of the Malaysian National Youth Development Policy reported that only 10% of youth felt perceived as recipients of, rather than partners in, community development efforts, while only 15% felt as though they were actively involved in finding solutions to issues affecting them (Krauss et al., 2013).

A PYD model has a particular utility in Malaysia and related mental health, social and organizational settings, where the social dimensions of various problems may be particularly poorly served. In fact, in Malaysia, PYD has been used to measure talents, strengths, interests, and future potential (Abdul Kadir, Rahim, Mutalib, et al., 2012; Abdul Kadir, Rahim, Mustapha, et al., 2012; Abdul Kadir, Mustapha, Abdul Mutalib, & Rahim, 2014; Abdul Kadir, Desa, Amat, Aun, & Ibrahim, 2017; Ang, 2009; Chong et al., 2011; Rahim, Abdul Kadir, Mahmud, Mohamed, & Kee, 2011). Such work has confirmed the usefulness of the model in enhancing thriving and success. Therefore, applying PYD among young people in Malaysia is of high relevance and priority given their reported limited social support (Kaur et al., 2019; Munikanan et al., 2017) and their needs for interventions focused on increasing self-agency, social connections, support and increasing contact with and acceptance from the broader community (Berry et al., 2019; Low, Lee, & Jacob, 2017). To these aims, the present chapter expands the usefulness and applicability of the 7Cs of PYD in unique Asian context with relevant socio-cultural distinctiveness. Enhancing mindfulness through the 7Cs model is of utmost importance as this approach may help the Malaysian society to facilitate the processes through which young people can be a source of national asset and societal growth.

The Present Chapter

This chapter addresses the growing interest in mindfulness and PYD as a way to enhance psychological well-being and operationalize and measure these constructs. In so doing, the chapter has two major goals. The first goal regards the application of the 7Cs as a new model of conceptualizing PYD that needs to be promoted and experienced by young people as to put them on a life trajectory marked by positive developmental outcomes, thriving and success (for introduction and conceptualization of the model see Dimitrova et al., [this volume](#); Manrique-Millones et al., [this volume](#)). The 7Cs model assumes that all 7Cs of *competence* (academic, social, vocational skills), *confidence* (sense of mastery, positive identity, and self-worth), *character* (integrity, moral commitment, and personal values), *connection* (healthy relation to community, friends, family, and school), *caring* (empathy and sympathy), *contribution* (community/society volunteering, help participation) and *creativity* (useful-adaptive, problem-solving ability) have the potential to optimize broader aspects of developmental growth, thriving and well-being. In applying the 7Cs model, the chapter explores ways to enhance mindfulness through the 7Cs among young people as to embrace their potential, well-being and success.

An additional goal deals with providing a more comprehensive assessment of both mindfulness and the 7Cs models by furthering evidence for their reliability and construct validity allowing future scholarship to use psychometrically reliable measurement scales in culturally diverse populations (Rutkowski & Svetina, 2017; van de Vijver et al., 2019). Importantly, these goals were addressed in the context of emerging adults (ages 18 to 29), representing specific and developmentally intriguing stage since past scholarship has primarily addressed childhood and adolescence (Arnett, 2018).

Emerging Adults from Malaysia

This chapter presents data from a larger international study on PYD across cultures covering more than 30 countries around the world

(Dimitrova & Wiium, [this volume](#); Wiium & Dimitrova, 2019). Data were drawn from 400 young people (M age = 21.572 years, $SD = 1.21$) from Malaysia, who provided information on their ethnic background, gender, age and filled in several measures on the 7Cs and mindfulness. The measures have been tested and validated in culturally diverse samples of young people (Geldhof et al., 2014; Haugan, Utvær, & Moksnes, 2013; Pirson, Langer, Bodner, & Zilcha, 2012) and showed good internal consistency in the present sample (Table 1). In addition, as further specified, all measures have shown very good reliability and construct validity for young people in Malaysia as well as highly significant inter-correlations (Tables 2 and 3).

Table 1 Sample characteristics and main variables

| | $N = 400$ |
|-----------------------|--------------|
| Age, M (SD) | 21.52 (1.21) |
| Gender, % females | 67 |
| The 7Cs, α | |
| Competence | .85 |
| Confidence | .90 |
| Character | .85 |
| Caring | .88 |
| Connection | .86 |
| Contribution | .82 |
| Creativity | .97 |
| Mindfulness, α | .93 |

Note. M = Mean; SD = Standard Deviation; α = Cronbach's alpha reliability coefficient; N = total sample

Table 2 Invariance models for the 7Cs and mindfulness

| | Model fit | | |
|--------------|--------------|-------|------|
| | $\chi^2(df)$ | RMSEA | CFI |
| The 7Cs | | | |
| Competence | 65.06 (6) | .077 | .947 |
| Confidence | 20.40 (7) | .069 | .991 |
| Character | 69.06 (17) | .088 | .995 |
| Caring | 19.85 (6) | .076 | .990 |
| Connection | 62.26 (18) | .079 | .967 |
| Contribution | 9.82 (3) | .079 | .990 |
| Creativity | 69.68 (24) | .069 | .986 |
| Mindfulness | 75.69 (20) | .084 | .983 |

Note. χ^2 = Chi-Square significant at $p < .001$; df = degrees of freedom; CFI = Comparative Fit Index; $RMSEA$ = Root Mean Square Error of Approximation

Table 3 Correlation matrix for mindfulness and the 7Cs

| | Mean | SD | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|-----------------|------|------|-----|-----|-----|-----|-----|-----|-----|----|
| 1. Mindfulness | 4.66 | 1.13 | – | | | | | | | |
| 2. Competence | 3.35 | .82 | .45 | | | | | | | |
| 3. Confidence | 3.65 | .82 | .47 | .71 | | | | | | |
| 4. Character | 3.85 | .61 | .56 | .52 | .58 | | | | | |
| 5. Caring | 4.10 | .73 | .42 | .20 | .29 | .65 | | | | |
| 6. Connection | 3.74 | .69 | .48 | .53 | .54 | .55 | .45 | | | |
| 7. Contribution | 2.86 | .89 | .24 | .21 | .22 | .31 | .27 | .29 | | |
| 8. Creativity | 3.51 | .80 | .63 | .54 | .49 | .51 | .27 | .49 | .25 | – |

Note. SD = Standard Deviation. All correlations are significant at $p < .01$

The 7Cs were measured with a set of measures such as The PYD Short Form ([PYD-SF]; Geldhof et al., 2014) comprising 34 items measuring *competence* (6 items related to class work), *confidence* (6 items referring to individual happiness and self-worth), *character* (8 items referring to various management abilities), *caring* (6 items referring to empathic and caregiving behaviors), and *connection* (8 items related to social connectedness). Response options were given on a 5-point Likert scale and calculated as mean scores with high scores indicating high levels of each C.

Contribution was measured with 6 items (Geldhof et al., 2014) concerning the amount of time spent in helping others (i.e., friends and neighbors) and community service (i.e., volunteering, mentoring, peer advising, participating in school government). Responses were answered on a 5-point Likert scale calculated as a composite mean score and high scores indicating high levels of contribution.

Creativity was measured with 9 items from The Reisman Diagnostic Creativity Assessment ([RDCA]; Reisman, Keiser, & Otti, 2016) regarding mind/brainstorming skills in generating original ideas/answers to own challenges answered on a 5-point Likert scale calculated as a composite mean score with high scores indicating high levels of creativity.

Mindfulness was measured with The Langer Mindfulness Scale ([LMS]; Haigh, Moore, Kashdan, & Fresco, 2011; Pirson et al., 2012) with 14-items (e.g., curiosity, enjoying intellectual challenges etc.) assessed on a 7-point Likert

scale and calculated as a composite mean score such that high scores corresponded with an increased propensity to be mindful.

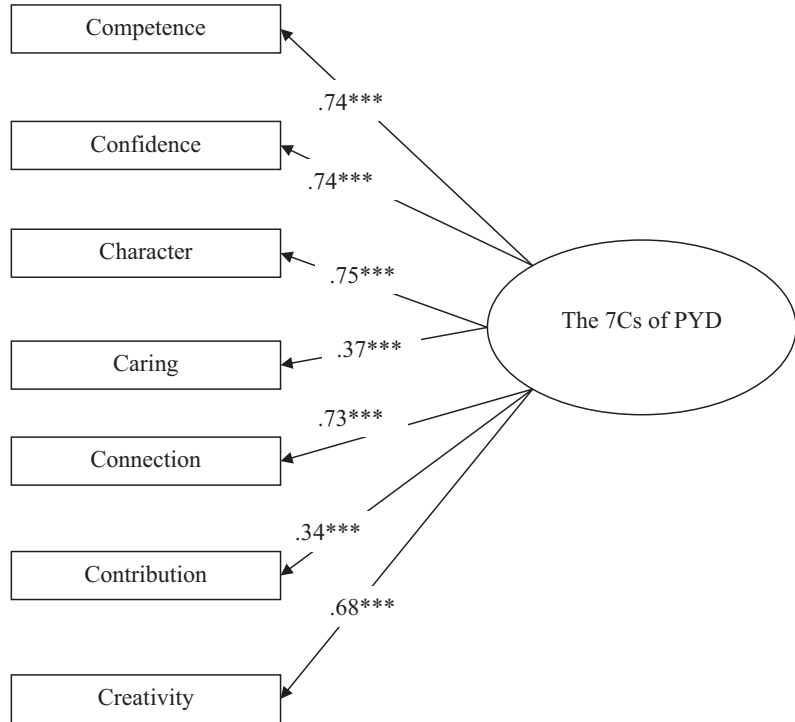
Construct Validity of Mindfulness and the 7Cs of PYD

A preliminary contribution of this chapter was to test for construct validity of mindfulness and the 7Cs model in a sample of young people from Malaysia. This was done by implementing several path models in Structural Equations Modeling (SEM) following goodness of fit indices for the Root-Mean-Square Error of Approximation (RMSEA; recommended $< .08$) and the Comparative Fit Index (CFI; recommended $> .95$) (Rutkowski & Svetina, 2017).

The first set of models tested the factorial structure of each C independently by running 7 separate path models represented by the respective items composing each C that loaded to an overall C factor. The results supported a good fit for each of the path models tested (Table 2). An additional model was implemented with the 7Cs as measured variables (competence, confidence, character, connection, caring, contribution and creativity) loading to an overall 7Cs of PYD factor. The results provided support for the factorial validity and invariance of the 7Cs model, $\chi^2(11, 400) = 25.34, p < .001, RMSEA = .057, CFI = .998$ (Fig. 1).

Additional path model showed a good fit for the mindfulness model represented by one factor related to all 14 items composing the mindfulness measure, $\chi^2(20, 400) = 75.69, p < .001,$

Fig. 1 The 7Cs model in Malaysia
 (Note. Values represent standardized coefficients.
 *** $p < .001$)



RMSEA = .085, CFI = .983 (Table 2). It can be concluded that all models confirmed the structurally reliable and valid representation of the 7Cs model and mindfulness for young people in Malaysia.

The 7Cs Promote Mindfulness Among Emerging Adults in Malaysia

Additional contribution of this chapter was to provide evidence for the conceptual relations between the 7Cs and mindfulness in the sample of young people from Malaysia. For this purpose, a path model was tested with the 7Cs composed by 7 measured variables (competence, confidence, character, connection, caring, contribution and creativity) leading to one 7Cs of PYD latent factor directly related to mindfulness. The model fit was good and suggested that the 7Cs factor was positively related to mindfulness. Yet, the modification indices suggested a strong rela-

tion between creativity and mindfulness. Therefore, a modified path model depicting direct relations between creativity and mindfulness was retained as providing a better fit, $\chi^2(16, 400) = 55.32$, $p < .001$, RMSEA = .078, CFI = .973. The 7Cs model of PYD has been shown to relate positively to mindfulness of young people in Malaysia (Fig. 2).

Conclusions

This chapter provides two main contributions to mindfulness and PYD scholarship as a way to enhance psychological well-being and thriving among young people. A strong methodological contribution regards the empirical evidence on the structural validity and reliability of both mindfulness and the 7Cs models for young people in Malaysia. This evidence provides support for strong construct validity for mindfulness and the 7Cs in this sample. The implementation of a

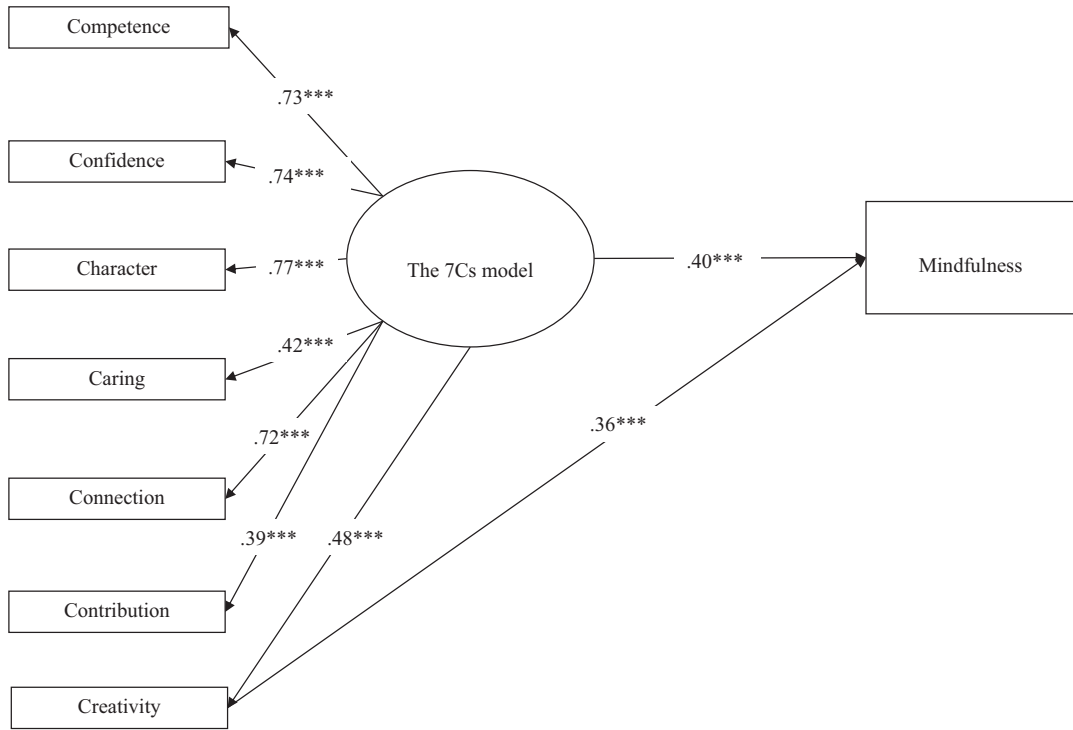


Fig. 2 The 7Cs model and mindfulness in Malaysia

comprehensive assessment of both mindfulness and PYD models amplifies their reliability and validity promoting future scholarship with psychometrically reliable measurement among young populations in Malaysia.

A strong conceptual contribution of this chapter regards the application of the 7Cs model that moves beyond previous conceptualizations of PYD focusing on competence, confidence, character, caring, connection, contribution, and creativity (Dimitrova et al., [this volume](#)). In applying the 7Cs model, the chapter supports the notion that the 7Cs enhance mindfulness among young people who are enabled to fully develop their potential, thriving and well-being. This is particularly relevant since mindfulness represents a powerful asset to enhance optimal development by reducing negative psychological states and behaviors (Su & Shum, 2019; Zimmer-Gembeck, 2020). Together, these contributions support the relevance of the 7Cs model beyond the United States in a generally neglected sample from Malaysia; thus, informing future mindfulness

and PYD research and intervention efforts to promote reliable indicators of positive functioning and human flourishing in this Asian context.

Implications for Research, Policy and Practice

The implementation of the 7Cs model as a way to promote mindfulness among young people in Malaysia furthers relevant research, policy and practice implications. The present chapter expands PYD international and Asian research by validating and supporting the cultural and structural validity of the 7Cs model. Such expansion advances PYD work led by local and international researchers who can benefit from valid measurement and models to investigate the 7Cs and mindfulness among emerging adults in Malaysia. It is likely that these researchers will gain greater insight into the nature of mindfulness by studying how a new conceptualization of PYD and mindfulness relate to one another.

The model provided in this chapter indicates relevant suggestions for policy. Policy actions targeting both mindfulness and the 7Cs in schools, organizations and communities can help preparing young people to thrive. Policy makers and organizations can benefit from this chapter to implement formalized mindfulness and PYD interventions with young people to foster academic achievement, social and emotional competence, physical and mental health as fundamentally interrelated to mindfulness and the 7Cs.

As to practice, although limited in scope and specific cultural group, this chapter may prompt joint PYD-mindfulness-based interventions that could potentially improve the well-being, health and quality of life of emerging adults in Malaysia. Institutions, community organizations and schools provide the ideal grounds to implement PYD-mindfulness-wide interventions to enhance all aspects of performance and well-being. These interventions may well be integrated into clinical settings since the efficacy mindfulness-based therapies have been widely established (Cairncross & Miller, 2020; Fresco & Mennin, 2019; Tickell et al., 2020). This is practically relevant for young people in general and in under-served and under-represented populations like Malaysian, since both PYD and mindfulness are associated with more robust physical and mental health, well-being, and thriving (Krauss et al., 2020; Ostafin et al., 2015).

In conclusion, given the growing interest among researchers and practitioners to study mindfulness and PYD models to identify strengths and indicators of optimal development among young populations, novel conceptualizations and measurement to be used in under-represented cultures and contexts is particularly important. The present chapter brings such new conceptual and measurement contributions to the rapidly increasing PYD scholarship across cultures to better understand its mechanisms and associated constructs in emerging adulthood. The 7Cs model of PYD has the potential to promote mindfulness as a relevant asset and personal strength for designing prevention and intervention programs.

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The Five Cs Model of Positive Youth Development and the PATHS Project in Mainland China

Xixi Li, Shasha He, and Bin-Bin Chen

Abstract

This chapter examines whether the 15 psychological constructs developed from the PATHS Project could fit into the Five Cs model (competence, confidence, character, connection, and caring) of Positive Youth Development (PYD) in the Chinese context. We used Confirmatory Factor Analysis (CFA) to test the fit of the Five Cs model based on 15 Chinese PYD constructs developed in the PATHS Project in China. Participants were 1116 middle school students aged 11 to 17 years old ($M = 14.43$, 49% males) from Shanghai, Suzhou, Yangzhou and Changzhou who participated in the PATHS project. The results confirmed a five-factor model consistent with the conceptualization of the Five Cs model of PYD. We conclude that the 15 Chinese PYD constructs and the Five Cs

model might conceptually overlap although some cultural differences should be considered.

Keywords

China · Confirmatory factor analyses · Five Cs model · PATHS project · Positive youth development

Recently, there has been increasing interest in research on Positive Youth Development (PYD) in China (Chang & Zhang, 2013; Gai & Lan, 2013; Ma, 2020; Shek, 2009; Wen, Su, Li, & Lin, 2015). For example, a model of the Positive Adolescent Training through Holistic Social programs (PATHS) based on 15 constructs (i.e., bonding, social, emotional, cognitive, behavioral and moral competence, self-efficacy, prosocial norms, resilience, self-determination, spirituality, clear and positive identity, beliefs in the future, prosocial involvement, and recognition for positive behavior) was developed (Shek, 2009). However, it remains unclear if the model developed in a Chinese context can be applied internationally. Researchers have discussed the application of PYD concepts and measures in a global context (Dimitrova & Wium, *this volume*; Leman, Smith, & Petersen, 2017). For example, the Five Cs model (Geldhof et al., 2015) was seen as a relatively

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culturally universal model for understanding PYD (for expanded 7Cs model see Dimitrova et al., [this volume](#)). The model has proved to be reliable and valid across various cultural groups in China and samples in Africa, Asia, Latin America and Europe (Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Chen, Wiium, & Dimitrova, 2018; Dimitrova et al., [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Dominguez, Wiium, Jackman, & Ferrer-Wreder, [this volume](#); Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#); Holsen, Geldhof, Larsen, & Aardal, 2017; Kozina, Wiium, Gonzalez, & Dimitrova, 2019; Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#); Wiium, Ferrer-Wreder, Chen, & Dimitrova, 2019).

The present chapter aims at testing whether the 15 PYD constructs developed in China could fit into the Five Cs structure originally developed in the U.S. context. Testing the fit between the 15 PYD constructs and the Five Cs model might help to understand the potential international validity of the Five Cs model by using measures of semantic similarity developed from a Chinese research program. In the following sections, we first introduce the Five Cs model. Second, we provide an overview of the PATHS model and its 15 constructs. Third, we introduce the PATHS model in mainland China. Fourth, we discuss potential links between the 15 constructs and the Five Cs model. Fifth, we report an empirical investigation on whether the 15 constructs would fit into the Five Cs structure. Last, based on the current findings we discuss relevant implications for research, policy and practice.

The Five Cs PYD Model in China

The PYD approach views youth development in a broad and holistic perspective by stressing positive aspects rather than deficits (Catalano et al., 2019). Accordingly, this chapter focuses on the 5Cs model as one of the most prominent conceptualizations of youth thriving and success indexed by competence, confidence, connection, character, and caring (Shek, Dou, Zhu, & Chai, 2019).

In the following section, we present the 5 constructs with a specific focus on the Chinese context (Chen et al., 2018).

Competence Competence refers to good functioning in domain-specific social and academic areas. Social competence pertains to interpersonal skills (e.g., conflict resolution) as well as social adaptation and positive social interpersonal interactions (Chen et al., 2018; Ma, 2012). School grades, attendance, and test scores are part of academic competence. In a report of the Program for International Student Assessment (PISA) on academic skills and knowledge in 15-year-old adolescents across countries (PISA, 2012), Chinese youth were found to achieve higher levels of academic achievement than their peers in all other countries. The excellent academic competence of Chinese youth was not surprising because academic achievement is highly valued and emphasized by both traditional and modern Chinese cultures (Fu, Lee, & Wang, 2020). Further, social competence has been increasingly investigated among Chinese youth (Chen et al., 2016; Chen, Li, Chen, & Chen, 2011) and found to be associated with leadership and social participation (Chen et al., 2016), co-parenting (Zou & Wu, 2020), school readiness and overall adjustment and well-being (Li et al., 2020).

Confidence Confidence represents an overall positive self-perception and self-worth. China is often described as a competitive and market-oriented society (Xi, 2006) where people are expected to be highly self-confident and self-efficacious (Chen, Cen, Li, & He, 2005). In response to new societal challenges, children and youth socialization processes, especially in urban cities, are more likely to focus on strong encouragement of self-confidence (Chen, Bian, Xin, Wang, & Silbereisen, 2010; Halstead & Zhu, 2009). In recent years, contingencies and circumstances that may determine confidence have received growing empirical attention. Research shows that there are relevant sources of confidence in Chinese adolescents, such as interpersonal behavior, appearance, family condition, and family relation (Hu, Zhang, Wang, & Zhang, 2013).

Connection Connection concerns positive relationships with people and institutions. Such positive bonds are reflected in bidirectional exchanges between the individual and peers, family, school, and community in a mutual relationship (Lerner et al., 2005). Within the Five Cs model, we discuss connection by focusing on positive relationships with people and institutions, which are shown in reciprocal intimate relationship of youth with parents, peers, and teachers/schools. Given its importance in the Chinese context, filial piety (i.e., a virtue of responsibility to love and to care for parents) promotes youth relationships with parents (Bedford & Yeh, 2020). In addition, peer relationships are also important (Chen & Li, 2009; Ju, Liu, & Fang, 2011) and particularly for Chinese adolescents who are strongly encouraged to connect with peers, teachers and schools being also exposed to a socialization process focusing on strong bonding within schools (Chen, Li, & Chen, 2017).

Character Character represents respect for societal and cultural rules. Character education places great emphasis on moral, intellectual, and physical aspects of development, guided by the educational goals in China. Most Chinese youth have profound respect for societal and cultural rules. In a national survey, nearly 90% of youth were rated as having good moral characters (Ye, Wang, & Rong, 2014). These moral characters ranged from obeying the societal rules (e.g., traffic rules) to family rules (e.g., respect the aged and the young). Therefore, formal character education has profound influences on Chinese youth character development.

Caring Caring represents a sense of social concern and empathy for others. Like other collectivistic societies, caring for others is highly valued and encouraged in China (Long, Chang, & Guo, 2020). Caring, as a personal asset, is essential for the collective welfare (Chen et al., 2002; Chen & Chang, 2012). With emphasis on moral education, the majority of Chinese youth value caring (Xi, 2006). In addition, existing literature shows that caring behaviors (including prosocial orientation and empathy) have unique contributions to optimal academic achievement and healthy psy-

chological adjustment among Chinese youth in both cross-sectional (Geng, Xia, & Qin, 2012; Li et al., 2015) and longitudinal research (Chen et al., 2002).

Recently, Chen et al. (2018) used Confirmatory Factor Analysis (CFA) and Exploratory Structural Equation Modeling (ESEM) to test the Five Cs model in a Chinese sample of 384 adolescents. The results indicated that connection and caring were well defined by their target indicators, although several non-target indicators significantly loaded onto the confidence factor in the ESEM analysis. Therefore, it is possible that cultural factors influence the meaning of the PYD constructs (Chen et al., 2017). In the next sections, we discuss the 15 constructs in the PATHS project, and the possible links between the Five Cs and the PATHS models.

The PATHS and the 15 PYD Constructs

The positive development of Chinese adolescents is represented in the PATHS project of PYD, proposed by a team led by Daniel Shek at Hong Kong Polytechnic University (Shek & Ma, 2014; Shek & Sun, 2014). The purpose of the PATHS program is to foster young people overall development by identifying their strengths, nurturing different abilities, and strengthening their relationships with others by establishing healthy beliefs and clear standards (Ferrer-Wreder et al., [this volume](#); Shek & Ma, 2007; Zhu & Shek, 2020).

The PATHS model proposed that there were 15 constructs of positive development – bonding, social, emotional, cognitive, behavioral and moral competence, self-efficacy, prosocial norms, resilience, self-determination, spirituality, clear and positive identity, beliefs in the future, prosocial involvement, and recognition for positive behavior (Shek & Ma, 2010), identified in a comprehensive review of PYD programs (Catalano et al., 2019; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004).

Bonding (BO) refers to individuals' emotional projection and promises for different social relationships (Catalano et al., 2004). Social compe-

tence (SC) and emotional competence (EC) refer to socially and emotionally competent behaviors, such as the ability to set up positive interpersonal and emotional relationships (Collie, 2020). Cognitive competence (CC) refers to the implementation of various cognitive activities based on the ability to evaluate and apply knowledge and to solve various problems (Kassymova, Kenzhaliyev, Kosherbayeva, Triyono, & Ilmaliyev, 2020). Behavioral competence (BC) is the ability to use non-verbal and verbal strategies to take actions acceptable to societal norms. Moral competence (MC) is the orientation of altruistic behaviors and the ability to judge moral issues (Gati & Amir, 2010). Self-efficacy (SE) emphasizes that individuals believe in their ability to plan or practice actions needed. Prosocial norms (PN) regard compliance with social and cultural norms. Resilience (RE) means that individuals have the ability to cope with pressure and difficulties. Self-determination (SD) is the ability to set goals and make decisions according to one's own ideas (Kerner, 2011). Spirituality (SP) stresses the connection of adolescents with their life and the world. Clear and positive identity (CPI) concerns active and relatively stable opinion on oneself. Beliefs in the future (BF) emphasize individuals' setting of future goals and optimism (Chen & Chang, 2016). Prosocial involvement (PI) is the concern for others and the willingness to contribute to schools or the society. Recognition for positive behavior (PB) is the positive response of the society (Catalano et al., 2004).

Empirical evidence based on various research and measurement methods, such as adolescent self-report, teacher rating, and interviews, have demonstrated that PATHS could effectively sustain healthy adolescent growth and delay or reduce the occurrence of high-risk behaviors (Shek & Law, 2014; Shek & Ma, 2014; Shek & Sun, 2014; Shek & Yu, 2014; Sun & Shek, 2014). At the individual level, PATHS significantly improved cognitive and emotional ability and helped youth fully understand their own advantages and potentials (Chen, 2009; Sun, 2013). At the social relationship level, the project significantly enhanced the ability of young people to connect with their friends and teachers (Jiang, 2013; Wang, 2011), to

participate in collective life, and to be involved in public welfare activities (Shi, 2016). The above presented evidence clearly shows that the PATHS project was successful in promoting positive youth development in Hong Kong.

The PATHS in Mainland China

In addition to Hong Kong, PATHS has also been implemented in mainland China following a rigorous adaptation process by Xiaoyan Han and her research team in East China Normal University, Shanghai. In the past 7 years, the project recruited more than 30,000 adolescents in the Eastern areas of China. Most participants had a good evaluation of the program and 96% considered it useful (Shek et al., 2015; Shek, Han, Luo, Li, & Yu, 2015). Students rated the course and the tutors useful to their social and academic activities, looked forward to participating in the course again, and were willing to recommend this program to their friends (Wang, Han, Li, Zhu, & Wang, 2014). In addition, the findings showed that the PATHS curriculum based on the 15 constructs of positive development had significant positive effects on Chinese adolescents (e.g., more mature skills in coping with academic challenges). Some studies tested the objective effectiveness of the PATHS program in mainland China and demonstrated that students who participated in PATHS had greater positive developmental outcomes (e.g., social skills, resilience, and a clear and positive identity) than those in the control group who did not attend the program (Li, Han, Zhao, Wang, & Zhu, 2014; Li, He, & Han, 2016).

The Present Chapter

This chapter aimed at examining whether the 15 constructs in PATHS could fit into the Five Cs structure in mainland China. Mainland China is the geopolitical as well as geographical area under the direct jurisdiction of the People's Republic of China. It is a developing country, which is located in East Asia and one of most populous countries in the world. According to the

national population census in 2010, there were about 344 million youth, which accounted for 26% of the whole population in China (Fan, 2013). China is considered a collectivistic society (Oyserman, Coon, & Kemmelmeier, 2002) that emphasizes thriving development of people and contribution to society. In particular, children and adolescents are prompted to develop positive characters and students have to attend formal character education including courses and activities from primary school to university.

In China, the term youth is implicitly linked with positive outlook and a bright future (Chen et al., 2017). For instance, the former Chairman Mao Zedong depicted youth like the sun between 8 and 9 am in the morning, which is full of vigor and vitality. Given that youth are the future of the country, a national organization, the Communist Youth League (CYL), was established to facilitate the positive and healthy development among youth in the entire country (Chen et al., 2017). Although the core notions of PYD are embedded in the CYL, containing various aspects of academic performance, hardworking, as well as social and moral values and behaviors, the Chinese cultural values and governmental ideologies may necessarily influence the conceptual meaning of PYD (Chai, Li, & Lin, 2018). Therefore, examining PYD in the context of mainland China appears timely and contextually relevant.

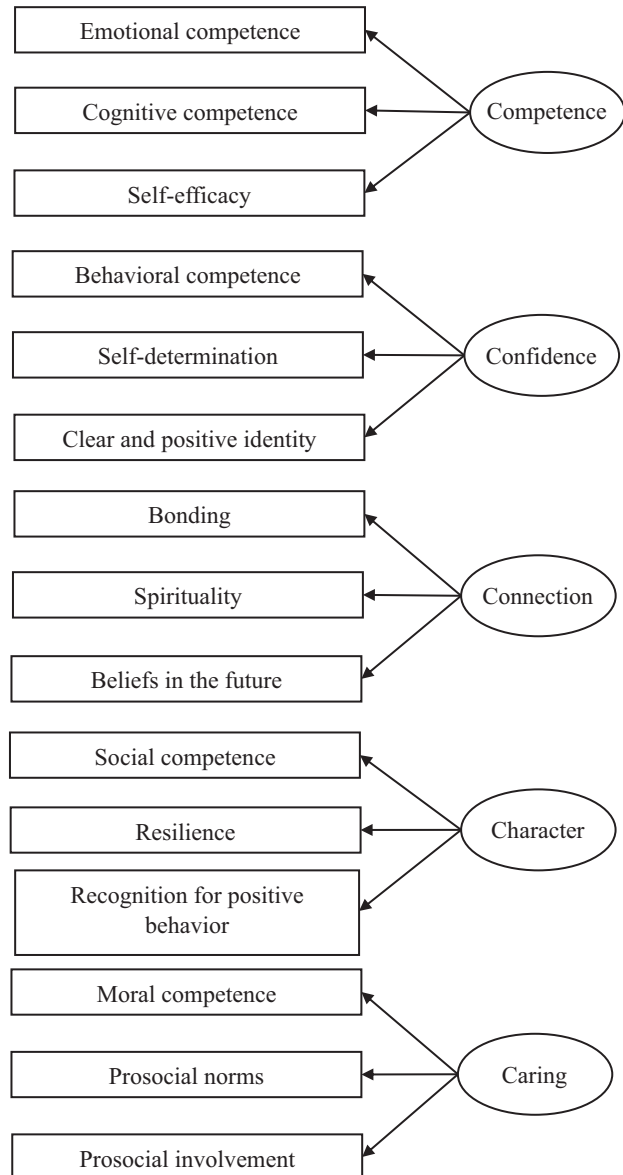
Although the 15 constructs in PATHS were developed in China, and showed effectiveness in assessment of Chinese youth's positive development, there are some limitations. First, a strong theoretical framework to link these 15 constructs is lacking. The effectiveness of the PATHS project on students' developmental outcomes was generally scattered in one or more constructs. It is hard to provide holistic explanations for the effectiveness of the PATHS project. The Five Cs model might provide a succinct and focused theoretical framework and holistic explanations for the effectiveness of the PATHS project. Second, in terms of curriculum design, due to limited class hours and teaching qualification it was hard to teach all 15 constructs in the PYD courses. Some course contents overlapped with schools' mental health courses. Therefore, there was a

lack of a systematic and distinctive PYD theoretical curriculum framework. At a practical level, it was difficult to provide feedback to school leaders and teachers using 15 constructs-the 5 constructs proved more optimal because of the fewer number of constructs.

Finally, from an international perspective, when we considered how cultural factors may influence PYD (e.g., Chen et al., 2017, 2018), the examination of the fit of the Five Cs and the 15 constructs model may enable cross-cultural research based on the measurement invariance (i.e., measurement statistical property that shows that the same PYD construct is reliably assessed across different cultural groups). The Five Cs model included psychological constructs that were identified among American youth, therefore it is necessary to examine whether the 15 PYD related constructs, which has been developed in the Chinese context would conceptually overlap with the Five Cs model of PYD. If the 15 constructs conceptually overlap with the Five Cs model of PYD, then we can further examine whether they would fully or partly overlap with each other.

Given this background, this chapter aimed to apply the Five Cs Model to a sample of Chinese adolescents. Specifically, we tested the psychometric properties and the model fit of the Five Cs constructs by using 15 constructs from the PATHS program. Although our assessment of the Cs does not parallel what was used in the original Five Cs model (Lerner et al., 2005), the conceptual meanings of 15 subscales appeared consistent with the meaning of the Five Cs constructs. For example, competence, defined by its target indicators of scholastic competence, social acceptance, and grades in the Five Cs model (Chen et al., 2018; Lerner et al., 2005) can similarly be defined by the indicators (i.e., subscales) of emotional competence, cognitive competence, and self-efficacy from PATHS (see Fig. 1). A focus on the conceptualization and operationalization of the Five Cs model would enhance our understanding of PYD among Chinese adolescents. If the 15 Chinese constructs from PATHS could map onto the Five Cs, the present chapter may further add to the growing literature that the Five Cs are a good representation of PYD.

Fig. 1 The hypothesized five Cs model based on the 15 PYD constructs (Note. The five Cs (i.e., competence, confidence, character, caring, connection) are operationalized in the model as reflecting the 15 constructs from the PATHS project)



The PATHS Program Survey in Mainland China

This chapter is based on a sample of 1116 middle school students (aged 11 to 17 years old, M age = 14.43, SD = 1.20, 49% males) in mainland China from Shanghai, Suzhou, Yangzhou and Changzhou, where the PATHS project was conducted. The data reported here was collected as part of a survey before the PATHS intervention. After the survey, participating adolescents received the PATHS interventions, which lasted for 3 years.

Parental and student consent was obtained prior to data collection. After obtaining school authority's permission, trained research assistants administered the survey in a classroom setting (Shek & Ma, 2010). The research assistants explained the purpose of the research and informed the students that they could decline to participate at any time. They were assured of their confidentiality and anonymity. Adequate time (about 40 min) was provided for the students to complete the questionnaire.

The participants filled in The Chinese Positive Youth Development Scale (CPYDS)

containing 15 PYD subscales (Shek, 2006). Responses were given on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). A composite score for each subscale was computed by averaging the subscale items. High scores indicated high levels in each construct. All scales have shown satisfactory reliability as measured by the coefficient Cronbach’s alpha (Table 1).

Main Findings

In order to provide more information about the variables, preliminary analyses included descriptives (Table 2) and correlations (Table 3). As shown in Table 2, generally, participants scored highest on prosocial norms, which might be because China’s basic education pays more attention to cultivating young people’s compliance with laws and regulations (Sun, 2006). In addition, they had the lowest score in self-efficacy, which might be because Chinese adolescents tended to be modest when they rate their ability (Chen et al., 2017; Ng, Pomerantz, & Lam, 2007).

As shown in Table 3, all 15 PYD constructs were positively correlated with each other but correlational strengths were variable. For example, the correlation between cognitive and behavioral competence was the highest. In the Chinese culture, individuals are encouraged to think before you come up with actions also in line with the traditional Chinese Confucianism. In addition, the correlation between self-determination and spirituality was the smallest, suggesting that Chinese adolescents who had higher levels of sense of autonomy might have lower beliefs in spirituality (e.g., religion).

Table 1 Description of the 15PYD constructs

| Constructs | Item numbers | Cronbach’s alpha |
|-----------------------------------|--------------|------------------|
| Emotional competence | 6 items | .813 |
| Cognitive competence | 4 items | .790 |
| Self-efficacy | 6 items | .836 |
| Behavioral competence | 5 items | .765 |
| Self-determination | 4 items | .714 |
| Clear and positive identity | 7 items | .840 |
| Bonding | 5 items | .821 |
| Spirituality | 5 items | .845 |
| Beliefs in the future | 4 items | .566 |
| Social competence | 6 items | .769 |
| Resilience | 5 items | .769 |
| Recognition for positive behavior | 4 items | .774 |
| Moral competence | 5 items | .765 |
| Prosocial norms | 3 items | .733 |
| Prosocial involvement | 5 items | .831 |

Table 2 Descriptive statistics of the 15 PYD constructs in Chinese youth

| | Range | Total (N = 1116) | | Male (n = 552) | | Female (n = 564) | |
|-----------------------------------|-------|------------------|------|----------------|------|------------------|------|
| | | M | SD | M | SD | M | SD |
| Bonding | 1–6 | 5.30 | .70 | 5.28 | .70 | 5.33 | .69 |
| Social competence | 1–6 | 5.00 | .70 | 4.96 | .73 | 5.05 | .68 |
| Emotional competence | 1–6 | 4.97 | .79 | 4.90 | .83 | 5.03 | .75 |
| Cognitive competence | 1–6 | 5.16 | .73 | 5.10 | .76 | 5.23 | .70 |
| Behavioral competence | 1–6 | 5.16 | .68 | 5.11 | .71 | 5.20 | .64 |
| Moral competence | 1–6 | 5.06 | .69 | 4.95 | .74 | 5.16 | .63 |
| Self-efficacy | 1–6 | 4.46 | 1.11 | 4.35 | 1.12 | 4.57 | 1.09 |
| Prosocial norms | 1–6 | 5.37 | .70 | 5.27 | .75 | 5.46 | .62 |
| Resilience | 1–6 | 5.28 | .68 | 5.22 | .71 | 5.33 | .64 |
| Self-determination | 1–6 | 5.21 | .68 | 5.13 | .71 | 5.29 | .65 |
| Spirituality | 1–7 | 4.68 | 1.05 | 4.69 | 1.02 | 4.67 | 1.08 |
| Clear and positive identity | 1–6 | 4.83 | .81 | 4.81 | .81 | 4.84 | .80 |
| Beliefs in the future | 1–6 | 4.83 | .86 | 4.72 | .89 | 4.94 | .81 |
| Prosocial involvement | 1–6 | 5.14 | .83 | 5.08 | .84 | 5.19 | .82 |
| Recognition for positive behavior | 1–6 | 5.03 | .81 | 4.96 | .85 | 5.11 | .78 |

Note. M = Mean; SD = Standard Deviation; N = total sample; n = sample size

NB: Please pay attention to all notes for all Tables and Fig to have = as indication of meaning

Table 3 Correlations among the 15 PYD constructs in Chinese youth (N = 1116)

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | 14. | 15. |
|---------------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Bonding | – | | | | | | | | | | | | | | |
| 2. Social competence | .52 | | | | | | | | | | | | | | |
| 3. Emotional competence | .53 | .60 | | | | | | | | | | | | | |
| 4. Cognitive competence | .57 | .63 | .66 | | | | | | | | | | | | |
| 5. Behavioral competence | .534 | .61 | .63 | .73 | | | | | | | | | | | |
| 6. Moral competence | .542 | .59 | .62 | .67 | .65 | | | | | | | | | | |
| 7. Self-efficacy | .424 | .44 | .46 | .52 | .49 | .47 | | | | | | | | | |
| 8. Prosocial norms | .477 | .50 | .49 | .56 | .53 | .57 | .40 | | | | | | | | |
| 9. Resilience | .593 | .62 | .60 | .70 | .62 | .60 | .50 | .51 | | | | | | | |
| 10. Self-determination | .473 | .57 | .55 | .66 | .61 | .66 | .45 | .52 | .60 | | | | | | |
| 11. Spirituality | .471 | .39 | .46 | .47 | .42 | .38 | .47 | .39 | .45 | .35 | | | | | |
| 12. Clear and positive identity | .522 | .58 | .62 | .63 | .59 | .63 | .53 | .49 | .60 | .62 | .47 | | | | |
| 13. Beliefs in the future | .418 | .45 | .46 | .52 | .48 | .47 | .59 | .48 | .50 | .49 | .44 | .53 | | | |
| 14. Prosocial involvement | .567 | .56 | .58 | .65 | .59 | .64 | .47 | .63 | .57 | .56 | .44 | .59 | .44 | | |
| 15. Recognition for positive behavior | .599 | .56 | .53 | .61 | .57 | .54 | .39 | .52 | .58 | .50 | .41 | .51 | .40 | .60 | – |

Note. All correlation coefficients are statistically significant at $p < .001$

In order to address the main goal (i.e., how the 15 constructs of PATHS would map onto the Five Cs of PYD), a CFA using maximum likelihood estimation was applied. Model fit was evaluated with the inferential goodness-of-fit statistics (χ^2), the Comparative Fit Index (CFI), the Root-Mean-Square Error of Approximation (RMSEA) and

the Standardized Root Mean Square Residual (SRMR). Values close to or greater than .95 are desirable for the CFI, while the RMSEA and SRMR should preferably be less than or equal to .06 (Rutkowski & Svetina, 2017).

Figure 2 represents the tested model based on 15 PYD constructs. The results indicated that

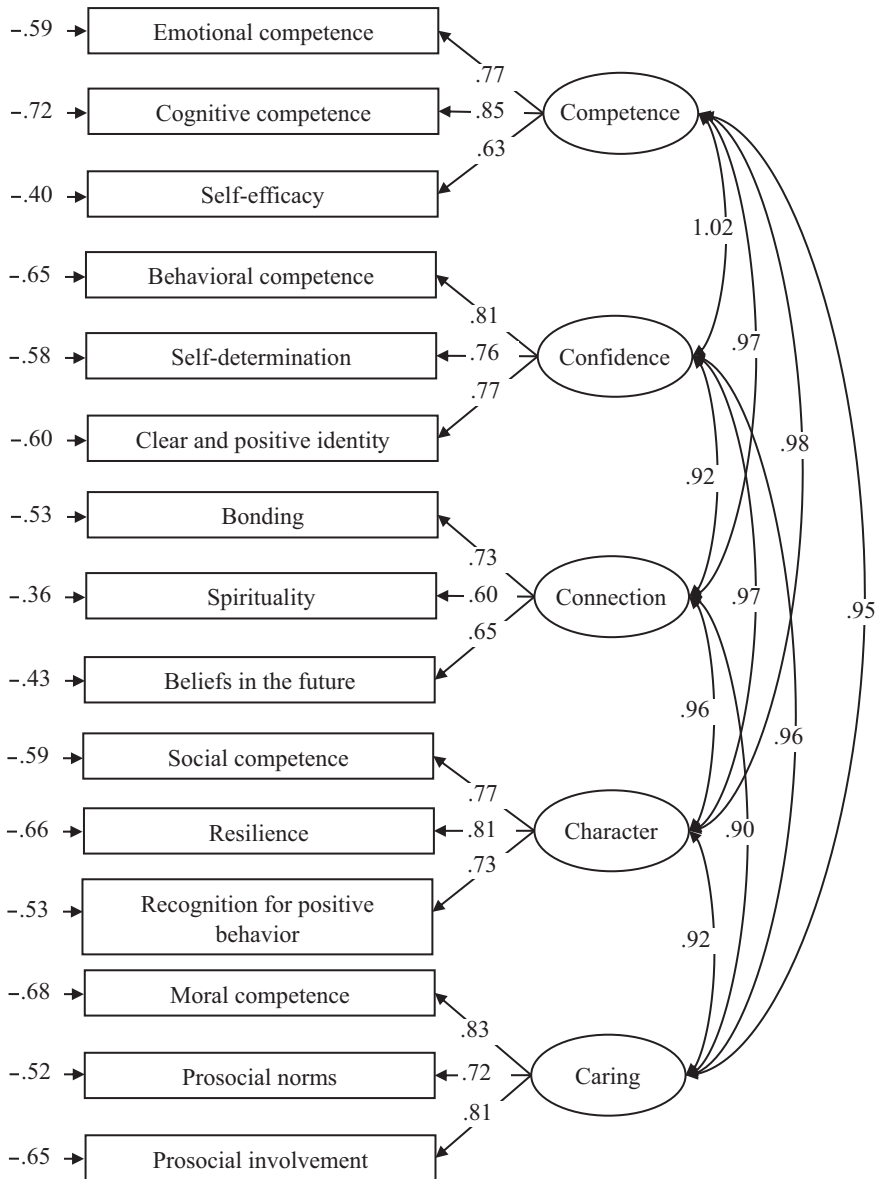


Fig. 2 Confirmatory factor analyses for 15 PYD constructs model (Note. All factor-loadings represent standardized coefficients for the measurement weights model and are statistically significant at $p < .001$)

the fit of this model was acceptable, $\chi^2(80, 1116) = 553.88, p < .001, RMSEA = .07, CFI = .96, SRMR = .03$. As shown in Fig. 2, the 15 constructs had significant loadings on the 5 PYD factors. Given that some modification indices for residual associations were relatively large ($> .20$), we added these additional specifications.

The fit of this modified model was much improved, $\chi^2(77, 1116) = 368.07, p < .001, RMSEA = .06, CFI = .97, SRMR = .03$. As shown in Fig. 3, the 15 indicators had significant loadings on 5 factors. The factor loadings of the indicators on competence ranged from .62 to .85; confidence from .76 to .80; connection from .60 to .72; character from .72 to .81; and caring from .72 to .83.

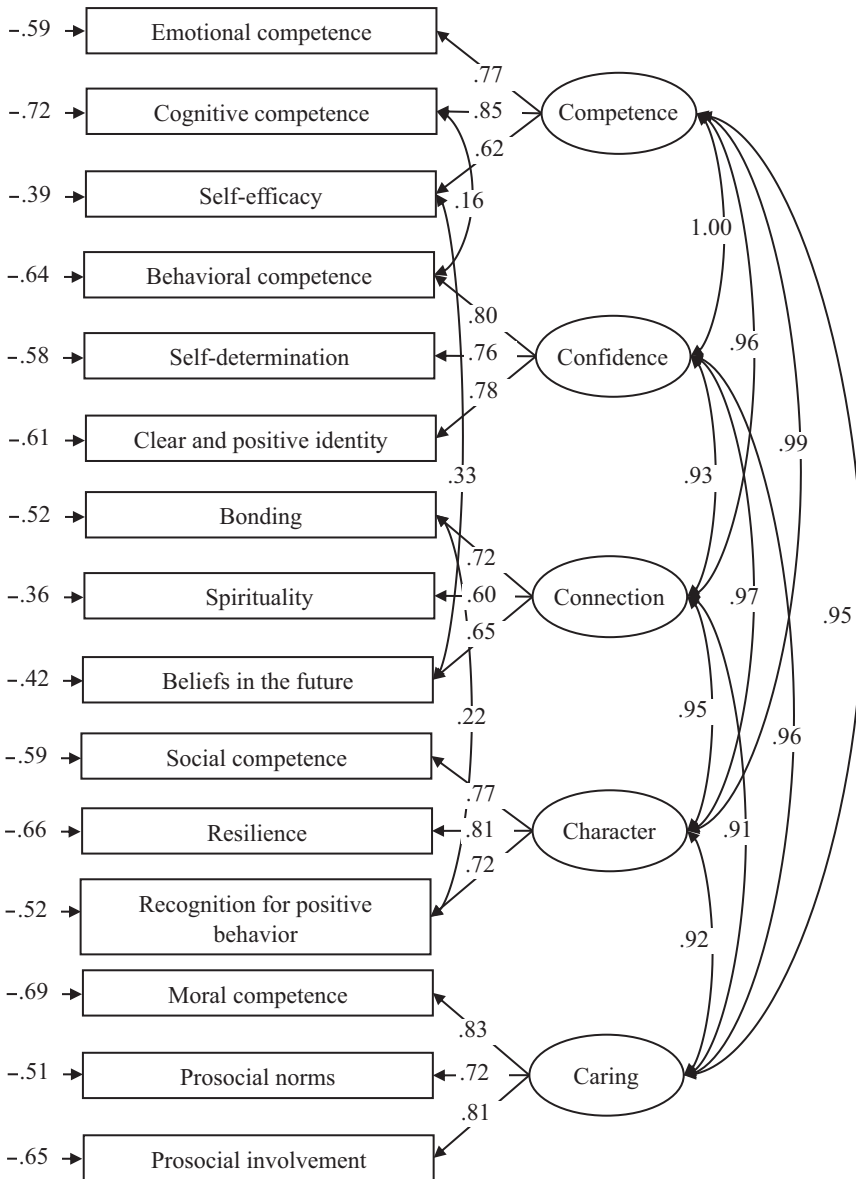


Fig. 3 A modified confirmatory factor analyses for the 15 PYD constructs model (Note. All factor-loadings represent standardized coefficients for the measurement weights model and are statistically significant at $p < .001$)

to .72; character from .72 to .81; caring from .72 to .83. Emotional competence (EC), cognitive competence (CC) and self-efficacy (SE) explained 59%, 72%, and 39% of competence. Behavioral competence (BC), self-determination (SD), clear and positive identity (CPI) explained 64%, 58%, and 60% of confidence. Bonding (BO), spirituality (SP), and beliefs in the future (BF) explained 52%, 36%, and 42% of connection. Social competence (SC), resilience (RE), and recognition for positive behavior (PB) explained 59%, 66%, and 51% of character. Moral competence (MC), prosocial norms (PN) and prosocial involvement (PI) explained 68%, 51%, and 65% of caring. In summary, the 15 constructs loaded well onto 5 factors that conceptually resembled the Five Cs of PYD.

Conclusions

This chapter aimed to investigate whether the 15 constructs developed in PATHS could fit into the Five Cs of PYD structure. Generally, the findings demonstrated that the 15 constructs could fit well into the Five Cs model of PYD among Chinese adolescents. The present chapter adds to the literature that the Five Cs might be a good representation of PYD (Lerner, Phelps, Forman, & Bowers, 2009) given that the 15 constructs developed in the Chinese contexts could also fit into the Five Cs model. We clarified how the 15 constructs loaded onto 5 factors that resembled the Five Cs of PYD, and discussed each C as follows.

In the Five Cs model, competence stresses individuals' academic and social abilities, but also included the students' leadership and social participation ability. This chapter shows that in the 15 positive development constructs, emotional competence, cognitive competence and self-efficacy loaded onto the competence factor in the Five Cs model. The factor loading of cognitive competence including the ability and belief to analyze and solve problems, comprehended problems from various angles, and setting goals was relatively high. This finding was consistent with some evidence that Chinese adolescents are

likely to have high levels of academic ability and performance (PISA, 2012). Self-efficacy reflected individuals' sense of their own abilities and control and proved critical to the construction of the sense of competence among adolescents, while emotional competence was an important competence in communication and cooperation in interpersonal situation, such as expressing empathy, having clear cognition, expressing abilities for emotions, and controlling emotions in conflicts. This was consistent with the emphasis on maintaining interpersonal harmony and individual emotional management in the Chinese collectivist culture (Chen & Chang, 2012).

The chapter also showed that among the 15 positive constructs, clear and positive identity, behavioral competence and self-determination were important indicators of confidence in the Five Cs model. Among these factors, clear and positive identity included the beliefs of self-confidence and understanding of merits and demerits. Moreover, self-efficacy with academic performance was also stressed. Behavioral competence, which included competence of taking on positive behaviors, such as learning to say no, thinking before you leap, readiness to take criticism, expressing one's own views, assuming responsibility for mistakes, and solving difficulties without withdrawal, was related to confidence. Self-determination included the confidence to make wise choices, and the feeling of having free choices. Previous literature (e.g., Chen et al., 2017) showed that in competitive social and economic formation, the cultivation of individual confidence and self-respect has become an additionally important issue in youth education. Confidence is stressed in the modern Chinese culture and could be that the establishment of confidence might come from academic performance, behavioral and determination abilities.

Connection concerned the intimate relationships between individuals and their parents, companions, teachers and schools in a mutually supportive fashion. In the 15 constructs, bonding, spirituality and beliefs in the future were important predictive factors. Bonding included the confidence to obtain the support and help of parents,

companions and teachers, to develop good relationships and support of one's friends, which loaded well on the connection factor. These results were consistent with those found for the Five Cs model in both Chinese and American contexts (Chen et al., 2018; Lerner et al., 2005). In addition, the connection between adolescents and their life (reflected in spirituality), and the connection between adolescents and the future (reflected in beliefs in the future) were also important components of connection, suggesting that for Chinese adolescents' thriving included also connection with the external world. This may be due to the Chinese collectivistic culture, which emphasizes that individuals seek connection and interdependence (Oyserman et al., 2002).

The present chapter indicated that recognition for positive behavior, social competence and resilience had relatively high factor loadings for character. Character education plays a decisive role in PYD in China and emphasizes the constructs that were identified as indicators of character. For example, prior work pointed out that character education valued the cultivation of patriotism, respect for societal and cultural norms, and compliance towards Chinese family-oriented rules, such as respecting the aged and taking good care of children (Li et al., 2016). Recognition for positive behavior reflected the recognition of social and cultural norms. In addition, social competence reflected the core content of character education (e.g., the readiness to take part in group life and getting on well with others). Yet, it should be noted that social competence did not load onto competence, possibly because competence in the Chinese context stresses non-interpersonal ability (e.g., cognition). However, social competence reflecting interpersonal ability might be strongly related to character in the Chinese context (Ma, 2012). Lastly, it is noteworthy that resilience was one of the important predictive factors for character (see Fig. 2) referring to the ability to never giving up in the face of difficulties, keeping optimism in adversity, and having ideals and determination. Resilience is one of the important aspects of moral education curricula in China as well as in other contexts (Nurius, Lavalley, & Kim, 2020).

This chapter suggests that moral competence, prosocial norms, and prosocial involvement had

relatively high factor loadings for caring. Caring is a merit valued in both families and schools in the Chinese education system manifested in compassion for others (prosocial involvement), contribution to groups and the society (prosocial norms), and moral requirements in social activities (moral competence). Specifically, among Chinese adolescents, we found that prosocial involvement might be expressed as willingness to share, forgiving people who have offended them, willingness to help each other, and being concerned about unfortunate people. In addition, prosocial norms might be manifested as social norms endorsed by the groups and the society that require adolescents to be active in voluntary activities, obeying school rules, and trying one's best to contribute to the society. Lastly, moral competence meant that adolescents should have the skills and ability to engage in moral behaviors, to treat everyone equally, and to feel ashamed for wrongdoing (Li, 2002).

In addition, several limitations of the study reported in this chapter need to be acknowledged. First, the study was cross-sectional and future work should use a longitudinal design to examine the stability of the 5Cs model based on the 15 PYD constructs. Second, the sample involved eight schools in four areas, which were all located in East China. There are great regional differences in socio-economic and cultural features between the Eastern and Western areas in China (Li, Chen, Chen, & Chen, 2011). For example, people living in the Eastern areas with high economic status are more likely to accept and adopt cultural individualism values than people living in the Western areas characterized by relatively low economic status (Chen et al., 2010). Therefore, in the future it would be interesting to examine regional differences and similarities.

Implications for Research, Policy and Practice

With regards to research, the current chapter confirms adequate psychometric properties of the Five Cs model based on 15 PYD constructs developed in PATHS. Given that the Five Cs model has a theoretical basis, the 15 constructs

meaningfully loaded onto the Five Cs structure among Chinese adolescents. Yet, it remains unclear whether the 15 constructs developed in Chinese contexts can be applied to Western contexts. For example, if we ask American adolescents to complete the 15-construct instruments, will the 15 constructs fit into the Five Cs model like it did for Chinese adolescents? Future studies should test differences and similarities in the PYD models between the Western and Chinese contexts.

Concerning policy, it is necessary to adopt evidence-based policy to develop programs for promoting PYD in China (Li et al., 2014). For example, CYL should base their recommendations on the evidence presented here. As reported in the current chapter, social and cognitive competence cannot be seen as the same PYD constructs in the Chinese context. Cognitive competence may be an important factor for character, whereas social competence for competence. Therefore, the differentiation of these psychological constructs should be considered in developing national programs and policies. In addition, schools at any levels, from primary schools to colleges in mainland China, have CYL branches that may provide policy support to promote the quality of PYD program implementation.

As to practice, with the increasing demand for effective intervention in educational contexts, using the Five Cs, compared with the 15 constructs, can enable teachers and professionals assess students' PYD in a more convergent and efficient manner. However, it should be noted that the 15 constructs were all based on Chinese indigenous concepts (Shek et al., 2010). Therefore, instead of using the original measures of the Five Cs model, the measures developed and adapted directly from Chinese contexts in the PATHS project may be more culturally appropriate for Chinese adolescents.

In conclusion, the present chapter provided evidence for a good fit between the 15 constructs from the PATHS program and the Five Cs model. The 15 indigenous positive development constructs developed in the Chinese context can be interpreted within the theoretical framework of the Five Cs model, suggesting that the Five Cs

model may be universal across cultures. The Five Cs model theorized and developed in the United States might have some international validity, especially by using different measurements. The chapter furthers and stimulates international research on PYD with more indigenous measures in different countries that may enrich the original concepts and connotation of the Five Cs.

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Positive Youth Development and Environmental Concerns Among Youth and Emerging Adults in Ghana

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Abstract

Positive Youth Development (PYD) indicators have been investigated across global contexts but have yet to be compared to the realm of attitudes toward environmental sustainability. Ghana is a unique and understudied cultural context to explore such relations as the population is notably young and the government actively seeks out strategic outcomes for youth policy. This chapter presents a cross-sectional study with 995 youth and emerging adults from Ghana who completed measures on the 5Cs of PYD (competence, confidence, character, connection and caring) and environmental concerns. The results from structural equation modelling indicated that character showed a significant positive path to sense of consumer and government environmental responsibility,

and competence showed a significant negative path to the belief that pollution cannot be considered as a requisite for industrial growth. Individual differences in confidence and caring were positively related to the belief that pollution is not a prerequisite for industrial growth, whereas confidence was negatively related to conservation intentions. Caring was positively related to the belief that pollution has dangers. Overall, this chapter established preliminary relations between the 5Cs of PYD and attitudes toward pollution, environmental conservation and environmental responsibility in an understudied African context.

Keywords

Positive youth development · Environmental concerns · Youth · Emerging adults · Ghana

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Radiative forcing changes in the atmospheric constituents associated with global temperatures show that the climate is changing (Forster et al., 2007; Intergovernmental Panel on Climate Change [IPCC], 2014, 2018). Major warnings from studies on the risks of climate change suggest that fluctuations could result in human consequences in the form of substantial migration from unstable living conditions to the abundance of needed goods and services. The nature of the

ecology of climate regimes indicates that the consequences could affect crop yields in myriad ways that undergird the economics of agriculture and underscore the dangers of food shortage and mass-migration if the issues of climate change are not treated as problems to be solved. Nevertheless, the scope and scale of these consequences are intuited on a continuum of urgency ranging from a narrative of unnecessary alarmism to one of real and foreseeable catastrophic risk (Klein, 2015).

Communication about climate change has been tagged as a major reason for discrepant beliefs. Namely, challenges for communicators and educators include the seeming invisibility of the causes of climate change, the sense of the impacts as distant, the lack of gratification associated with conducting mitigating actions and the general disbelief in the global influence of humans (Moser, 2010). Other challenges are the overall complexity of climate change issues and the remaining uncertainties about the state of research in some domains, an inadequacy in the messaging about the need for change, the perceived limits about the efficacy of private actions, and the pervasiveness of competing self-interests (Friel, 2020; Miller & Eggleston, 2020; Moser, 2010).

As the debate rages on about the human use of environmental resources and natural capital and their inherent communicative challenges, it has become clear that these questions have reached beyond the domain of science and precipitated into the arena of values and everyday life. Naturally, young people are negotiating these values as they shape their political orientation by adjusting or ascribing to their moral foundations that are thought to underpin those (Feinberg & Willer, 2013). No matter the political climate, as future adults, today's youth will face challenges and plausible knock-on consequences requiring leadership related to the management of natural capital predicated on their values that are shaped by their attitudes towards the environment as they unfold over time. In this way, youth are or will be presented with a list of questions about their connection to the principles of sustainability and their sense of responsibility to serve as stewards

of the environment. This applies to young people globally and especially to those living in developing countries, such as Ghana. The present chapter focuses on an understudied African setting of youth and emerging adults in Ghana to explore their environmental attitudes, behaviours and sense of responsibility as a form of participation or contribution to the development of their context.

Positive Youth Development (PYD) is an internationally recognized framework for classifying dimensions in child and adolescent progress toward becoming productive members of the society (Burkhard, Robinson, Murray, & Lerner, 2019). The model of the 5Cs of PYD encompasses *character* (integrity, moral commitment and respect for societal and cultural rules), *confidence* (a sense of mastery and future, positive identity and self-efficacy), *connection* (healthy relationships with friends, family, school and community), *caring* (empathy and sympathy) and *competence* (academic, social, vocational skills). The often mentioned, but seldom directly measured 6thC of *contribution* serves as a penultimate goal positing that high growth along the 5Cs indicates that youth possess the skills to enact or partake in prosocial behaviour and civic engagement (for an expanded 7Cs model and global applications of the 5Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Dimitrova et al., [this volume](#) Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)).

A major, consequential domain for work in this area of youth contribution is that of the issues associated with climate change. In research on environmental concerns over time, there have been peaks and valleys in attention and belief in personal responsibility for environmental protection across generational value systems related to topics such as conservation, resource depletion, pollution, and beliefs in sociotechnical solutions (Bachman, Johnston, & O'Malley, 2011). A general decline in the belief in personal responsibility toward the environment was observed although such evidence was limited in generalizability to other national contexts outside the

United States. Related recent work examined actions to reduce energy consumption and beliefs about the personal responsibility for climate change mitigation across 23 mostly European countries. The findings showed a large heterogeneity in both beliefs and actions, with young people from wealthy countries being more concerned about the environment. Personal responsibility and efforts to save energy were positively but weakly related (Boto-García & Buccio, 2020). Similar work has also examined the relations between human values and attitudes to environmental issues across countries providing cross-cultural generalizability of the fact that self-transcendence (i.e., feeling oneself an integral part of the universe) is positively related to concern for environmental problems. The opposite has been found for self-enhancement, where people focus mostly on themselves (Schultz et al., 2005; Schultz & Zelezny, 2003). Based on the available work on environmental concerns, the present chapter examines environmental attitudes, behaviours and sense of responsibility of youth and emerging adults in Ghana in light of the PYD framework.

PYD and Environmental Concerns

Despite available insights for the intersection between youth and environmental attitudes (Bachman et al., 2011), more discussion on theoretical considerations could help frame possible connections with the 5Cs of PYD. The circle of concern for the environment is typically in dramatic tension between the necessity of maintaining natural abundance and the pursuit of human enterprise through industry. Children and youth have recognized the tension as one that runs the risk of short-sightedly mortgaging their future of necessary resources, biodiversity, or other environmental factors vital for human thriving. The theme of preserving the future of natural capital for posterity has been entwined with the domain of public health and regulatory practices to maintain a standard quality of shared resources in the public space. Young people are change agents to which these responsibilities will be transferred,

and thereby represent a relevant demographic segment for strategic investment (Hadfield-Hill & Zara, 2020; Rousell & Cutter-Mackenzie-Knowles, 2020). Thus, a focus on the 5Cs and environment assumes primary relevance to equip young people for becoming such agents.

In a seminal study of the overlap between developmental psychology and sustainability values, Eagles and Demare (1999) found moral roots in environmental attitudes of children and that these were shaped by being exposed to and engaging in communication about environmental issues, namely, by reading and talking about the environment in the home and watching films about nature. Youth values are subject to numerous vicissitudes inherent to identity status exploration, but developmental studies suggest that stable traits in political attitudes regarding values, such as environmental concerns are established in adolescence when behaviours about prosocial civic engagement become particularly salient (Wray-Lake, DeHaan, Shubert, & Ryan, 2019). In fact, Wray-Lake et al. (2019) found pro-environmental behaviours to be a type of civic engagement linked to daily well-being and basic needs satisfaction of autonomy, competence and relatedness.

In these ways, developmental science, positive psychology and the PYD have intersected with the domain of environmental concerns as a matter of value-driven behaviour especially in the Western research context (van der Werff, Steg, & Keizer, 2013). However, the translation of behavioural intentions from environmental knowledge into participatory behaviour is not always clear, as was the case in a study of environmental knowledge and behaviour with Nigerian youth. Abiolu (2018) found that population growth and noise pollution were the main concerns of Nigerian youth and that their main sources of environmental information were electronic media sources. However, the assessment also showed that levels of environmental behaviour among Nigerian youth were not commensurate with their level of environmental knowledge, suggesting other factors at play in pro-environmental behaviours, such as program participation (Abiolu, 2018).

Environmental Sustainability in Ghana

Like Nigeria, the country of Ghana is a similar developing context that could shed light on environmental attitudes and positive behaviour among young people. Ghana is located in West Africa along the Atlantic Ocean and borders Togo, Cote d'Ivoire, and Burkina Faso. With over 60% of its total population of 24 million under age of 30 years, registered in the last population census in 2010 (Ghana Statistical Service, 2012), the country, formerly known as Gold Coast, is considered as a youthful population. English is the official language, and Christianity, the main religion. Politically, the country has enjoyed stability since its transition to multi-party democracy in 1992. The main cornerstone of Ghana's economy is gold, cocoa and more recently, oil, which has helped invigorate the country's economy (Ghana Statistical Service, 2018).

Ghana's industrialization effort after the attainment of independence in 1957 has been driven by its abundant natural resources, which remain the main source of livelihood for its people. However, due to lack of adequate care, the exploitation of the resources to meet socio-economic needs has led to a depletion of the resources. The consequences include deforestation, desertification, soil degradation as well as several problems associated with industrialization (e.g., pollution of air and water). In a bid to balance socio-economic development and the exploitation of the natural resources, in 1988 the government of Ghana drew an environmental action plan to address key issues pertaining to the protection of the environment and better management of the resources (Environmental Protection Council, 1988).

Despite some obstacles, recent development reveals the government's determination through the Ghana Environmental Resource Management System to achieve its environmental goals. The planning, implementation, coordination and monitoring processes are handled by the collaborative efforts of five inter-sectoral networks (built environment, natural resources, mining and industry, education and compliance and enforce-

ment) as well as local communities and institutions, non-governmental organizations, and decentralized sectoral organizations (Adomako, 2020; Domfeh, 2004).

Efforts through education and strategies to promote active participation are also being made to engage youth in environmental protection and resource management activities. Organizations, such as Friends of the Earth Ghana, a member of the world's largest grassroots environmental network Friends of the Earth International, has since its inception in 1986, engaged over 300 local groups, bringing together youth to address environmental issues and raise public awareness on environmental problems. Green Africa Youth Organization (GAYO) established in 2014 seeks to engage youth in Ghana and other African countries. Focusing on climate change, disaster risk reduction, sustainable agriculture, and renewable energy activism, the organization's mission is to research and provide solutions to pressing environmental issues through youth empowerment and public education.

With its large population of young people, there is an attempt by the government to include this population in activities that will promote national development. Several strategies related to key areas of education and skills training, youth employment, mentoring, sports and recreation, patriotism and volunteerism have been outlined in the youth policy to ensure that young people develop the skills and competencies needed to undertake such nationwide endeavours (Ghana Ministry of Youth and Sports, 2010). As the implementation of the strategies is usually within the educational system, university students in Ghana are strategically positioned to benefit from them. Accordingly, the development of personal skills and experience of contextual resources should enable these young people to contribute to the development of self and the society (Shek, Dou, Zhu, & Chai, 2019). Contribution to the society would also mean being stewards of the environment through own attitudes, values and behaviours. This is necessary as environmental challenges are not only present, but on the rise (Intergovernmental Panel on Climate Change, 2018; Ye et al., 2020).

The Present Chapter

This chapter presents a study involving youth and emerging adults in Ghana by providing novel insights into individual differences in PYD and circles of environmental concern from a cross-section of attitudes, behaviours and responsibilities. In so doing, the chapter advances research on factors that can facilitate optimal development and contribution to societal development among young people in Ghana. Furthermore, the chapter contributes to the development of effective educational tools and strategies that can be used by youth and adults alike to promote youth development and contribution. Finally, the chapter informs policy at both local and national levels about the skills and resources that are needed to empower youth to contribute to national and global development even amidst economically challenged conditions.

In line with the relevant literature and the scope of this chapter, it was assumed to observe high endorsement of the 5Cs of PYD that in turn would be associated with more attitudes, behaviours and sense of responsibilities towards the environment. To the best of our knowledge, this is the first time these associations are being studied in an African context although some recent comparative PYD work has been done in Ghana, Kenya, and South Africa (Adams, Wiium, & Abubakar, 2018). The chapter has also an exploratory nature as conditions specific to Ghana, such as its cultural collectivism (i.e., prioritising group over the self) and economic status can affect how young people perceive their role and responsibility in national and global development.

Empirical Study of Youth and Emerging Adults in Ghana

The current chapter presents data from a large international project on PYD (Dimitrova & Wiium, [this volume](#); Wiium & Dimitrova, 2019). Participants were selected through convenience sampling in three different regions in Ghana – the Northern, the Ashanti (in mid-Ghana) and the Greater Accra region in the South. The data was

collected by the second author Ghanaian native, from 995 first year students (52% females) at three state universities: The University of Development Studies ($n = 187$), Kwame Nkrumah University of Science and Technology ($n = 347$) and the University of Ghana ($n = 461$). The age range of the total sample was 16–27 (M age = 19.89, $SD = 1.86$). About 58% of participants lived with their parents, 22% with their mother, and 5% with their father, 3% as much with mother as with father, 7% with adults who were not their parents and 4% were living alone. The highest level of education was postsecondary for fathers (60%) and mothers (39%).

The 5Cs of PYD were measured with The Short Measure of the Five Cs of Positive Youth Development containing 34 items (Geldhof et al., 2014). Items referred to having friends, liking own look, acting the right way, being useful and important member of own family. Responses ranged on a 5-point Likert scale from 1 (*strongly disagree*) to 4 (*strongly agree*), with high scores indicating high presence of each of the Cs.

Environmental concerns were measured with a list of items from Wray-Lake, Flanagan, and Osgood (2010). Attitudes towards pollution were measured with 3 items reflecting increase in pollution, the dangers involved, and the significance of pollution relative to growth. Responses ranged on a 5-point Likert scale from 1 (*disagree*) to 5 (*agree*) with high mean score indicating more concern about increasing pollution.

For conservation behaviours, 4 items (Wray-Lake et al., 2010) that tap into potential pro-environmental behaviours (3 items) and behavioural intention (1 item) were used. One item on pro-environmental behaviours related to reducing heat as a means to cutting down on electricity, referred to climate in the U.S. As the climate in Ghana is tropical, this item was rephrased to emphasize the effort to switch off the lights to cut back on the use of electricity. The other two pro-environmental behaviours items were related to considerations of gasoline consumption from driving and general attention to energy use expenditures. Responses ranged from 1 (*not at all*) to 4 (*yes, quite a bit*). The behavioural intention item covered the potential to swap driving

for cycling and had responses ranging from 1 (*disagree*) to 5 (*agree*).

For environmental responsibility, 5 items that measured the degree to which participants (1 item), consumers (1 item) and the government (3 items) are responsible for solving environmental problems were used. The items for participants' and consumers' responsibilities covered efforts to conserve and protect the environment through purchasing habits and the extent to which such habits would need to change to accommodate countermeasures. The three items measuring governmental responsibilities were related to the role of the state to intervene in the procurement, availability, or taxing of products that could harm the environment as possible solutions. Responses to all environmental responsibility items ranged from 1 (*disagree*) to 5 (*agree*). Table 1 shows the reliability estimates for all measures.

The Ethics Committee for Humanities at the University of Ghana approved the study. Participants were informed about the goals and procedure of the study and they were asked to give their informed consent before data collection. Data collection in three universities took place before or after a lecture and lasted for about 40 min. The items were administered in English, as the main language of instruction in Ghana. Trained research assistants from the University of Ghana, Kwame Nkrumah University of Science and Technology and the University of Development Studies coordinated the data collection at the respective site. Participants received a pen as a small token.

Analytical Procedure and Main Findings

There were three main analytic steps. First, to assess the pattern of responses on environmental concerns and PYD, descriptive analyses were conducted on the 5Cs, attitudes towards pollution, environmental conservation behaviours and environmental responsibility. Second, Confirmatory Factor Analysis (CFA) was performed on items measuring the 5Cs to verify the factorial structure of the scale. Third, Structural

Table 1 Study variables among youth and emerging adults in Ghana

| Study variable | Range | Mean (SD) |
|---------------------------------------|-------|-------------------------|
| Gender | 1–2 | 1.52 (.50) |
| Age | 16–27 | 19.89 (1.86) |
| Father's education ^b | 1–2 | 1.67 (.47) |
| Mother's education ^b | 1–2 | 1.43 (.50) |
| 5Cs of PYD | | |
| Character (8 items; $\alpha = .81$) | 1–5 | 4.20 (.66) ^a |
| Confidence (6 items; $\alpha = .88$) | 1–5 | 4.26 (.72) ^a |
| Connection (8 items; $\alpha = .84$) | 1–5 | 3.81 (.72) ^a |
| Caring (6 items; $\alpha = .86$) | 1–5 | 4.22 (.79) ^a |
| Competence (6 items; $\alpha = .70$) | 1–5 | 3.47 (.73) ^a |
| Attitudes towards pollution | | |
| 3 items ($\alpha = .37$) | | |
| Pollution has increased | 1–5 | 4.21 (.98) |
| Pollution has dangers | 1–5 | 2.81 (1.44) |
| Pollution over growth | 1–5 | 3.07 (1.48) |
| Environmental conservation | | |
| Behaviours | | |
| 3 items ($\alpha = .56$) | | 3.13 (.73) ^a |
| Conservation behaviour 1 | 1–4 | |
| Conservation behaviour 2 | 1–4 | |
| Conservation behaviour 3 | 1–4 | |
| Behavioural intention | | |
| 1 item | 1–5 | 2.88 (1.43) |
| Environmental responsibility | | |
| Personal | 1–4 | 3.22 (.85) |
| Consumers | 1–5 | 3.99 (1.09) |
| Government | | |
| 3 items ($\alpha = .68$) | | 4.01 (.87) ^a |
| Government item 1 | 1–5 | |
| Government item 2 | 1–5 | |
| Government item 3 | 1–5 | |

Note. ^aMean score; ^bSecondary school or lower *versus* vocational, technical, polytechnic or university; PYD = Positive Youth Development; α = Cronbach's alpha internal reliability coefficient; SD = Standard Deviation

Equation Modeling (SEM) was carried out to examine the relations between the 5Cs of PYD and the environmental factors. The demographic variables of age, gender and parental educational background were treated as controls, as these have been found to influence PYD (Wiium, Dost-Gözkán, & Kosić, 2019; Wiium, Ferrer-Wreder, Chen, & Dimitrova, 2019). The model fit was assessed by the Chi square test, the Comparative Fit Index (CFI; acceptable > .90), the Tucker

Lewis Index (TLI; acceptable $> .90$), and the Root Mean Square Error of Approximation (RMSEA; acceptable $< .08$) (Brown, 2015; Rutkowski & Svetina, 2017).

The descriptive analyses indicated that the mean scores of the 5Cs of PYD were high and particularly for character ($M = 4.20$, $SD = .66$), confidence ($M = 4.26$, $SD = .72$) and caring ($M = 4.22$, $SD = .79$). For the environmental factors, mean scores were high for one item measuring attitudes towards pollution (i.e., pollution has increased) and the composite variable measuring government responsibility for the environment (Table 1).

The CFA of the 5Cs of PYD was carried out with an initial set of items, where 14 pairs of same-facet items (character, confidence, connection and competence) were allowed to correlate. This model indicated a poor model fit, $\chi^2(503, 995) = 1624.68$, $p < .000$, CFI = .897, TLI = .885; RMSEA = .047, 90% CIs [.04, .050]. An examination of the modification indices (MI) revealed cross-loadings of two items of conduct behaviour reflecting character. These items were removed from further CFA. In addition, the modification indices suggested correlations among four pairs of same-facet items (one pair for caring and the other three for confidence). These pairs of same-facet items were allowed to correlate in a second CFA that gave an adequate model fit, $\chi^2(437, 995) = 1165.41$, $p < .000$, CFI = .929, TLI = .919; RMSEA = .041, 90% CIs [.038, .044]. Details of the factor loadings as well as correlations among the latent PYD variables are presented in Table 2.

With the factorial structure of the 5Cs of PYD established, the association between the 5Cs and environmental concerns was examined in a SEM analysis controlling for age, gender and parental educational background. Contrary to the significant correlations observed between the 5Cs and the environmental concern variables (see Tables 3 and 4), several of the associations were no longer significant. Specifically, for attitudes towards pollution, caring was significantly associated with pollution dangers and pollution over growth (both reflecting concern about increasing pollution; $\beta = .16$ and $\beta = .18$, respectively). Furthermore, confidence was positively associ-

ated with pollution over growth ($\beta = .47$), and unexpectedly, significant negative association was observed between competence and pollution over growth ($\beta = -.52$). For the relations between the 5Cs and environmental conservation (reflecting behaviour and behavioural intention), only one significant but negative association emerged between confidence and conservation intentions ($\beta = -.40$). Finally, the SEM model revealed that only character was positively associated with customer ($\beta = .25$) and government responsibilities ($\beta = .23$). None of the 5Cs of PYD was associated with participants' report of their personal responsibility towards the environment (Table 4).

Conclusions

Gifford (2008) mapped a course for psychology as an enterprise to play a role in the study of environmental sustainability by focusing on environment-related motivations, attitudes, habits, life contexts, and investigations of trust-in-government. Further work on the possible effects of climate change and models regarding the value-beliefs-norms continues to emphasize the role of personal beliefs about the perceived ability to reduce the threat, a sense of obligation to take pro-environmental actions, and how these norms manifest themselves in the public and private spheres through behavioural choices (Ignell, Davies, & Lundholm, 2019; Yuriev, Dahmen, Paillé, Boiral, & Guillaumie, 2020). The present chapter suggests that certain PYD indicators tap environmental responsibility that echo the social dilemma model put forth by Gifford (2008). Therefore, these indicators are useful framework for understanding individual dispositions among young people in the preparedness to engage in pro-environmental behaviours (Larson, 2000; Ouariachi, Li, & Elving, 2020). Accordingly, this chapter provides evidence for the existing relations between environmental concerns and the 5Cs of PYD in a sample of youth and emerging adults in Ghana.

This chapter also suggests a complex pattern of the above examined relations. Confidence was positively related to pollution growth but nega-

Table 2 Correlations for demographics, positive youth development and environmental concerns variables

| Study variables | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | 14. | 15. | 16. |
|----------------------------------|--------|--------|-------|------|--------|-------|-------|-------|--------|-------|--------|--------|-------|-------|-------|-------|
| 1. Gender | – | | | | | | | | | | | | | | | |
| 2. Age | –.18** | | | | | | | | | | | | | | | |
| 3. Father's education | .01 | –.09* | | | | | | | | | | | | | | |
| 4. Mother's education | .07* | –.17** | .36** | | | | | | | | | | | | | |
| 5. Character ^a | –.20** | .03 | .06 | .03 | | | | | | | | | | | | |
| 6. Confidence ^a | .03 | .03 | –.06 | –.06 | .49** | | | | | | | | | | | |
| 7. Connection ^a | .05 | .05 | –.01 | –.04 | .44** | .66** | | | | | | | | | | |
| 8. Caring ^a | .11** | .01 | –.01 | –.05 | .35** | .44** | .66** | | | | | | | | | |
| 9. Competence ^a | .00 | .05 | –.00 | –.03 | .48** | .51** | .57** | .52** | | | | | | | | |
| 10. Pollution increased | .13** | –.04 | .01 | –.05 | .11** | .23** | .23** | .22** | .14** | | | | | | | |
| 11. Pollution dangers | .09** | .03 | .01 | .01 | –.20** | –.09* | –.04 | –.04 | –.14** | –.06 | | | | | | |
| 12. Pollution over growth | .17** | .01 | .01 | –.02 | –.22** | –.02 | –.04 | –.01 | –.15** | .01 | .44** | | | | | |
| 13. Conservation BH ^a | .01 | .01 | –.01 | –.00 | .21** | .18** | .25** | .28** | .23** | .24** | –.15** | –.10** | | | | |
| 14. Conservation BI | –.12** | .09** | –.03 | –.02 | .13** | .01 | .08* | .07* | .10** | .07* | –.18** | –.19** | .27** | | | |
| 15. ER PERS | –.08* | .04 | .03 | .04 | .22** | .19** | .29** | .26** | .25** | .08* | –.07* | –.13** | .34** | .22** | | |
| 16. ER CONS | .10** | –.02 | –.04 | .03 | .08* | .18** | .24** | .23** | .16** | .41** | .03 | .06 | .24** | .15** | .24** | |
| 17. ER GOV ^a | .11** | –.00 | .05 | –.01 | .15** | .20** | .29** | .25** | .23** | .51** | –.08* | –.02 | .30** | .16** | .24** | .51** |

Note. ^aMean score; *BH* = Behavioural Intention; *BI* = Behavioural Intention; *ER PERS* = Environmental Responsibility Personal; *ER CONS* = Environmental Responsibility Consumer; *ER GOV* = Environmental Responsibility Government

* $p < .05$; ** $p < .01$

Table 3 Confirmatory factor analyses of the 5Cs of positive youth development

| The 5Cs of PYD | Factor loadings range | 1. | 2. | 3. | 4. |
|---------------------------|-----------------------|-----|-----|-----|-----|
| 1. Character ^a | .47–.77 | – | | | |
| 2. Confidence | .57–.88 | .69 | | | |
| 3. Connection | .50–.69 | .66 | .62 | | |
| 4. Caring | .46–.87 | .75 | .53 | .60 | |
| 5. Competence | .31–.69 | .58 | .80 | .75 | .54 |

Note. Model fit $\chi^2(437, 995) = 1165.405$, CFI = .929, TLI = .919, RMSEA = .041, 90% CIs [.038, .044]. ^aTwo items were removed from the 8-item scale due to cross-loadings

Table 4 Path coefficients for the 5Cs of PYD and environmental concerns model

| | The 5Cs of PYD ^a | | | | |
|------------------------------|-----------------------------|-------------|------------|------------|-------------|
| | Character | Confidence | Connection | Caring | Competence |
| Attitudes towards pollution | | | | | |
| Pollution has increased | .06 (.11) | .12 (.13) | –.08 (.11) | .14 (.08) | .05 (.18) |
| Pollution has dangers | .00 (.10) | .21 (.15) | –.12 (.12) | .16 (.08)* | –.40 (.21) |
| Pollution over growth | –.02 (.11) | .47 (.16)** | –.21 (.13) | .18 (.08)* | –.52 (.22)* |
| Environmental conservation | | | | | |
| Behaviour | .07 (.10) | –.16 (.15) | –.02 (.12) | .15 (.08) | .34 (.20) |
| Behavioural intention | .12 (.10) | –.40 (.16)* | .04 (.13) | –.08 (.08) | .40 (.22) |
| Environmental responsibility | | | | | |
| Personal | .14 (.10) | –.15 (.14) | .11 (.11) | .05 (.08) | .23 (.18) |
| Consumer | .25 (.10)* | –.04 (.15) | –.02 (.11) | .11 (.07) | –.03 (.19) |
| Government | .23 (.10)* | –.16 (.15) | –.08 (.11) | .08 (.08) | .19 (.19) |

Note. Model fit $\chi^2(761, 995) = 1530.375$, CFI = .920, TLI = .901, RMSEA = 0.37, 90% CIs [.034, .040]. ^aStandardized coefficients controlling for age, gender and parental education

* $p < .05$; ** $p < .01$

tively related to conservation intentions indicating that young people in Ghana with high sense of self-worth were less likely to endorse attitudes about environmental conservation. Caring was positively associated with pollution dangers and growth, and individual differences in competence were negatively related to pollution growth. Character was positively related to customer and government environmental responsibilities. As an exploratory endeavour, however, the modelled associations suggested that pollution-related attitudes represent interesting relations to individual differences in positive youth attributes.

Competence was positively related to environmental conservation behaviours and intentions related to the use of mass transit, indicating that young people with high value of academic, physical and social achievement were more likely to espouse views related to environmental conservation. However, these relations did not withstand structured modelling of paths among

indicators as the regression coefficients proved not to be statistically significant. The magnitude of higher coefficient relative to other attributes except for confidence, suggested that education and personal competence are important factors in environmental behaviour (Chawla & Cushing, 2007; Maurer & Bogne, 2020). Such finding also relates to the international multi-level analysis of the Program for International Student Assessment (PISA) indicating that competence in science literacy was a unique and significant predictor of environmental attitudes (Boeve-de Pauw & Van Petegem, 2010). Therefore, the finding on the competence offers convergent support to previous work on a plausible role for strategic science education (Kosic, Wiium, & Dimitrova, [this volume](#)).

Character was positively associated with environmental responsibility, particularly in the perceived sense of obligation as consumers and the belief that something should be done by the gov-

ernment. These tendencies suggest that individual differences among young people in Ghana who are more inclined to stand up for their beliefs are associated with a high tendency to endorse environmentally responsible changes as consumers, as well as civic actors who expect policy-making institutions to take an active role in environmental management.

The finding that confidence among young people in Ghana was negatively associated with willingness to use mass transit and electricity-saving behaviours indicates that those with a sense of self-worth and mastery, or belief in their capacity to succeed, are less inclined to ascribe pro-environmental attitudes. This is interesting as studies of similar constructs in self-determination theory (i.e., autonomy, competence and relatedness), of which confidence appears to be an amalgam, show that harbouring pro-environmental attitudes often coincides with civic engagement (Wray-Lake, Metzger, & Syvertsen, 2017). The results of the present chapter indicate differences in values about the distribution of resources, plausibly that high positive attributes in confidence relate to an individual over collective preference about the use or treatment of environmental resources. Personality research has shown similar relations for the moral roots of environmental attitudes (Feinberg & Willer, 2013), and social and political psychology research demonstrated that attitudes toward the environment represent an individualistic versus collectivistic dynamics (Haidt, 2012). Given that the self-determination theory encompasses similar but comprehensive factors related to autonomy, competence, and relatedness (Ryan & Deci, 2020), it may be an intriguing avenue for future research with positive youth attributes.

Character as operationalized by Geldhof et al. (2014) relates to social consciousness, value drivers, and personal values. The finding that this C is moderately related to environmental responsibility shows that attitudes toward environmental preservation are tied to value-drivers in behaviour. This is congruent with the evidence reported by van der Werff et al. (2013) that moral obligations underpin pro-environmental tendencies. Similarly, the tie between competence as an

underlying attribute of valuing academic and social performance and conservation behaviours could indicate a desire to act in accordance to beliefs or knowledge about the state of the environment.

A surprising finding was that connection, which examines healthy relations to community, friends, family, and school, was not related to environmental concerns despite the theoretical consideration that these relations indicate an acknowledgement of shared space and resources. While connectedness has been an important factor for youth from various ethnic and minority backgrounds (Abubakar & Dimitrova, 2016; Bradley, Ferguson, & Zimmer-Gembeck, [this volume](#)), connection was not necessarily relevant for environmental attitudes to be endorsed as a theoretical matter of social-norm binding.

There are several avenues for future work related to the empirical study reported in this chapter. First, the psychometric properties of the PYD scale were only adequate without two items of character. This may suggest that some items do not sufficiently capture the positive youth attributes of young people in Ghana, an issue which needs to be investigated with further qualitative methods. Second, the environmental concern factors showed low internal reliability for attitudes towards pollution. While items were thoughtfully chosen from previous research by Wray-Lake et al. (2010) and shared by similar approaches among globally recognized efforts like the Organisation for Economic Cooperation and Development (OECD) and the Program for International Student Assessment (PISA), the items did not comprehensively cover issues relevant to the construct validity of environmental concerns, such as sea level, ocean acidification, damage to infrastructure, and the perceived impacts of sustainability on human health. Additional items that explicitly tap into the environmental attitudes, intentions and behaviours would allow more complete considerations on environmental concerns among young people in Ghana. Third, further work can expand on longitudinal and more representative samples to allow for causal inferences of the reported findings.

Implications for Research, Policy and Practice

An important consideration regards the fact that the investigation outlined in this chapter was chiefly preliminary and aimed to identify strategic areas for environmental education among young people in Ghana. Nonetheless, the chapter has several implications for research, policy and practice. For research, the psychometric properties of the 5Cs of PYD scale (Chen, Wiium, & Dimitrova, 2018; Dominguez, Wiium, Jackman, & Ferrer-Wreder, [this volume](#); Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#); Li, He, & Chen, [this volume](#)) were shown to measure and represent well these thriving indicators among young people in Ghana. Given that the demographic makeup of Ghana and other regions of sub-Saharan Africa are comprised of youth and emerging adults, this chapter provides interested researchers with relevant insights on the significant relations between environmental attitudes and the 5Cs of PYD. In addition, the relations between the 5Cs and environmental concerns are interpretable as an indication of contribution vis-à-vis the inherent target of the environment. The findings on the 5Cs as thriving indicators demonstrated structural relations between this PYD model and environmental concerns that can be built upon in future research. This is particularly valuable for scholars to further apply the model in emerging adulthood as a period characterized by new challenges and opportunities for young people, and as such, an especially critical developmental context to examine indicators of PYD (Dimitrova, 2018).

A major takeaway of this chapter for policy is similar to that of Abiolu (2018) who suggested that there appears to be a distance in the sense of personal responsibility to handle issues of environmental sustainability. Individuals with high levels of positive youth attributes are developing in adaptive ways. In a similar manner, the current chapter suggests that young people who possess a likely tendency to find success in the local educational system do not seem to harbour attitudes toward the environment that would indicate a high level of committed concern to issues of

environmental management (e.g., threats to sustainability from industry or the plight to combat climate change). In the realm of policy, this would suggest strategic actions to environmental management set by the government of Ghana, plausibly through increased efforts to promote environmental programme participation. Further, opportunities to offer scientific literacy about the state of transboundary environmental issues and the threat these pose to the progress of Ghana's development as a country can be offered. However, as an initial policy insight, this chapter showed that thriving young people in Ghana are more likely to contribute to global affairs with beliefs and attitudes about their behaviours and intentions related to environmental sustainability issues. This can inform strategies for policymakers to use environmental sustainability as a platform for scientific literacy on environmental management and a basis for global civic engagement.

The chapter offers implications for practice in the form of strategically targeting areas for the application of programs for youth to foster knowledge about the environment and promote sustainable behaviours. Namely, educational curricula could promote environmental awareness for young people in Ghana or Africa with programs and cross-cutting collaborations between the education sector and organizations, such as the Friends of the Earth and Green Africa Youth, a youth-led group focusing on environmental sustainability and public health. These collaborations might include lectures or symposia to promote and engage in pro-environmental behaviours as individual citizens, as suggested in this chapter that the norm is an institutional rather than personal responsibility. Promoting collective action that offers practical information and stimulates individual pro-environmental behaviours might be one strategy moving forward for parties interested in preparing youth for environmental management or advancing the state of environmental awareness among young people in Ghana.

In conclusion, this chapter offers unique and novel evidence on the existing relations between the 5Cs of PYD and environmental concerns of youth and emerging adults in an understudied

African context (Dimitrova, 2018; Dimitrova et al., *this volume*; Wiium & Dimitrova, 2019). The focus on Ghana provides new and strategic insights with regard to cultural variability and demographic breadth for research in this domain. Ghana offers an interesting life context to investigate attitude change as it is currently experiencing industrial growth with incumbent environmental alterations in a population that is heavily comprised of young people. The patterns emerged for the 5Cs suggest that young people strongly experiencing confidence and competence hold views about industrial growth and related prospects, whereas those with strong character demonstrated beliefs that consumers and state actors should take an active role in being responsible for environmental management. The positive relation between character and caring and environmental attitudes points toward a theoretically assumed alignment between the 5Cs of PYD and environmental engagement (Larson, 2000). In this manner, character might be tied to morally attune value-driven behaviour akin to the relation between environmental self-identity and moral obligation (van der Werff et al., 2013). Moral responsibility for the prevention of pollution or other domains of environmental sustainability is a fruitful avenue for future research, policy and practice.

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Positive Youth Development and the Big Five Personality Traits in Youth from Belize

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Abstract

Relevant work has shown significant relations between the Big Five personality traits (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness)

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and the Five Cs of positive youth development (PYD) (competence, confidence, character, connection, and caring). For example, conscientiousness has been positively related to competence (e.g., grades, test scores, decision making, and vocational competence). However, direct relations between the Big Five and the Five Cs at the construct level have not been explored in any population. In the present chapter, we examined the relations between the Big Five and the Five Cs of PYD through a canonical correlation in Belize youth ($N = 3.770$, M age = 14.11, $SD = 1.46$). The findings suggest that the Five Cs and the Big Five are theoretically different and assess unrelated latent constructs. This chapter further indicates that striving to promote the Five Cs in youth is an impactful endeavor that is not attempting to change a stable trait, but a malleable quality of person-context relations that can positively alter youth development. A better understanding of the Five Cs in relation to the Big Five provides a more comprehensive insight into the effects of PYD programs implemented in international contexts.

Keywords

Big Five · Positive youth development ·
Belize · Five Cs · Personality

Stability of personality traits has been a controversial issue over the last few decades (Bleidorn, Hopwood, & Lucas, 2018; Cobb-Clark & Schurer, 2012; Elkins, Kassenboehmer, & Schurer, 2017). One school of thought argues for plasticity of personality in relation to major life events (e.g., marriage, loss of employment, and parenthood) and on-going experiences, while another argues for stability regardless of these events. The recent literature shows that major life events can have perpetual effects on personality traits. For instance, the birth of a child is an irreversible event that can lead to radical and abrupt changes in behavior and routines potentially leading to changes in personality (Bleidorn, 2015). However, the magnitude of change of personality traits within the Five-Factor Model (Big Five) varies based on the specific personality trait and by life event (Bleidorn et al., 2018). The Five-Factor Model (Big Five) of personality is a classification of personality traits that consists of *neuroticism* (how often a person experiences anger, anxiety, or depression), *extraversion* (the tendency for an individual to seek stimulation with others), *openness to experience* (intellectual curiosity and imagination), *agreeableness* (a person's inclination to be compassionate, cooperative, and trusting towards others) and *conscientiousness* (how organized and disciplined an individual is) (Smith et al., 2019; Tupes & Christal, 1961).

Excluding major life events, personality, as modeled by the Big Five, is relatively stable over time. More specifically, neuroticism has been shown to be consistent across the lifespan with the remaining four personality types showing minimal variation in a 4-year time period (Schwaba & Bleidorn, 2018), and the biggest variation occurring in adolescence and emerging adulthood from 15 to 24 years of age (Cobb-Clark & Schurer, 2012; Elkins et al., 2017). As such, the relation of the Big Five with Positive Youth Development (PYD), specifically the Five Cs of PYD (i.e., competence, confidence, character, connection, and caring), could be particularly interesting given the goal of PYD programs to positively alter youth's life trajectories and the

relative stability of the Big Five over the lifespan. This chapter aims to understand the underlying relations between the Big Five and the Five Cs of PYD in a sample of youth from unique and understudied context in Belize.

Positive Youth Development

The PYD scholarship aims to promote positive outcomes in youth by focusing on their strengths and healthy development (Burkhard, Robinson, Murray, & Lerner, 2019; Geldhof et al., 2015; Hull, Powell, Fagan, Hobbs, & Williams, 2020; Hull, Saxon, Fagan, Williams, & Verdisco, 2018; Tirrell et al., 2020). Instead of fixing or managing youth-related problems, PYD looks at youth as something to develop into a productive community member valued by themselves and others (Roth & Brooks-Gunn, 2003). The theoretical background of this model is relational developmental systems aiming to promote a bi-directional positive and beneficial relation between an individual and their context (Lerner, 2017). The goal is to alter youth's trajectory of individual to context relations by providing resources within their ecology (e.g., families, school, and communities). Providing youth with PYD promoting resources fosters valuable growth that leads to the emergence of the Five Cs (Geldhof et al., 2015; for expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)).

The Five Cs model of PYD operationalizes healthy development recognized as youth thriving (Geldhof et al., 2014, 2015). The five components of the model refer to *competence* (constructed through four types of social (interpersonal skills), academic (grades, attendance, and test scores), cognitive (decision making), and vocational competence (work habits and skills), *confidence* (self-efficacy, self-regard, and self-worth), *character* (standards, morality, and integrity), *connection* (positive bi-directional relationships) and *caring* (compassion and under-

standing for others). The Five Cs have been widely used and linked to youth positive outcomes in a range of developmental competencies (Dimitrova, Buzea, et al., [this volume](#); Dominguez, Wiium, Jackman, & Ferrer-Wreder, [this volume](#); Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#); Kabir & Wiium, [this volume](#); Kozina, Wiium, Gonzalez, & Dimitrova, 2019; Mohamed, Hamzah, & Samah, 2017; Wiium & Dimitrova, 2019) particularly in youth development programs (Catalano et al., 2019) by lowering the probability to be on a negative life trajectory of problem behavior and delinquency (Geldhof et al., 2014). The Five Cs set youth on a life path that leads to the formation of the sixth C of *contribution* to their ecology through family, school, and community interactions (Shek, Dou, Zhu, & Chai, 2019).

The Relation Between the Big Five and the Five Cs

The Big Five personality traits have shown meaningful relations to the Five Cs of PYD (McAbee & Oswald, 2013; Milfont & Sibley, 2012). For example, conscientiousness has been positively related to competence in terms of career and academic success (Bidjerano & Dai, 2007; McAbee & Oswald, 2013) and decision making (McElroy & Hevey, 2014). Agreeableness has a strong relation with caring being often defined as trustworthiness and caring (Wayne, Musisca, & Fleeson, 2004). High levels of agreeableness have been positively related to teachers caring for students (Teven, 2007) and greater levels of empathy (Graziano, Habashi, Sheese, & Tobin, 2007). It is possible that some combination of caring (e.g., empathy and sympathy) could provide the essential core of an individual's agreeableness trait. If so, caring may fit within the nomological network of agreeableness such that caring can help explain agreeableness within individuals.

The Big Five personality traits were associated with connection in terms of establishing relationships within a family. Neuroticism has shown a negative association with relationship

satisfaction, whereas agreeableness, conscientiousness, and openness to experience have been positively related to both community engagement and environmental involvement (Milfont & Sibley, 2012). Conversely, conscientiousness, neuroticism, and agreeableness have been related to the ethical behavioral aspect of character (Kalshoven, Den Hartog, & De Hoogh, 2011). With regards to confidence, extraversion and emotional stability (inverse of neuroticism) were shown to be related to both self-efficacy (Obara-Gołębiowska & Michałek-Kwiecień, 2020; Thoms, Moore, & Scott, 1996) and self-worth (Zeigler-Hill et al., 2015). Therefore, previous research has shown patterns of personality traits that relate to individual's character, confidence, and their ability of forming a connection, specifically, within their ecology (Kalshoven et al., 2011; Milfont & Sibley, 2012; Zeigler-Hill et al., 2015).

The potential connections and interrelations between the Big Five and the Five Cs of PYD establish the need to examine relations among these two sets of constructs. This is particularly important in the case that personality is meaningfully related to the Five Cs of PYD, which are often used to evaluate the efficacy of PYD programs. The need to examine such relations arises when considering the relative stability of the Big Five over the lifespan. For example, individuals high in conscientiousness could potentially have a strong, relatively fixed relation with competence and conversely, for individuals low in conscientiousness. Therefore, PYD programs could focus efforts and resources to develop or change a trait of an individual that is largely stable. If so, this could be a mismanagement of resources that NEET youth (not in employment, education, or training) requiring PYD approach need to concentrate their curriculum and realign PYD programs towards aspects and sub traits of the Five Cs that are largely not correlated with relatively stable personality traits. Based on these premises, the current chapter describes a PYD school-based curriculum to explore significant relations of the Big Five personality traits and the Five Cs of PYD.

The Context of Belize

Belize is a developing country in the Caribbean with an economy based primarily on agriculture and tourism. The unemployment rate is over 15% and more than 41% of the population lives below the poverty line (Central Intelligence Agency, 2020). Specifically, 33% of youth 14–19 years old are unemployed with this number dropping to 20% for the 20–24 years old. It is estimated that 28% of all youth aged 15 to 24 are not in employment, education, or training ([NEET]; Parra-Torrado, 2014). Further, within the age group of 15 to 24 years, 17% male and 39% females are considered NEET with less than 26% enrollment rate of tertiary school (Parra-Torrado, 2014). To compound the issue, school dropout in Belize is the highest of any country in Latin America and the Caribbean (Inter-American Development Bank, 2020). As such, the increasing prevalence of a young NEET population demonstrates the need of a PYD program to help alter youth trajectory and foster growth within the communities of Belize. This chapter is built off the only PYD intervention implemented in Belize, which provides a unique opportunity to better understand PYD and its interrelations within the country, registering the sixth highest homicide rate in the world (Lopez, 2013).

The Belize population is made up of six main ethnic groups—the Mestizo are the predominate ethnic group descended from a mix of Spanish and Mayan people; the Maya people that come from the Mayans; the Creole, which represent about a quarter of Belize's population and descend from African slaves and Europeans; the Garifuna that are descendants of West and Central Africa; the Mennonites who live in secluded conservative communities inhabited entirely of Mennonites; and East Indian people, which immigrated from India.

The Belize education is based on the British educational system of 8-year primary school (UNESCO International Bureau of Education, 2010). After completion of primary school, Belize youth enter secondary schools that offer

vocational training and college preparation, but students are only required to attend for 2 years based on their age. Youth from the age of 5 to 14 must attend school, but 25% of students do not complete secondary school beyond the age requirement (UNESCO International Bureau of Education, 2010).

The Present Chapter

The purpose of the present chapter is to examine if, by using PYD to positively alter youth's life trajectories, stable aspects of the Big Five personality traits can be altered. Accordingly, the chapter explores the relations between the Big Five and the Five Cs of PYD through a canonical correlation in a large, cross-sectional sample of Belize youth. To our knowledge, no prior work has examined the direct relations between the Big Five and the Five Cs in any population. We see this as a prevalent issue as sub-traits of the Big Five and the Five Cs have been empirically linked, showing the need to better explore and understand their relations. Moreover, limited work has investigated the stability of the Five Cs of PYD with a U.S. sample (Geldhof et al., 2014). Yet, there could be cultural differences in the stability of the Five Cs. Consequently, this chapter aims to promote evidence for PYD programs that are altering permeable rather than stable traits by looking at the relations between relatively stable traits (the Big Five) and the Five Cs. However, based on the theoretical and empirical relations between the Five Cs and the Big Five, we assume a positive relation among these two sets of variables, excluding neuroticism as it should have a negative relations with the Five Cs. Other specific assumptions regard a positive relation between conscientiousness and competence; agreeableness and caring; agreeableness, conscientiousness, openness to experience and connection; conscientiousness, the inverse of neuroticism, agreeableness and character; and confidence, extraversion and emotional stability.

An Empirical Example with Youth from Belize

For the purpose of this chapter, a sample of Belize youth ($N = 3,770$, M age = 14.11, $SD = 1.46$) in the 8th and 9th grades across 52 schools (53% female) was employed. Of the total sample, 1,580 (42%) identified as Mestizo, 1,053 (28%) as Creole, 551 (15%) as Maya, 303 (8%) as Garifuna, 104 (3%) as East Indian, and 152 (4%) did not identify as any of the above. Mennonites were not present in the study as they live in small secluded communities. Moreover, the average socioeconomic status (SES) was 21.60 ($SD = 13.15$) out of 66 indicating that a majority of the sample had low SES. Sample demographics are provided in Table 1.

The study and related data collection took place under the auspices of the Ministry of Education and the Ministry of Human Development, Social Transformation and Poverty Alleviation in Belize. A survey supervisor coordinated 10 enumerators (two enumerators per district). Each enumerator collected data at a proportionate number of schools at approximately the same time during a two week period. English was used for all instructions and measures as it is the Belize national language.

Table 1 Demographic information for the full sample

| Variable | Percent (n) | SES (SD) |
|--------------|--------------|---------------|
| Gender | | |
| Male | 47 (1772) | 21.25 (13.08) |
| Female | 53 (1998) | 21.93 (13.21) |
| Ethnicity | | |
| Creole | 28 (1053) | 25.44 (14.28) |
| Garifuna | 8 (303) | 26.83 (15.28) |
| Maya | 15 (551) | 16.08 (7.39) |
| Mestizo | 42 (1580) | 20.10 (12.43) |
| East Indian | 3 (104) | 23.48 (14.23) |
| Other | 4 (152) | 24.92 (14.31) |
| Grade | | |
| Form 1 | 57 (2117) | 21.41 (13.18) |
| Form 2 | 43 (1619) | 21.89 (13.13) |
| Age (SD) | 14.11 (1.46) | |

Note. n = sample size; SD = Standard Deviation; SES = Socioeconomic status as measured by the Barratt Simplified Measure of Social Status (BSMSS)

Institutional Review Board approval was obtained to examine the de-identified data. The final data file was de-identified prior to submitting it to the researchers. Upon receipt, composite scores were generated for summary and subscales of the measures, and the scores and items were examined for reliability (provided in each respective measure section), non-compliant values outside of the range of the items (e.g., answering a 15 on a 5-point Likert scale), outliers (e.g., individuals answering 1 or 5 on every item of all measures), normality, and homogeneity of variance.

The Big Five personality traits were measured with The International Personality Item Pool of the Big Five Personality Inventory covering five dimensions of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (Hong, Paunonen, & Slade, 2008; Hull, Beaujean, Worrell, & Verdisco, 2010). The inventory contains over 2000 publicly available items that are regularly used in personality research and allows selecting specific items or scales that measure the desired personality dimension (Goldberg et al., 2006). The 50 items selected for use in the present chapter were positively scaled, and all five dimensions were measured with 10-items each with response categories ranging from 1 (*very inaccurate*) to 5 (*very accurate*). The validity of the measure has been examined in cross-cultural work and samples from Belize, Jamaica and the United States (Sanguras, Beaujean, & Hull, 2014), as well as in other personality research in the Caribbean (Hull & Beaujean, 2011; Hull, Booker, & Näslund-Hadley, 2016). For this sample, the reliability coefficients ranged from $\alpha = .69$ to $\alpha = .82$.

The Five Cs of PYD were measured with previously adopted measurement tool of competence, confidence, connection, character, and caring (Lerner et al., 2005). Items used to measure the Five Cs came from five different scales: The Search Institute Profiles of Student Life: Attitudes and Behaviors (Syvertsen, Scales, & Toomey, 2019); the Self-Perception Profile for Children (Harter, 1988); The Teen Assessment Project Survey Question Bank (Small & Rodgers, 1995); The Eisenberg Empathy Scale (Eisenberg

et al., 1996) and the Empathic Concern Subscale of the Interpersonal Reactivity Index (Davis, 1980). Competence comprised 3 subscales of scholastic competence, social acceptance, and grades. Confidence comprised 3 subscales of self-worth, positive identity, and physical appearance. Connection reflected 4 subscales of connection to family, neighborhood, peers and school. Character contained 4 subscales of social conscience, values diversity, conduct morality and personal values. Caring was the only dimension without subscales. The subscales were calculated by following established protocol and prior work (Lerner et al., 2005). In the present sample, the overall reliability coefficient was $\alpha = .90$ and for the subscales ranged from $\alpha = .61$ to $\alpha = .85$.

Socioeconomic status (SES) was measured with The Barratt Simplified Measure of Social Status (BSMSS) based on marital status, education level, and occupation of self, spouse, and parents. This self-report measure was a simplified version of the Hollingshead Four-Factor Measure of Social Status (Barratt, 2006; Hollingshead, 1975) using a continuous scale from 8 (*low*) to 66 (*high*). In addition, respondents provided educational and occupational information about themselves and their family members. Because information from the measure was about different household members making up the family unit, responses were not expected to correlate; consequently internal consistency reliability estimates were inappropriate for this measure.

Analytic Steps

Missing data on each item ranged from 0.4% to 13.22% for the most extreme item. Listwise deletion would reduce the sample size to 1710 and remove over 2000 students; thus, multiple imputation was used (Peugh & Enders, 2004) to estimate missing values in a three-step process: imputation, analysis, and pooling. Five data sets ($m = 5$) were created during the imputation phase with each containing unique estimates for the missing values. Then, separate canonical correla-

tion analyses were run on each of the datasets, yielding m parameter estimates and standard errors. Estimates were pooled together into a single parameter estimate following Rubin's (1987) rules.

Canonical correlation analysis (CCA) explored the relations between two sets of variables (e.g., the Big Five and the Five Cs; Zhuang, Yang, & Cordes, 2020). This analysis is similar to a multiple regression analysis; however, there are sets of variables on both sides (IV and DV). This was used to understand the underlying relations between the Big Five and the Five Cs while holding true to the complexity of the world and accounting for familywise error (Proschan & Brittain, 2020).

Main Findings

The canonical correlation analysis (CAA) used the Big Five as predictors of the Five Cs of PYD resulting in five functions with the squared canonical correlations (R_C^2) of .11, .06, .02, .004, and .0002, respectively. The overall model was statistically significant, $F(25, 13987.86) = 31.80, p < .001$, Wilk's $\lambda = .814$, meaning, that the full model explained 18.6% of the shared variance between the Big Five and the Five Cs of PYD. Additionally, functions 2 to 5, $F(16, 11505.96) = 20.16, p < .001$, 3 to 5, $F(9, 9168.04) = 9.47, p < .001$, and 4 to 5, $F(4, 7536) = 3.71, p = .02$, were all statistically significant. However, function 2 (5%), 3 (2%), and 4 (0.2%) combined explained less than 10% of variance. Thus, only function 1 was interpreted with the standardized canonical function coefficients and structure coefficients represented in Table 2.

Examining the standardized coefficients of function 1, the synthetic criterion variable was largely comprised of confidence, competence, and connection. This was supported by the corresponding squared structure coefficients. However, the squared structure coefficients also identified character as a potential secondary contributor as it explained 28% of the variance in the synthetic criterion variable. This finding was due

Table 2 Canonical correlations, standardized function coefficients, and structure coefficients of the five Cs of PYD and the big five personality traits

| | R_c^2 | Standardized coefficient | r_s | r_s^2 |
|------------------------|---------|--------------------------|-------|---------|
| | .11 | | | |
| Confidence | | .425 | .829 | .687 |
| Connection | | .382 | .708 | .502 |
| Caring | | .060 | .348 | .121 |
| Competence | | .425 | .770 | .593 |
| Character | | .041 | .530 | .281 |
| Neuroticism | | -.763 | -.618 | .382 |
| Extraversion | | .529 | .683 | .467 |
| Openness to experience | | .076 | .481 | .232 |
| Agreeableness | | .238 | .504 | .254 |
| Conscientiousness | | .078 | .493 | .243 |

Note. R_c^2 = squared canonical correlation with only one value (.11) because equivalent to a multiple R squared (R^2) and is the sum of the variance explained in personality by the five Cs of PYD; r_s = structure coefficients; r_s^2 = squared structure coefficients; only one function was extracted making $r_s^2 = h^2$; h^2 = communalities

to multicollinearity between character and the other Cs of PYD. Moreover, all of the variables' structure coefficients were positive indicating a positive relation. Consequently, the synthetic criterion variable was labeled "connected self-efficacy."

Looking at the set of predictor variables in function 1, the standardized coefficients showed that neuroticism and extraversion were the primary contributors, which was supported by the squared structure coefficients. However, conscientiousness, openness to experience, and agreeableness all had squared structure coefficients that could explain up to 20% of the variance in the synthetic predictor variable, indicating multicollinearity across predictors. Additionally, neuroticism had a negative structure coefficient and the remaining Big Five had positive structure coefficients indicating that neuroticism had a negative relation with the Five Cs of PYD. As such, the synthetic predictor variable of function 1 was labeled "emotionally stable and outgoing". Only 11% of the variance could be explained by the relation between the two sets of variables. Moreover, this relation was largely composed of confidence, competence, and connection with neuroticism and extraversion. Following this,

Table 3 Squared canonical correlations of the five Cs of PYD and the big five personality traits by gender and ethnicity

| | R_{c1}^2 | R_{c2}^2 | R_{c3}^2 | R_{c4}^2 | R_{c5}^2 |
|-----------|------------|------------|------------|------------|------------|
| Gender | | | | | |
| Male | .135 | .086 | .028 | .002 | < .001 |
| Female | .108 | .061 | .025 | .018 | < .001 |
| Ethnicity | | | | | |
| Creole | .104 | .058 | .027 | .003 | .001 |
| Garifuna | .186 | .121 | .088 | .021 | .009 |
| Maya | .113 | .047 | .011 | .002 | < .001 |
| Mestizo | .159 | .091 | .033 | .005 | < .001 |

Note. East Indian ($n = 45$) and other ($n = 78$) were not calculated because of the small sample size. R_c^2 = squared canonical correlation; r_s = structure coefficients; r_s^2 = squared structure coefficients; only one function was extracted making $r_s^2 = h^2$; h^2 = communalities

each group (ethnicity and gender) was individually tested to see if there were differences in R_c^2 across groups. Group differences are reported in Table 3 with Garifuna having the largest R_c^2 (.186) and Creole (.108) having the smallest. Moreover, there was less than a .03 difference in variance accounted for between males (.135) and females (.108).

Conclusions

The present chapter examined the relations between the Big Five personality traits and the Five Cs of PYD among large sample of youth in Belize. This chapter helped to validate and verify each measurement construct as theoretically different as the only function that could be considered for practical significance explained 11% of variance in the relation between the two sets of variables. The findings indicated that the Big Five and the Five Cs of PYD do not substantially correlate, which is supported across each individual group (ethnicity and gender) in Belize. This suggests that striving to promote the Five Cs in youth is an impactful endeavor not attempting to change the stable traits of the Big Five, but potentially changing the permeable quality of person-context relations that can positively alter youth development. Conceptually, the findings lend credence to the idea of PYD as a transient state, rather than a permanent trait, such as the Big Five.

The relations between the Five Cs of PYD and the Big Five were not consistent with some earlier findings (e.g., conscientiousness with competence and agreeableness with caring; McAbee & Oswald, 2013; Mc Elroy & Hevey, 2014; Wayne et al., 2004). However, the present chapter found support for a positive relation between emotional stability (inverse of neuroticism) and extraversion (emotionally stable and outgoing individuals) and confidence, competence, and connection (connected self-efficacy). This finding is partially supported by previous literature on the relations between neuroticism and extraversion, and confidence (Thoms et al., 1996; Zeigler-Hill et al., 2015). However, the link to both connection and competence appears to be unique in comparison to previous studies that found potential relations of connection with agreeableness, conscientiousness, and openness to experience (Milfont & Sibley, 2012), and competence to conscientiousness (Bidjerano & Dai, 2007; Mc Elroy & Hevey, 2014; McAbee & Oswald, 2013). The relations between emotionally stable, outgoing individuals

and connected self-efficacy could be potentially explained as it is not unusual for extraverted individuals to make connections within their community especially if they are emotionally stable, which can lead to high self-esteem (Duffy, Shaw, Scott, & Tepper, 2006), creating confidence in their ability (competence) to do so.

Due to the nature and context of how youth grow up in Belize, these findings might be specific only to Belize or, potentially, the Caribbean. Youth tend to grow up in poor conditions that could possibly cause them to over express or under express traits in comparison to youth in WEIRD (Western, Educated, Industrialized, Rich, and Democratic) countries (Muthukrishna et al., 2020). As such, this could potentially affect the relations between the Five Cs of PYD and the Big Five. However, this needs to be tested in a WEIRD country to determine the degree of difference, or lack of difference caused by the conditions of Belize.

Future Outlook

This chapter provides fruitful directions for future work. Future research should look to replicate the findings of this chapter beyond Belize; for example in the U.S. and Europe, and in countries where the Five Cs may never have been applied. Cross-cultural measurement invariance studies would help researchers and practitioners better understand the transportability of the Five Cs of PYD (Dimitrova & Wium, [this volume](#)). Further, simply because we provide evidence that the Five Cs constructs are not the same as the Big Five personality traits by eliminating the jingle-jangle fallacy confusion, the present chapter does not clear up the matter that construct labels are lexically similar. Further work may attempt to address this issue. Finally, future work on the Five Cs measure is needed to establish psychological labels with clearer definitions of the constructs, as such work would help researchers internationally to understand how to apply and translate the measures into other languages.

Implications for Research, Policy, and Practice

Despite the construct names and definitions of the Five Cs appearing conceptually similar to the Big Five personality traits, the fact that they are independent as shown in the present chapter suggests the possibility of fluidity and uniqueness of the Five Cs as a measure of PYD that might not be immediately apparent. Consequently, two major benefits for research can be identified based on the findings presented in this chapter. First, the Five Cs are not only theoretically different from the Big Five, but they are assessing different unrelated latent constructs. This implies that the Five Cs diverge from the Big Five as constructs, strengthening the validity of the Five Cs measure by demonstrating that it is extrinsic to a nomological network of the Big Five. Consequently, the present chapter suggests that the Five Cs measure is possibly assessing changeable states that affect trajectories of youth rather than stable, less malleable individual difference traits of personality. It is important that PYD researchers and evaluators possess psychological instruments that are specific to and have been demonstrated to assess domains of interest (e.g., the Five Cs of PYD assessing changeable states that affect life trajectories) and build evidence for construct validity for assessing that domain (e.g., divergent validity of the Five Cs and the Big Five). Second, for those evaluating the efficacy of PYD programs in international contexts, the present chapter supports the use of the Five Cs measure to identify youth and program effects since the scores for participants on both measures do not reflect similar underlying constructs.

Regarding policy, governments should design youth interventions to seek to influence and aid in positive development of the Five Cs. Specifically, we recommend that education systems develop three sets of policy areas that target the development of the Five Cs to identify and develop age-appropriate interventions that create lasting positive effects on youth populations. First, training for school administrators, educators and counselors in the identification of individuals needing interventions is recommended. A key

element of this line of activities should be the use of student assessments of risk and protective factors related to violence and academic performance to identify youth in need of support. The continuous use of student assessments provides diagnostic information, not only to guide the provision of tutoring and other support, but also to monitor student progress; make referrals to other agencies or professionals; and assess the impact of interventions. Second, the development of school-based interventions to support the development of the Five Cs is needed. This could include training of teachers and school counselors in the development of individualized learning plans for those most at risk; use of curricula that educates and promotes pro-social norms; classroom management techniques for identifying and preventing behaviors that are detrimental to learning; models for one-to-one mentoring; and how to make referrals to appropriate agencies and professionals to assist youth with complex behavioral problems. Third, the development of policies that target how youth spend their time by promoting activities with the specific purpose of developing the Five Cs is of relevance. This could include school-based extracurricular activities for both in-school and NEET youth with group activities in a safe environment that integrate and promote a mixture of youth with different risk and protective factors. In addition to providing a space for positive use of youth time, such school-based extracurricular activities have the potential to allow NEET youth to reconnect within their schools and communities. Through the implementation of policy changes, governments can effectively concentrate resources, such as personnel and funding, toward altering developmental trajectories of youth that are malleable and changeable.

As to the practice, it is possible that program outcomes reflect nascent characteristics of youth, and do not support effective program delivery and allocation of resources in support of youth development. The present chapter provides evidence that the Five Cs of PYD measure does tend to assess malleable latent dimensions of youth development that would be important for assessing the impact of youth programs. This is vital for

governments or non-partisan organizations that are implementing and evaluating PYD programs for youth, especially in developing countries where the value or worth of the program must be established under delivery with real-world conditions. When attempting to determine whether PYD programs are effective, the Five Cs measure is recommended to assess the extent to which positive developmental trajectories are being established by programs. Our reasoning behind this recommendation is that internal psychological states that are directly tied to PYD instead of manifest (observable) indicators or outcomes such as direct observations of behavior or other socially desirable observed outcomes (e.g., the number/proportion of youth graduating), provide evidence of internal change or maturation. Often it is possible that observed/manifest variables do not reflect internal states of change in individuals. Latent variables, however, can be thought of to exist independent of their measurements, as hypothetical constructs which, while not directly observed, have operational implications that are closer to what is often intended with PYD programs under real implementation. The states assessed are the psychological conditions we believe should be altered, and reflective of inter-individual long-term change as the goal of practice for PYD programs.

In conclusion, the present chapter examined the relation of the Five Cs in a large and diverse sample from a nation and culture distinct from that in which the measure was developed, but avoided the potential problems of translation of the measure since the official language of Belize is English. In addition, we used data from this same sample on a widely accepted international measure of personality with cross-cultural validity to determine whether or not the Five Cs of PYD does indeed measure developmental states of youth, rather than stable individual differences traits. Importantly, the findings support the fact that the Five Cs measure is unique. Construct names withstanding, the work to produce items and scales for international researchers for PYD deserves additional consideration for practice from an evaluative perspective, and provides a poten-

tially meaningful tool for examining developmental trajectories of youth in global contexts.

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Healthy Lifestyle Behaviors and the 5Cs of Positive Youth Development in Mexico

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Abstract

Healthy lifestyle behaviors (HLBs; regular fruit and vegetable intake and physical activity) share intersections with Positive Youth Development (PYD) through the promotion of health, well-being, and overall positive functioning among young people. This chapter examines such intersections in Mexico in light of pressing health concerns and the need for effective preventative approaches to reduce adolescent obesity. The chapter begins with operationalization and a summary of relevant empirical work on HLBs and the 5Cs of PYD (i.e., competence, confidence, character, connection, and caring) as a way to highlight the incremental contributions offered to the PYD field and the uniqueness of the Mexican context. The chapter follows with an illustrative empirical example from a cross-sectional self-

report study with Mexican youth regarding HLBs and the 5Cs. The results from a structural equation modeling supported the reliability and validity of the HLBs and the 5Cs measures in Mexico. Further, the chapter provides evidence for positive associations among the main constructs investigated in a path model indicating that HLBs are associated with the 5Cs. The final section provides indications for research, policy, and practice based on the evidence presented in this chapter.

Keywords

Healthy lifestyle behaviors · Fruit and vegetable intake · Physical activity · Positive youth development · 5Cs · Mexico · Adolescents

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Positive Youth Development (PYD) scholars who aim to foster positive development in a broad sense have argued for the need to enlarge the range of PYD models including healthy lifestyle behaviors (HLBs; Holt, 2016; Holt, Deal, & Pankow, 2020; Paakkari et al., 2019). In fact, relevant research, that is primarily based in the United States (U.S.), has prompted PYD models in relation to sports (Bruner et al., 2016; Ferreira dos Santos, Camiré, & Da Fonte Campos, 2018;

Holt et al., 2017; McDavid & McDonough, 2020) and disordered eating attitudes and behaviors (Stephens, Bowers, & Lerner, 2018) deviating attention from key healthy lifestyle behaviors (HLBs), such as healthy nutrition and physical activity. Such empirical attention has the potential to improve policy and practice related to HLBs as relevant PYD correlates with the possibility to beneficially impact the lives of young people from culturally diverse and under-researched contexts such as Mexico. This is particularly salient in adolescence when young people shape and consolidate their healthy eating and lifestyle behaviors (Sawyer et al., 2012) and specifically in Mexico, a Latin American country with pressing health concerns for prevention and intervention for the near-epidemic proportions of unhealthy habits and adolescent obesity rates (Aceves-Martins, Llauroadó, Tarro, Solà, & Giralt, 2016). This chapter addresses these concerns by investigating relations between HLBs and PYD, and thereby adding to the evidence base for a policy and practice actions to improve health in Latin America and globally (Koller & Verma, 2017). In so doing, the chapter examines ways in which HLBs (i.e., regular fruit and vegetable intake and physical activity), are important to the emergence of the 5Cs of PYD in a sample of Mexican youth.

The chapter provides relevant conceptual and methodological contributions to the PYD field. Conceptually, the chapter tests a novel model on joint interrelations of two core HLBs usually examined separately to advance the generally neglected relations between HLBs and the 5Cs of PYD (confidence, competence, character, connection and caring) in an under-researched Latin American context. Such model affirms the positive association between HLBs and the 5Cs and thereby adds to the research foundation for the development of health promotion interventions well suited for use in a Mexican context. The chapter also adds value to the conceptual knowledge on HLBs in adolescence, by addressing the urgent call of scholars and stakeholders to investigate relevant health concerns in Mexico related

to physical activity and eating habits of the youthful population (Hernández-Cordero et al., 2017). Methodologically, this chapter offers solid evidence for the reliability and validity of the HLBs and the 5Cs measures in Mexico. Little is known about PYD among Mexican youth, and this chapter furthers the utility of meaningful measurement within the PYD field in this relevant and unique sample.

The chapter continues with an operationalization and an overview of empirical studies regarding the HLBs and the 5Cs of PYD as well as an overview of the Mexican context and relevant health-related youth policy. These sections set the stage for an illustrative empirical example, namely a cross-sectional study that explores the association between HLBs and PYD as well as the reliability and validity of the HLBs and PYD measures used in a sample of Mexican youth. The final section provides indications for research, policy, and practice based on the evidence presented in the chapter that is situated in the extant research literature.

Healthy Lifestyle Behaviors

This chapter focuses on specifically selected healthy lifestyle behaviors (HLBs) such as regular fruit and vegetable intake and physical activity and their importance to the 5Cs of PYD. Following established classifications, these behaviors are operationalized as daily habits of eating five or more servings of fruit or vegetables and being physically active (Food and Agriculture Organization of the United Nations, 2019). These HLBs are usually consolidated in adolescence and particularly salient in this developmental period marked by relevant challenges for young people in defining own identity, body image, and weight management behaviors (Hartman-Munick, Gordon, & Guss, 2020; Reina, Monsma, Dumas, & Gay, 2019; Sawyer et al., 2012). Further, these HLBs represent a relevant issue associated with obesity and particularly in Mexico registering one of the highest adolescent

obesity rates worldwide (Aceves-Martins et al., 2016). The practice of physical activity among Mexican adolescents is quite inexistent and sedentary habits are common (Hernández-Cordero et al., 2017). Inappropriate HLBs associated with sedentary lifestyles are important health risk factors in adolescence and if adopted at this early life stage may become a stable habit retained in adult life, making them difficult to modify later (Haddad & Sarti, 2020).

Among adolescents, the sociodemographic and economic determinants of HLBs have been of particular interest, because the effects of these determinants are crucially important for differences in HLBs. Most relevant of these are socio-economic disparities, gender, and age (the transition from early to late adolescence). Adolescents who experience poverty (i.e., as indexed by low family socio-economic status; SES) are more likely to have unhealthy dietary patterns (Hinnig et al., 2018) and to consume unhealthy foods (Williamson et al., 2020). Low family SES and neighborhoods reduce the opportunities for individuals to be physically active (Heradstveit et al., 2020). Adolescents who live in these neighborhoods have less regular meal patterns and a higher consumption of sweet and fatty snacks, compared to their high SES peers who tend to engage in physical activities during leisure time, due to differential access to financial and material resources (Cureau et al., 2016). The SES-HLBs pattern is particularly salient in Mexico, where noticeable socioeconomic deprivation classifies 46% of the population as poor and 29% as vulnerable to social deprivation (The World Bank, 2018).

Concerning gender, females show greater involvement in healthy dietary habits than males due to a stronger link between dietary restraint and healthy eating as well as better nutrition knowledge among girls (Johnson, Wardle, & Griffith, 2002). In contrast, male adolescents are usually more physically active than females due to increased social and parental support compared to females who usually hold a more negative attitude toward physical activities and

experience social and environmental barriers to engage in such activities (Cureau et al., 2016; Haddad & Sarti, 2020).

Concerning age, HLBs decrease with age. The decrease in the consumption of fruits and vegetables in late adolescence has been observed (Albani, Butler, Traill, & Kennedy, 2017) as well as in practice of physical activity, as adolescents gain more independence and are exposed to varied environmental influences within school and peer contexts (Marques, Loureiro, Avelar-Rosa, Naia, & Gaspar de Matos, 2020). Therefore, understanding how sociodemographic and economic determinants of the HLBs are related with food consumption and physical activity is relevant to promote effective lifestyle interventions. Although such factors are important HLBs determinants, there is a lack of work on their effects on HLBs, especially in low- and middle-income countries and in Mexico (Graf & Cecchini, 2018). This chapter addresses such a gap by examining the role of these determinants in a PYD perspective with the potential to provide evidence for policy interventions and enhance the adoption of healthy behaviors, foster healthy eating habits and physical activity practices during adolescence.

Healthy Lifestyle Behaviors and the 5Cs of Positive Youth Development

The present chapter extends healthy lifestyle scholarship in Latin America by applying the 5Cs model of PYD represented by confidence (self-worth), competence (knowledge skills or adaptive capacity), connection (family and community belonging), character (responsibility, spirituality, and autonomy) and caring (compassion for others) (Burkhard, Robinson, Murray, & Lerner, 2019; Shek, Dou, Zhu, & Chai, 2019). The model assumes that the 5Cs prompt adolescents to contribute to their own development (e.g., making healthy choices) and their contexts (i.e., home, school, and community) (for an

expanded 7Cs model globally and in Latin America see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). HLBs as operationalized in this chapter assume meaningful relevance for the 5Cs because they carry substantial psychological and physical health benefits (Agans, Johnson, & Lerner, 2017). Therefore, HLBs may have a direct bearing on the individual experience and development of competence, confidence, character, caring, and connection, as core PYD components.

The scarcely available literature on the association between HLBs and the 5Cs shows two directly related research examples that have focused specifically on testing associations between fruit and vegetable intake/physical activity and the 5Cs. A first cross-sectional study among adolescent and emerging adults in Spain ($N = 768$; 17–29 years old) showed that those engaging in regular physical activity (30 min or more, at least two or more times per week) were more likely to report high levels of competence and confidence (Gomez-Baya, Reis, & Gaspar de Matos, 2019). Additionally, regular vegetable intake (at least one serving per day) was positively associated with character. A second cross-sectional study among adolescents in the U.S. ($N = 6,217$) documented significant positive associations for both regular physical activity and daily fruit and vegetable intake with competence, confidence, and connection (Nystrom, Prata, & Ramowski, 2008).

The evidence base from these studies clearly shows that HLBs (i.e., regular fruit and vegetable intake and physical activity) are important to the emergence and experience of the 5Cs of PYD in adolescence and emerging adulthood in Spain and the U.S. The relevance of such evidence to a sample of adolescents in Mexico merits inquiry in light of the local public health priorities of improving food habits and opportunities to engage in physical activity (Denham & Gladstone, 2020). Thus, the focus of this chapter is timely and much needed from both a societal and scientific standpoint.

The Mexican Context

Located in the South of North America, Mexico is a Spanish speaking Catholic country bordering with the United States, the Pacific Ocean, Guatemala, Belize, the Caribbean Sea, and the Gulf of Mexico (Central Intelligence Agency, 2020). With a population of 131 million, Mexico is the 10th most populated country in the world with approximately 22 million adolescents (10 to 19-years olds; World Health Organization, 2020b; World Population Review, 2018). Unhealthy lifestyles behaviors have fueled an epidemic of non-communicable diseases that are currently the first cause of national health burden (Gakidou et al., 2017; Gómez, 2015). In Latin America, it is estimated that over 200 million people are living with such diseases causing 79% of all deaths worldwide (Hennis, Ochoa, & Sandoval, 2016) and 75% of all deaths in Mexico (Gómez, 2015; Graf & Cecchini, 2018). Unhealthy lifestyles behaviors are responsible for adolescent obesity rates in the country reaching near-epidemic proportions. Mexico has the highest prevalence globally and the highest obesity rates in Latin America with 36% young people aged 10–19 years old (World Health Organization, 2020a).

Concerning healthy eating behaviors, over the last several decades Mexico has been in the midst of a nutrition transition with a resulting diets shift from more “traditional” fruit, vegetable, and whole grain-based diets to more “Westernized” energy-dense foods and saturated fat (Jansen et al., 2020). This transition resulted in reduced healthy meal options at public schools and decline in traditional and homemade diets but increase in the consumption of commercial products and fast food (Azcorra & Dickinson, 2020). The average Mexican diet is based on high saturated fat, cholesterol, sugars and sodium and low protein and fiber intake (Ibarra Sánchez, Viveros Ibarra, González Bernal, & Hernández Guerrero, 2016; Ramírez Mayans et al., 2003) with an increase of 226% since 2000 in consumption of carbonated drinks and sweetened beverages among adolescents (Barquera, Campos, &

Rivera, 2013). Mexican adolescents have poor daily intake of plain water and the recommended daily intake of minimum 400 g of fruit and vegetables (Jiménez-Aguilar et al., 2014) in contrast to regular consumption of high-fat milk, fruit juices, carbonated and noncarbonated sweetened soft drinks (Piernas, Barquera, & Popkin, 2014). Mexican schools do not offer healthy food options; rather low quality meals and calorically enhanced sweetened beverages are common particularly in public schools (Piernas et al., 2014).

Concerning physical activity, recent reports document the lack of such activity among adolescents (Hermosillo-Gallardo, Sebire, & Jago, 2020; World Health Organization, 2020b), but very high daily prevalence of sedentary behaviors (Lopez-Gonzalez et al., 2020). National data show that physical activity and sedentary behaviors among Mexican youth remain below the recommended levels with 67% of youth aged 10–18 years old spending more than 2 h per day in front of a screen (Encuesta Nacional de Salud y Nutrición, 2012). Schools lack open spaces and playgrounds for physical education which is mandatory only 1 h per week (Ortega-Cortes, 2014). In addition, there is a limited government and community support and severely lacking investment for physical education (Galaviz et al., 2016).

In reaction to such an alarming picture concerning HLBs in Mexico, national policy efforts have been directed towards the improvement of food environment and support of physical activity among adolescents. Yet, the actual implementation of such initiatives has been curtailed, due to inadequate resources and support (United Nations International Children's Emergency Fund, 2018). A PYD approach is particularly useful to sustain the implementation of nutritional and physical intervention efforts to enhance positive development, thriving and healthy life among adolescents. These efforts are of utmost relevance in light of HLBs-related health, social and psychological consequences for adolescents in Mexico, where such efforts are sorely needed. Indeed, the scarcely available PYD inspired work in Mexico has confirmed the utility of the model

to promote thriving and success among young people (Catalano et al., 2019; Marsiglia et al., 2014; Marsiglia, Kulis, Booth, Nuño-Gutierrez, & Robbins, 2015; Scales, Roehlkepartain, & Shramko, 2017). Accordingly, the present chapter expands the utility and applicability of the 5Cs of PYD in Latin America with the scope to document the ways in which HLBs are important to the experience and possible enhancement of competence, confidence, character, connection and caring among adolescents in Mexico.

The Chapter Aims and an Illustrative Empirical Example

Consistent, intentional, and regular HLBs practice has been found to produce positive development in the lives of adolescents (Edwards & Cheeley, 2016; Vierimaa, Erickson, Côté, & Gilbert, 2012). Yet, no research has examined the joint role of two main HLBs such as regular fruits and vegetable intake and physical activity among adolescents in general and in Mexico within the PYD perspective. The present chapter applies PYD to explore how HLBs may be linked to the 5Cs of confidence, competence, character, connection and caring. The illustrative study presented here examines these relations in adolescence as a particularly important and formative developmental period. In addition to consolidating HLBs, adolescents are usually experiencing academic transitions and undergoing physical, emotional, and psychological changes that may set the stage for young adulthood (Sawyer et al., 2012).

In addition, this chapter contributes to the PYD field by adding to the evidence base regarding the reliability and validity of two measures of HLBs and the 5Cs in Mexico. The aim was to increase the availability and to encourage the use of methodologically sound assessments of HLBs and the 5Cs of PYD in a largely neglected and socially relevant context. In so doing, the chapter also examines the role of relevant sociodemographic and economic determinants of HLBs such as SES, gender, and age.

The data presented in the current chapter are part of a large international study of PYD (Dimitrova & Wiium, [this volume](#); Wiium & Dimitrova, 2019). Participants were 243 youth (M age = 15.73 years old; 54% female) recruited from several public schools in the city of Mexico. For further analyses, age was dichotomized in early (12–14 years old), middle (15–17 years old) and late (18–19 years old) adolescent groups (Verkuyten, Thijs, & Stevens, 2012). Socio-economic status (SES) was computed by creating a composite score of adolescents' responses to questions about the educational levels (primary, secondary, and university degree) of both parents. This score was recoded into three levels using established criteria of low, middle, and high SES (Diemer, Mistry, Wadsworth, López, & Reimers, 2013). In addition, all participants filled out two self-report measures about HLBs and the 5Cs of PYD widely applied in prior work (Lerner et al., 2005).

The HLBs were measured with four items in line with guidelines on physical activity and fruit and vegetables intake (World Health Organization, 2018). Sample items referred to daily/weekly habits of eating at least one serving of fruit once or more every week, paying attention to healthy nutrition and exercise and engaging in physical activity answered on a 4-point Likert scale from 1 (*not at all*) to 4 (*more than 3 times*). Responses were transformed in a composite mean score with high score indicating more HLBs.

The 5Cs of PYD were measured with the widely used PYD scale composed by 78 items measuring competence, confidence, character, connection and caring. Response options differed across subscales and the standard scoring protocol was followed for these scales (Lerner et al., 2005). An average score for each of the 5Cs was computed with high scores indicating greater competence, confidence, character, connection, and caring.

Reliability and Validity of HLBs and the 5Cs of PYD

Reliability of HLBs and the 5Cs measures has been estimated with Cronbach's alpha coefficients (Tavakol & Dennick, 2011). The results

Table 1 The sample of adolescents in Mexico

| | Total sample $N = 243$ |
|---------------------------------------|------------------------|
| Age, M (SD) | 15.73 (1.79) |
| Age group, % | |
| Early adolescence (12–14) | 30 |
| Middle adolescence (15–17) | 50 |
| Late adolescence (18–19) | 23 |
| Gender, % | |
| Female | 54 |
| Male | 46 |
| SES, % | |
| Low | 2 |
| Middle | 14 |
| High | 85 |
| The 5Cs of PYD, α | |
| Competence | .68 |
| Confidence | .68 |
| Character | .86 |
| Connection | .78 |
| Caring | .77 |
| Healthy lifestyle behaviors, α | .70 |

Note. M = Mean; SD = Standard Deviation; SES = Socio-economic Status; α = Cronbach's alpha reliability coefficient

confirmed an accurate estimate of reliability in that both instruments measured consistently the main constructs in the sample of Mexican adolescents (Table 1). Further, the validity of HLBs and the 5Cs measures was examined to provide a solid base for the underlying constructs. HLBs were tested for invariance referring to the degree to which the measured construct exhibits identical psychometric properties across groups and such analyses are of utmost relevance when applying or comparing new measures within groups (van de Vijver et al., 2019). Structural invariance for the HLBs was evaluated for SES, gender and age to allow group comparisons with the Tucker's phi congruence coefficient (above .90 as acceptable and above .95 excellent) (Lorenzo-Seva & Ten Berge, 2006). The Tucker coefficient was chosen as most appropriate invariance testing method given the low item numbers of HLBs in each SES, gender and age groups that impede traditional invariance testing by Multi-group Confirmatory Factor Analysis (MGCFA). The values of Tucker's phi across these groups ranged between .92 and 1.00 show-

ing very good structural invariance and allowing HLBs group comparisons.

Evidence for validity of the 5Cs was evaluated for the whole sample ($N = 243$) with a Confirmatory Factor Analysis (CFA) model by assessing its goodness of fit with the Root-Mean-Square Error of Approximation (RMSEA; recommended $< .08$) and the Comparative Fit Index (CFI; recommended $> .95$) (Meade, Johnson, & Braddy, 2008; Rutkowski & Svetina, 2017). The model was represented by one PYD latent factor with the 5Cs scales (competence, confidence, character, connection and caring) treated as observed variables of this latent construct. The results indicated that all 5Cs loaded significantly onto one factor (coefficients ranging from $\beta = .15$ to $\beta = .78$, $p < .05$) confirming an overall good fit of the model in this sample, $\chi^2(4, 243) = 11.22$, $p < .024$, CFI = .959, RMSEA = .086.

Sociodemographic and Economic Determinants of HLBs

Further analyses examined the role of sociodemographic and economic determinants in relation to HLBs. To this end, HLBs were compared across SES, gender, and age given that the established invariance allowed such group comparisons. A Multivariate Analysis of Variance (MANOVA) was carried out with SES (3 levels), gender (2 levels) and age group (3 levels) as independent variables and HLBs scores (two levels, fruits and vegetable intake and physical activity) as dependent variables. The results of this analysis revealed statistically significant gender and SES differences for HLBs in that males were more involved in physical activity than females, $F(1, 242) = 4.10$, $p < .05$, and high SES adolescents reported more healthy eating practices relative to low SES adolescents, $F(2, 241) = 5.35$, $p < .001$. To test the importance of sociodemographic and economic determinants to HLBs globally (the two HLBs were significantly and positively correlated $r(243) = .52$, $p < .001$), Univariate Analyses of Variance was carried out with SES, gender and age as independent variables and HLBs overall score as the dependent

variable. The results confirmed a significant SES effect in that high SES adolescents reported more overall HLBs than low SES adolescents, $F(2, 241) = 4.99$, $p < .001$.

The Importance of Healthy Lifestyle Behaviors to the 5Cs of PYD among Mexican Youth

In a final step, a path model was implemented to test the relation between HLBs and the 5Cs in this sample. The model was tested for the whole sample with one HLS observed factor leading to one PYD latent factor composed by five measured variables of competence, character, confidence, connection and caring. The model showed a good fit, $\chi^2(6, 243) = 13.32$, $p < .038$, CFI = .966, RMSEA = .071, providing support for the structural relation between HLBs and the 5Cs in a sample of Mexican adolescents (Fig. 1). Thus, these results indicate that HLBs are significantly and positively associated with the 5Cs of PYD in this sample of Mexican adolescents. Yet, sociodemographic and economic determinants had a key role to play with physical activity being common among males than females and healthy eating habits being endorsed more by high SES compared to low SES adolescents.

Conclusions

The HLBs that young people engage in have come increasingly into the spotlight in recent years and particularly in Latin America and Mexico where many adolescents have a poor diet and less than ideal levels of engagement in physical activity (Jansen et al., 2020; Lopez-Gonzalez et al., 2020; Rtveldaze et al., 2014; Turnbull, Gordon, Martínez-Andrade, & González-Unzaga, 2019). Areas of concern have included high levels of dietary fat, sedentary behaviors but low fruit and vegetable intake and physical exercise. These HLBs are of direct relevance to the Mexican society where public health measures are put forward to prevent adolescent obesity and combat unhealthy lifestyle behaviors. In the light

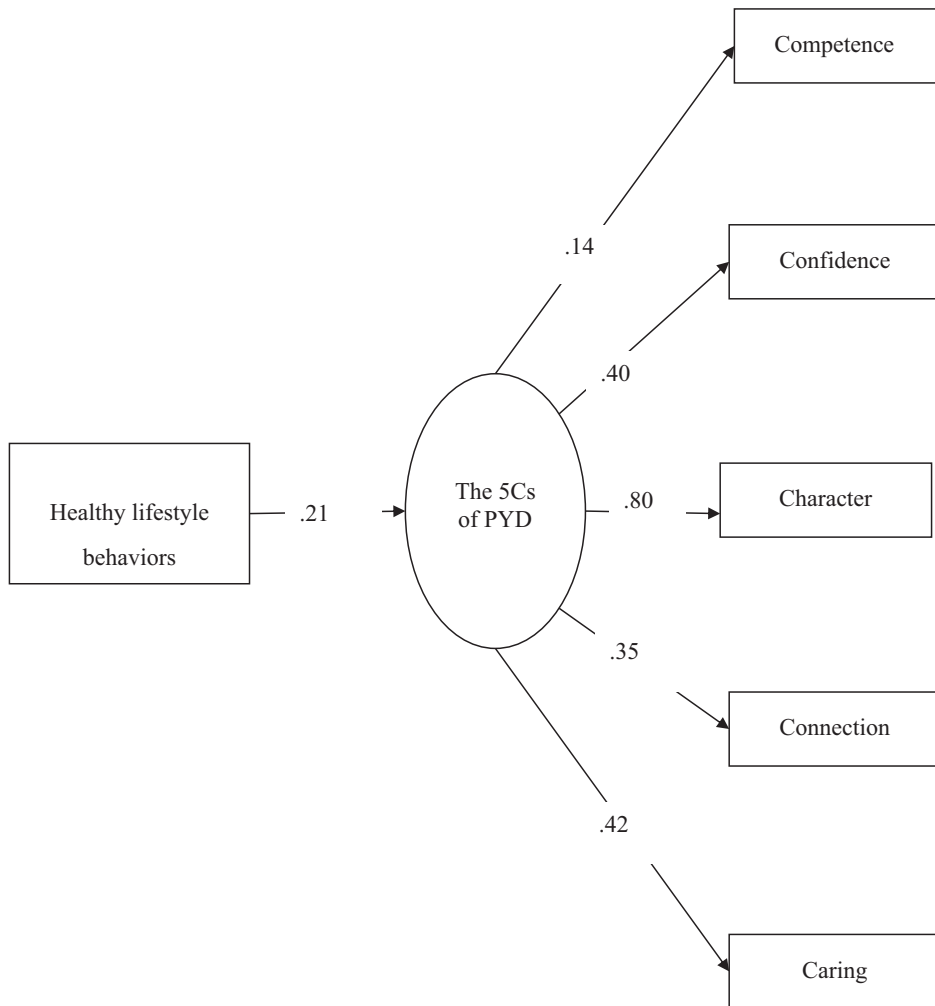


Fig. 1 Path model of HLBs and the 5Cs of PYD (Note. Coefficients represent standardized regression weights significant at $p < .001$)

of these concerns, there has been an interest in novel approaches and frameworks to the measurement and the study of HLBs among Mexican young people. The present chapter addresses these concerns by applying the PYD framework as to indicate promising ways in which HLBs relate to the 5Cs of confidence, competence, character, connection, and caring. In so doing, the chapter contributes to the measurement and the study of HLBs and the PYD field by providing strong evidence of the reliability and validity of the HLBs and the 5Cs measures as well as providing new evidence about the role of sociodemographic and economic determinants of HLBs

in highlighting SES and gender subgroup differences in this sample of Mexican adolescents.

The model presented in the empirical example, clearly shows that HLBs are significantly and positively related to the 5Cs of PYD as also documented by similar work in Spain and the United States (Gomez-Baya et al., 2019; Nystrom et al., 2008). Such significant conceptual insight adds to the scarcely available evidence base addressing the pressing health concerns of epidemiologically high overweight and obesity rates among Mexican youth (Aceves-Martins et al., 2016; World Health Organization, 2020a). What is more, the chapter furthers our understanding

about ways to promote positive development and thriving among Mexican youth who in turn can contribute to their society through HLBs. Along the same lines, attention should be directed towards gender and SES determinants because females have been shown to practice less physical activity than males and low SES adolescents endorse less HLBs than high SES adolescents. Lastly, while advancing our understanding of the link between HLBs and PYD in the Mexican context, the present chapter also poses further challenges for research with more representative local samples, new PYD models (e.g., the 7Cs) and a more extensive measure of HLBs that goes beyond healthy eating and physical activity among Mexican youth.

Implications for Research, Policy and Practice

This chapter advances relevant avenues for research, policy, and practice. With regards to research, the HLBs and the 5Cs measures have shown evidence for their validity and reliability for youth in Mexico. Further, the HLBs measure can be reliably used by researchers in Mexico to conduct meaningful comparisons of HLBs among boys and girls, early-middle-late adolescents and low relative to high SES groups. A conceptually relevant research implication regards the novel model presented here about the meaningful relations of HLBs and the 5Cs that offers a useful framework to apply and further expand upon.

With regards to policy, the chapter advances and supplements national efforts for adolescent healthy development in Mexico. Policy makers and stakeholders are thus facilitated in such efforts by implementing multiple strategies encouraging HLBs through healthy meals, sports, outdoor activities, family involvement, school activities, and community participation (United Nations International Children's Emergency Fund, 2018). Such systemic policy strategies should include the adolescents, parents, health care professionals, schools, and the community in general, to better ensure the effectiveness and impact of HLBs-PYD inspired curricula, while

also considering the role that sociodemographic and economic determinants play in regards to HLBs among Mexican adolescents.

In relation to practice, this chapter offers practitioners, youth program leaders and stakeholders, reliable measures to assess HLBs and facets of positive development in Mexican youth. Such assessment can flourish in strategic prevention interventions for the promotion of a healthy lifestyle in adolescence, a key stage in life for the consolidation of healthy behaviors into adulthood. Preventive nutritional interventions and interventions to enhance physical activity among adolescents in general and in Mexico are greatly needed. The present chapter advances these efforts in this direction by also urging tailoring such interventions to the diverse gender and SES experiences of Mexican adolescents.

Based on the knowledge advanced in the current chapter, there is still much work to be done in promoting healthy lifestyles and to raise awareness among adolescents of the potential risk to their health status and overall well-being in Mexico. From a life course perspective, at this formative period of life, HLBs will have an impact on health not only at this stage but also in adulthood. Consequently, the socio-economic and psychosocial costs of obesity in combination with the associated comorbidities and ill well-being become outstanding. The study of HLBs with strong consideration of a PYD perspective represents a fruitful ground to ameliorate adverse effects and prevent such societal and personal costs in the life challenges for adolescents in Mexico.

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The Relationship Between Emerging Adults and their Parents as PYD Promotive Factor in Brazil

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Abstract

This chapter applies the Positive Youth Development (PYD) perspective to examine the relationship of emerging adults with their parents in Brazil. The chapter brings novel insights into contextual (socioeconomic status, SES) and relational aspects (closeness) of this relationship based on a literature review of Brazilian studies. The review indicated that emerging adults from different SES vary in terms of speed of transition, independence, and opportunities of identity exploration. In addition, the extended period of emerging adults living with their parents brings a change in family dynamics and a relationship with greater reciprocity, mutual respect, and equality. In conclusion, we propose that despite SES impact, the family acts as PYD promotive factor during emerging adulthood.

Keywords

Emerging adulthood · Socioeconomic status · Family · Relationship with parents · Living with parents · Brazil

The purpose of this chapter is to examine the relationship of emerging adults with their parents as a source of Positive Youth Development (PYD; Burkhard, Robinson, Murray, & Lerner, 2019), highlighting contextual (socioeconomic status, SES) and relational aspects (closeness) of this relationship based on a literature review of Brazilian studies (Rother, 2007). This chapter applies the 5Cs of PYD model comprised of competence (intellectual ability and behavior), confidence (sense of self-efficacy and self-validation), character (integrity and moral values), connection (positive bonds with people and institutions) and caring (empathy and sympathy) (for an expanded 7Cs model globally and in Latin America see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). In so doing, the chapter focuses specifically on connection, as family connectedness is a relevant construct in Brazil associated with high levels of self-esteem and overall positive outcomes during emerging adulthood (Dominguez, Wiium, Jackman, & Ferrer-Wreder, [this volume](#); Dutra-

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Thomé, DeSousa, & Koller, 2018; Fernandes, Fetvadjev, Wiium, & Dimitrova, *this volume*; Manrique-Millones et al., *this volume*; Martinez et al., 2020).

This chapter addresses the 4thC of PYD represented by connection in Brazil, as to expand the PYD field to a South-American context, considering that 96% of general studies in social sciences and psychology come from Europe and the USA, representing only 12% of the world population (Henrich, Heine, & Norenzayan, 2010). In so doing, the chapter devotes a particular attention to emerging adulthood as a conceptually relevant developmental stage (ages 18–29) beyond original PYD conceptualizations among younger samples (Arnett, 2018; Dimitrova, 2018). In addition, we believe the discussed topics can support intervention, as well as public policy for positive development of young people, recognizing the mutual influence between relationships and individual development, including the ecological environment (Burkhard et al., 2019).

We based our literature review on the broad question regarding the contextual and relational aspects affecting emerging adults' relationship with their parents in Brazil (Rother, 2007). This question oriented the literature review on Brazilian findings about the relationship of emerging adults and their parents. The available theoretical and empirical studies in Brazil helped us to provide an overview of this topic within the country. We found 11 scientific productions (6 articles, 4 chapters, 1 dissertation, and 1 conference presentation) on this theme. These investigations were focused on two main themes, which were then organized in two sections in the present chapter. First, we discuss the theme of contextual aspects of the transition to adulthood among low and high socioeconomic status (SES) young people, specifically SES differences, taking into account that Brazil presents high economic disparities affecting individuals' developmental trajectories (Sorj & Fraga, 2020). Second, we bring the theme on relational aspects of emerging adulthood and parental hierarchy. In Brazil, the family becomes one of the main sources of emerging adults' support in their trajectories towards adulthood, which implies

changes in hierarchical relationships in the family (Carlo, Koller, Raffaelli, & De Guzman, 2007; Cerqueira-Santos & Koller, 2009; Ponciano & Seidl-de-Moura, 2017; Seidl-de-Moura, Carvalho, & Vieira, 2013).

The emphasis on connection highlights a perspective in which developmental studies must go beyond the focus on the individual, including relationships with parents and the context of establishment of this relationship. Thus, studies on the different trajectories of emerging adults from low and high SES might help to construct interventions that consider particularities of individuals' developmental contexts. While emphasizing connection, we bring an aspect of the Brazilian culture, which values the permanence of the relationship with parents, positivizing the need for emerging adults to still request the help of their parents and maintain an intense coexistence, which may vary according to context and SES.

Contextual Aspects: Transition to Adulthood Among Low and High SES Young People in Brazil

Thirty years ago, individuals would leave the parental home by their early 20s. Currently in Brazil, individuals live longer with their parents, moving out from the parental home by their late 20s or early 30s, a fact that has led to the creation of the term "kangaroo generation" (Ciríaco, Junior, Rodrigues, & Alves, 2018). This phenomenon is present in other Western industrialized countries, such as the United States, Argentina, and Spain (Arnett, 2011; Douglas, 2007; Facio, Resett, Micocci, & Mistrorigo, 2007).

The extended period of parent-child living together presents different characteristics depending on the individuals' cultural, economic, and social origins. In Brazil, the percentage of young people living with their families increased from 20% to 24% between 2002 and 2012; the higher the family SES, the longer young individuals live with their parents (Instituto Brasileiro de Geografia e Estatística, 2014). The family SES and income also define the resources to which

individuals have access to explore identities to a greater or lesser extent. Thus, extended periods of parent-child living together when individuals are transitioning to adult life is a multifactorial phenomenon influenced by social and relational aspects.

Currently, we observe an extension of Erikson’s psychosocial moratorium, a period when young individuals explore diverse aspects of their identities for longer periods before taking on definitive adult roles (Demuth & Keller, 2011; Erikson, 1950, 1968). The opportunity to experience this moratorium, however, is not a reality to the entire Brazilian society. Three inter-related factors referred to (a) speed of transition (b) emerging adulthood X precocious adulthood and (c) “inverted” identity exploration influence Brazilians from low and high SES developmental trajectories (see Fig. 1; Dutra-Thomé, 2016).

(a) **Speed of transition.** In Brazil, individuals with high SES experience a more gradual transition to adulthood than those with low SES (Dutra-Thomé, 2016). Emerging adults with high SES have the support of their families in terms of finances, education, guidance, and protection. They are allowed an extended period to explore their identities, having different experiences in terms of romantic love, education, profession, and leisure (Henriques, Jablonski, & Feres-Carneiro, 2004; Mehta, Arnett, Palmer, & Nelson, 2020; Ponciano & Seidl-de-Moura, 2017). At the same time, this supportive environment also means that society and families hold higher expectations in terms of educational and professional performance, which would enable them to find a job and become the providers of their families.

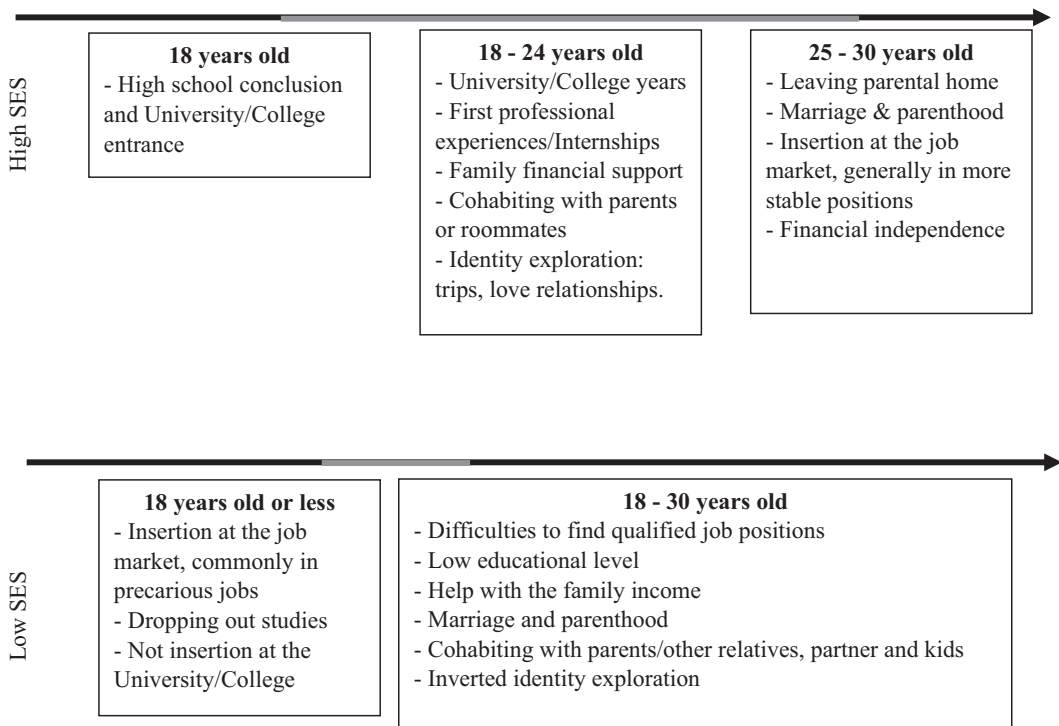


Fig. 1 Developmental trajectories towards adulthood in Brazil. (Note. Grey lines indicate the transition length from adolescence to adulthood. Below each line, life events typical for each age group are described)

The trajectory of low SES young individuals happens abruptly, leading to a precocious adulthood, with demands of assuming adult responsibilities they are not always ready for (Barros & Santos, 1996; Marques, Neves, & Neto, 2002). One Brazilian study conducted with emerging adults verified that low SES individuals tended to assume adult roles earlier in life (e.g., getting married, having children, and finding a job), and presented lower educational level in comparison to high SES individuals (Dutra-Thomé & Koller, 2014).

- (b) **Emerging adulthood X precocious adulthood.** When considering extended education as one of the main milestones in emerging adulthood, we observe distinct trajectories for individuals with low and high SES. In Brazil, young individuals with low SES relative to those with high SES do not have the opportunity to fully dedicate themselves to studies, as they need to contribute to the family income. Usually, they have to work during the day and study during the evening. The opposite of emerging adulthood is the phenomenon of “precocious adulthood” (Augustyn & Jackson, 2020; Campos & Francischini, 2003; Oliveira & Robazzi, 2001). In contrast to postponing adulthood, there is an anticipation of adulthood in the case of precocious adulthood, that is, young people are required to become autonomous early in life, possibly leading to school abandonment, as they feel attracted to the financial independence they can attain. Sometimes, they receive a salary that is greater than that of their parents, which may even interfere with the parental authority and roles (Campos & Francischini, 2003; Oliveira & Robazzi, 2001). Additionally, within these families, parents’ educational level is often low, a situation that arises from a context of vulnerability and limited resources in which the need to survive surpasses the need for education.

A Brazilian study found that the lower the educational level of parents, the greater the number of young individuals working precociously (Dutra-Thomé, Pereira, & Koller, 2016). Another Brazilian study among emerging adults found

that both low and high SES participants presented characteristics of emerging adulthood such as exploration of identity, ambivalence, optimism in regard to future prospects, focus on oneself, and instability (Arnett, 2011). However, in terms of the emerging adulthood feature named “instability” in diverse life areas (e.g., work, studies), those with a low SES presented higher instability, since they were more frequently demanded to administer family problems, generally of a financial nature. Therefore, in addition to the instability inherent to the process of transitioning to adult life, these individuals also had to deal with family problems, work, and pay for their education (Dutra-Thomé & Koller, 2019).

- (c) **“Inverted” identity exploration.** Family and educational institutions socially support young individuals with high SES in Brazil. They are encouraged and have the opportunity to live an extension of Erikson’s psychosocial moratorium and to explore their identities before taking on definitive adult roles for longer periods (Demuth & Keller, 2011; Erikson, 1950, 1968). In addition, high SES Brazilians have the opportunity to live a typical “mass media youth”. For instance, the popular term “Y Generation” refers only to high SES Brazilians. A Brazilian national study stated that most low SES individuals do not represent characteristics associated with the Y Generation, such as having high levels of self-confidence and lower involvement in troubles (Dutra-Thomé, Costa, & Koller, 2013; Howe & Strauss, 2007).

The limited support to low SES individuals to freely explore their identities does not happen only in Brazil. In Portugal, a study conducted with 426 students with low, medium and high SES, verified that those with a medium SES were more likely to explore different vocational possibilities as opposed to individuals with a low SES, who tended to present less exploratory behaviors, because required to start working earlier and had fewer professional choices (Gonçalves, 1997). One Brazilian study among emerging adults with different SES, however, revealed that some individuals with low SES did not completely forsake exploring their identities; only they did that in an

“inverted” fashion. That is, they gave priority to their family, as they started working during adolescence and were responsible for paying their own expenses and contributed to the family income. Nonetheless, once these young people provided sufficient financial and emotional support to their families, they started exploring possibilities like traveling or studying some subjects of their interest (Dutra-Thomé & Koller, 2019).

Relational Aspects: Emerging Adulthood and Parental Hierarchy

Extended transition into adult life affects behaviors, perceptions, and beliefs of emerging adults, which, coupled with parent-child living together, is manifested in postponing traditional adult roles. The traditional adult roles would represent the “adult behavior” of taking on long-term commitments, such as getting married, having children, and having a stable job (Arnett, 2011). Beginning in the 1990s, primary markers of passage into adult life were no longer traditional adult roles once psychological markers started overtaking social markers. Autonomy and independence have become the main indicators of adulthood among emerging adults (Arnett, 2011; Dutra-Thomé & Koller, 2014; Dutra-Thomé, Marques, Seidl-de-Moura, Ramos, & Koller, 2019; Macek, Bejcek, & Vanickova, 2007).

In Brazil, the emerging adulthood feature “feeling in-between” (Arnett, 2011) is influenced by both new family dynamics and cultural issues. In terms of family dynamics, we note that dialogues are more open and there is more freedom in relationships. Traditional family values coexist with personal and individual values. Therefore, family members do not see necessarily extended parent-child living together as a problem, and may encourage it, especially because it enables individuals to extend their studies (Borges & Magalhães, 2009; Henriques et al., 2004). Young people in turn, may focus on achieving high educational and professional goals, aiming to enter a successful career and, for this reason, are not necessarily in a hurry to leave the parental home, as they can enjoy the comfort and facilities accruing

from parent-child living together. In some cases, even when individuals have achieved their financial independence, they opt to live with their parents (Henriques et al., 2004). In cultural terms, the strong connection with the family among emerging adults in Brazil reinforces this bond, similarly to other Latin American and Asian countries (Dutra-Thomé et al., 2018; Facio et al., 2007).

The transformation of the relationship between parents and children while transitioning from adolescence into adulthood requires identifying their roles in the family dynamics. Balance among these roles varies according to cultures and contexts, as well as the individuals’ phase of development (Seltzer, 2019; Smetana, 2011). Young individuals in the “in-between” period may experience a high level of uncertainty and insecurity. As a result, many parents feel they still need to help their children navigate this period of experimentation and exploration, at the same time as they allow them to exert their autonomy. It is a time to find balance between the effort of emerging adults to acquire more autonomy by playing adult roles (Aquilino, 2006) and the support provided by parents, necessary to acquire such autonomy, including guidance, openness and emotional support (Padilla-Walker & Nelson, 2012). The main change in the relationship between parents and children is greater closeness. Greater closeness denotes a relationship with a greater reciprocity and mutual respect, tending more toward equality rather than hierarchy (Scharp & Hall, 2019). The dependence/independence relationship alternates according to the young individuals’ situation and needs. Consequently, parents realize that their roles grow increasingly unpredictable. Therefore, from adolescence to adult life, parents have an important role in supporting their children’s growth, facilitating and guiding this transition (Gower & Dowling, 2008; Oliveira, Fonseca, Sotero, Crespo, & Relvas, 2019). Yet, the definition of the parents’ role depends on factors that are inherent to the family dynamics, and economic, social and cultural factors.

A set of Brazilian studies among medium-class fathers and mothers living in the Southern

area of Rio de Janeiro aimed to understand how parents were experiencing their emerging adult “kids” transition into adult life (Ponciano & Féres-Carneiro, 2012, 2014, 2017). The meanings assigned to this period of life and the type of support provided to emerging adults while they have not yet become adults were investigated, highlighting a transformation in the role of parents. Content analysis of the interviews (Bardin, 2008) originated four thematic axes: (1) world of youth (perceptions of parents regarding the experience of children in environments where parents are not usually present); (2) conflicts (negotiation between parents and children in divergent situations); (3) how to get closer to children (strategies to maintain a close relationship with children); (4) about the future (perceptions about children’s plans for the future that refer to adult life). These axes enabled the identification of meanings assigned by the parents to the experiences of their children’s transitions into adult life (see Table 1).

Another study conducted in the city of Rio de Janeiro focused on emerging adults living in different regions of the city, enabling access to greater socioeconomic diversity (Ponciano & Seidl-de-Moura, 2017). The interviews were also processed with content analysis and identified three thematic axes: (1) being an adult (characteristics that indicate one has reached adulthood); (2) relationship and conversation with father and mother (interaction with parents); (3) plans for the future (prospects for the short and long terms concerning adult life). These axes brought the meanings assigned by the young individuals to their experience of transitioning into adult life and to the relationship established with their parents (see Table 2).

The results of the investigations among emerging adults in Rio de Janeiro (Ponciano & Féres-Carneiro, 2012, 2014, 2017; Ponciano & Seidl-de-Moura, 2017) revealed the perception of adulthood associated with assuming responsibility for one’s own actions, the ability of making independent decisions, and having financial independence (Dutra-Thomé & Koller, 2014). These adulthood markers did not necessarily imply distance from parents, since Brazilian emerging

adults’ transition to adulthood occurs with the participation of parents (Ponciano, 2016). Parents’ investment in their children’s education makes parents and children strongly connected with common expectations for the future. Young people remained in their parents’ homes, facing indefiniteness of what it means to be an adult and a faint presence of social markers for one’s entry into adulthood. While individuals are in this process, characterized by construction of identity, exploration of possibilities, and parental investment in their children’s education, they establish a close relationship with parents and may express their autonomy in a context of interdependence (Jensen & Arnett, 2012).

The retrieved Brazilian studies indicate that the transition to adulthood within the country is marked by socioeconomic differences and a close relationship with parents. Socioeconomic aspects generate different speed of transition with high SES young adults living a slower transition and an extension of the psychosocial moratorium (Barros & Santos, 1996; Dutra-Thomé, 2016; Marques et al., 2002). Low SES individuals, other than emerging adulthood, would live a “precocious adulthood”, with an anticipation of adulthood, possibly leading to school abandonment (Campos & Francischini, 2003; Oliveira & Robazzi, 2001). Low SES individuals may also live an “inverted” identity exploration, once they helped their families financially and emotionally, they would start exploring their identities (e.g., traveling or studying) (Dutra-Thomé & Koller, 2019). The reviewed studies also identified a close relationship between emerging adults and their parents (Ponciano & Féres-Carneiro, 2012, 2014, 2017; Ponciano & Seidl-de-Moura, 2017). Brazilian emerging adults, despite moving toward autonomy and independence, seem to live this process in partnership with parents (Ponciano, 2016). The closeness between Brazilian emerging adults and their parents may lead to a transition to adulthood in a context of dialogue, support and negotiation and contribute to the establishment of the connection as indexed by the PYD framework (Dutra-Thomé et al., 2018).

Table 1 Parental view of emerging adults’ transition to adulthood

| Axis | Description | Reports excerpt |
|-------------------------------|---|--|
| World of youth | Perceptions of parents regarding the experience of children in environments where parents are not usually present. For the parents, the world of youth is marked by night life, dangers, fun and drugs and unrelated to the parents’ adult life; romantic/sexual life is not linked to a project of marriage, rather to experimentation; professional choice characterized by uncertainty and a need for parental support was a more objective marker of one’s entry into adult life. Even though parents do not go to the same places, they felt, in all cases, with the exception of drugs, that they are better informed about the “world of the youth”. | “ <i>She (daughter) goes to the disco... I know that she drinks... of course she drinks about four draft beers... As far as marijuana, drugs never.</i> ” (Mother 3, 48 years old) |
| Conflicts | A process of negotiation between parents and children was established in the face of divergent situations, which results in estrangement or greater closeness. They reported conflicts and compromising of personal positions and worldviews, tending to smooth out generational differences and hierarchy. | “ <i>Here everybody is equal, so that authority begins to fade. You sort of lose the limit between authority and friendship.</i> ” (Mother 13, 44 years old) |
| How to get closer to children | Strategies to maintain a close relationship with children included mainly conversation and dialogue. Often, this closeness with children was called friendship. One of the parents’ concerns was the need to help children grow in a context of relational proximity and guidance. Independence was indicated as one of the ways to identify that children have acquired greater autonomy. | “ <i>We’re connected, even if far away... We’re tuned in. In a way, we’re friends...</i> ” (Mother 2, 43 years old) |
| About the future | Perceptions about children’s plans for the future referring to adult life. The parents asked themselves whether their children are adults or not. There was no urgency to enter adult life, rather one needs to prepare and learn to live independently. Entry into adult life must be postponed while children are not fully prepared. Professional qualification and financial independence seemed to be the necessary answers to define the future. A marker that definitely determines one’s entry into adulthood was not identified, as if the relationship with children could be extended indefinitely in a situation of dependence. | “ <i>She (daughter) sort of became autonomous... She brags, she’s a working woman, but in the face a new situation: ‘mom, how do I sort this out?’</i> ” (Mother 19, 54 years old). “ <i>I guess that their dependence is linked to their financial situation. I guess that, once they acquire a financial situation that is sufficient for them to self-sustain, they’ll change a lot.</i> ” (Father 19, 59 years old) |

Implications for Research, Policy and Practice

The focus of this chapter to advance understanding of the relationship between emerging adults and their parents originates from the fact that family connectedness is a promotive factor of PYD in Brazil, associated with higher levels of self-esteem (Dutra-Thomé et al., 2018). Within the 5Cs model, family connectedness is a source of connection, as well as high self-esteem, life

satisfaction and confidence (Abubakar & Dimitrova, 2016; Chen, Wium, Dimitrova, & Chen, 2019; Geldhof et al., 2015). In Brazil, connection is particularly important, because the country presents high familism, characterized by assigning a high relevance to the family, similarly to other Latin countries (Facio et al., 2007; Vieira da Silva, Paulson, Legon, & Irurita-Ballesteros, 2019). Thus, we lay the ground for future research to take into account ways in which the family influences individuals’ choices, and the close

Table 2 Emerging adults' view of the role of their parents in transition to adulthood

| Axis | Description | Reports excerpt |
|--|--|--|
| Being an adult | The characteristics that indicate one has reached adulthood. This axis was marked by the idea of autonomy, highlighting the characteristic of young individuals to act on their own; however, they seek to differentiate themselves and to find a way to carry out their own actions; they were influenced by the relationship they have with their parents. The reports did not include traditional markers, such as getting married or having children; rather they highlighted freedom, professional choice and independence. | <i>"My mother has always given me freedom to do whatever I wanted... the same with my father he disciplined me and gave me freedom to do things..."</i> (Emerging adult 13, 22 years old) |
| Relationship and conversation with father and mother | Interactive process differentiated by gender (children are closer to mothers) encompassing daily situations. The children highlighted a friendship relationship. The maternal and paternal presence was linked to the idea of guidance and how parents can be models and provide an example at the same time as they offer protection. Mothers talked more often than fathers, but both can be considered friends if they established a dialogue. | <i>"Friendship (with mother) to tell things, to play with, freedom to make certain jokes, freedom to get my mom's things without a concern... freedom to tell her stuff, freedom I don't have with my dad. He doesn't give me the freedom to have a friendship with him..."</i> (Emerging adult 15, 20 years old) <i>"I get along much better with my mom than with my dad. We talk, too, me with my mom... we talk about everything... which does not mean I don't love him. I like him very much, but I have great affinity with my mom"</i> (Emerging adult 4, 23 years old) |
| Plans for the future | Prospects for the short and long terms concerning adult life. The children stated that the sort of adult life traditionally marked by getting married and having children was included in their plans, but these were secondary to their careers and financial independence. Additionally, they concluded that they have to experiment with options and remain in the comfort of their parents' home. The type of support provided by the parents varies, but was not dispensed with very early. | <i>"I graduated at the end of 2010 and intend to compete to work in the Federal Police... I still live with my parents because, leaving the comfort of home to live by myself, no... I'd leave home only if I'd go to live with someone else, like getting married... Living by myself, only if I'd make a lot of money."</i> (Emerging adult 7, 25 years old) |

relationship of emerging adults and their parents during the process of transition to adulthood. This chapter stimulates comparative research in that direction as well as extensions in other contexts beyond Brazil to elucidate different ways in which parents support young people during their transition to adulthood (Bradley, Ferguson, & Zimmer-Gembeck, [this volume](#); Kasic, Wium, & Dimitrova, [this volume](#)).

This chapter also prompts PYD driven policy taking into account the family role when young individuals are transitioning to adulthood. Public

policy needs to endorse the relevant role of the family in a global developmental perspective from adolescence, emerging adulthood and the transition to adulthood in Brazil. Such policy should view the family as a PYD protective factor and the socioeconomic context as interfering with the kind of support the family may offer to emerging adults.

As to practice, this chapter suggests, first, that professionals should consider socioeconomic differences among emerging adults. For low SES families, intervention should focus on their means

to offer emotional and informational support over financial support (Koller & Dutra-Thomé, 2018). In addition, parents and their kids would benefit from governmental programs capable of helping youth in their college entrance, as well as accessing low SES students' scholarships (Ribeiro, 2005; Zago, 2006). Such interventions should provide orientation to parents and youth about the importance of identifying their roles in family dynamics, especially when parents and youth live under the same roof. Psycho-educational intervention programs with therapeutic purposes are an alternative that provide information on the process of becoming an adult enabling both parents and children to achieve positive development, while taking into account their specificities (Dimitrova & Wiium, [this volume](#)). It is a delicate moment of balance in which parents provide guidance but also promote autonomy, constituting an important support for these individuals in their assumption of adult roles.

In conclusion, the connection with the family is a key issue to consider in research, policy, and intervention supporting the transition to adulthood in Brazil (DeSousa & Pereira, 2018; Dutra-Thomé et al., 2018). Emerging adults need institutional support that takes into account their specificities and experiences. As emerging adults need independence and autonomy, their parents play a supportive role in that direction. When emphasizing the connection with parents, the permanence of the relationship with parents should not be disqualified, but seen as a source of PYD. Despite a great valorization of autonomy and independence as means to adulthood (Smorti, Ponti, & Cincidda, 2020), emerging adults still living with their parents and establishing a close relationship with them are not necessarily facing difficulties to assume their adult roles. Instead, they are counting on their connection with parents to manage the challenges of this transition.

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Developmental Assets, Academic Achievement and Risky Behaviors Among Albanians in Albania, Kosovo, Macedonia and Serbia

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Abstract

The current chapter extends Positive Youth Development (PYD) scholarship by applying the developmental assets model in relation to academic achievement and risky behaviors among 779 Albanian youth in Albania, Kosovo, Macedonia and Serbia. The findings revealed that Albanian youth in Kosovo registered higher academic achievement and those

in Albania showed more risky behaviors than their peers in other countries. For all youth, developmental assets were positively associated with academic achievement. A set of path models showed that external assets (environmental resources) were positively related to risky behaviors, whereas internal assets (interpersonal strengths) were positively associated to academic achievement but negatively to risky behaviors. The current chapter lays the groundwork for PYD scholarship among youth with Albanian background in four South-Eastern European countries.

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Keywords

Developmental assets · Risky behaviors ·
Academic achievement · Albanian youth ·
South-Eastern Europe · Albania · Kosovo ·
Macedonia · Serbia

In recent decades, Positive Youth Development (PYD) has been increasingly applied as a meaningful framework to guide research, policy and practice organizing service, support, and opportunities for young people to develop their full potential (Cabrera & Leyendecker, 2017; Dimitrova, 2018; Dimitrova et al., [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Petersen, Koller, Motti-Stefanidi, & Verma, 2017; Wiium & Dimitrova, 2019). Relatedly, the

developmental assets of environmental resources (external assets) and interpersonal strengths (internal assets), represent one of the most influential PYD models (Roehlkepartain & Blyth, 2020; for expanded 7Cs model see Dimitrova et al., [this volume](#)) largely applied in the United States and various countries in Western Europe (Pashak, Handal, & Scales, 2018; Scales, Roehlkepartain, & Shramko, 2017; Soares, Pais-Ribeiro, & Silva, 2019; Wiium, Dost-Gözkán, & Kusic, 2019). Yet, what remains unclear is whether the developmental assets as relevant PYD components are applicable for youth in South-Eastern European low-mid-income countries. To this end, the current chapter aims to explore the degree to which Albanian youth living in Albania, Kosovo, Macedonia and Serbia experience the internal and external assets and how these affect their academic achievement and risky behaviors.

The Balkans situated in South-Eastern Europe, have a long history of interethnic conflict. As a result, Albanians experienced ethnic cleansing and were separated in several countries (Blumi, 2020). So far, the growing body of research has documented the negative impact of armed and ethnic conflicts experienced in this region (Popović & Weeks, 2007; Rohringer, 2009) and highly neglected PYD approach for the youthful generations. There is also a dearth of work on developmental assets and ways to enhance positive youth outcomes in the Balkan countries. To the best of our knowledge, this is the first contribution of its kind, applying the assets model and documenting meaningful relations with academic achievement and risky behaviors across youth samples from understudied Albanian populations in the Balkans.

Developmental Assets, Academic Achievement and Risky Behaviors

The developmental assets model identifies a wide range of environmental resources and interpersonal strengths reflecting important relationships, skills, opportunities or values that protect youth from risk by promoting resilience and positive

outcomes (Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dominguez, Wiium, Jackman, & Ferrer-Wreder, [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#); Roehlkepartain & Blyth, 2020). Forty developmental assets compose the model divided in external and internal assets. *External assets* indicate experiences and relationships across multiple contexts of young people and consist of four categories of support, empowerment, boundaries and expectations, and constructive use of time. *Internal assets* refer to individual skills, values, qualities and self-perceptions that help the young person to self-regulate effectively divided in four asset categories of commitment to learning, positive values, social competencies, and positive identity (Scales et al., 2017). The present chapter examines the influence of these assets on academic achievement and risky behaviors among hardly investigated Albanian youth in four Balkan countries.

International work on the developmental assets model has reported strong connections between these assets with academic achievement and risky behaviors among adolescents. The findings are largely converging in offering promising evidence that building the assets in young people's lives contributes to academic achievement and lowers risky behaviors (Scales, Benson, Roehlkepartain, Sesma, & van Dulmen, 2006; Scales & Leffert, 2004). Academic achievement (i.e., the extent to which a person has accomplished specific goals in educational settings; Steinmayr, Meissner, Weidinger, & Wirthwein, 2017), is a relevant factor for the assets and overall PYD (Pinquart & Ebeling, 2020). Substantial work has provided evidence for the positive relations between academic achievement and PYD (Kozina, Wiium, Gonzalez, & Dimitrova, 2019), psychological well-being (Saminathen, Plenty, & Modin, 2020; Scales, Pekel, Sethi, Chamberlain, & Van Boekel, 2019), cognitive competence (Peng & Kievit, 2020) and optimism (Icekson, Kaplan, & Slobodin, 2020). Academic achievement is strongly associated with less psychological distress and risky behaviors among youth as those with high academic achievement experience less externalizing and aggressive behaviours (Okano,

Jeon, Crandall, Powell, & Riley, 2019; Saminathen et al., 2020). In a PYD perspective, prevention of such distress as well as risky behaviors in terms of tobacco, alcohol and drug use is of utmost relevance (Bonell et al., 2015). Risky behaviours are an important threat to PYD posing a major concern for countries globally and particularly for the young populations in South-Eastern Europe. The prevalence of risky behaviours among youth in this region in Europe is particularly high (Radovanovic et al., 2016). Based on these considerations, the current chapter focuses on the academic achievement and risky behaviours as two facets of meaningful youth outcomes to explore their relation with developmental assets among understudied Albanian youth in four South-Eastern European countries.

We base our reasoning on extant work showing that the more developmental assets young people experience, the better off they tend to be across a range of academic, psychological, social-emotional, and behavioral indicators of well-being (Benson, Scales, & Syvertsen, 2011). For example, a seminal study with more than 1 million youth in the U.S. confirmed that those who reported high levels of developmental assets registered very good academic achievement (Benson, Scales, Leffert, & Roehlkepartain, 1999). Additional U.S. based work showed that developmental assets were significant predictors of educational success, including average marks in school, participation in volunteering, employment, education or training and development of skills useful for employment (Roehlkepartain & Blyth, 2020). Moreover, findings from a longitudinal study on the link between developmental assets and academic achievement revealed that students who stayed stable or increased in their asset levels had significantly high academic achievement in a three years period compared to students whose asset levels decreased within this time frame (Scales et al., 2006).

Related work has also shown that the assets have the potential to decrease risky behaviors among young people (Toomey, Syvertsen, & Flores, 2019). For example, youth who reported more assets were less likely to engage in risky

behaviors, such as smoking or alcohol use (Benson et al., 1999; Wilhelm, Parks, Eisenberg, & Allen, 2020). However, the relation between developmental assets and youth outcomes may vary by context (Adams, Wiium, & Abubakar, 2019; Eichas, Ferrer-Wreder, & Olsson, 2019; Kozina et al., 2019). Different contexts provide different range of assets, thus influencing different outcomes. To add to the wide international evidence on the positive influence of developmental assets, this chapter examines ways in which the assets affect relevant outcomes among Albanian youth living in four specific contexts in South-Eastern Europe. In so doing, the chapter contributes to cross-cultural advancements of PYD research by identifying the universality and specificity of relational patterns between developmental assets, academic achievement and risky behaviors in four cultural contexts.

Albanians in Albania, Kosovo, Macedonia and Serbia

The Albanians are European ethnic group located mainly in South-Eastern Europe named as Western Balkan area. The estimation of the Albanian population in this area is approximately 7 million with the majority of Albanians living in Albania and Kosovo. Albanians are also located in other Balkan countries, including Serbia, the Republic of Macedonia, Montenegro and Greece, and share a common ancestry, culture and language, but diverse socio-economic and political context (King & Oruc, 2019). Since Albanians are a majority group in Albania and Kosovo, while a minority in Macedonia and Serbia (Draško, Fiket, & Vasiljević, 2020; Poposka & Stojanovski, 2020; Potter, 2020), we have a unique chance to compare levels of developmental assets and their influence on youth outcomes. Therefore, this chapter extends the body of knowledge on PYD to foster relevant implications for research, policy and practice regarding positive development among Albanian youth living in the Balkans.

Albania

Albania is a Balkan country sharing borders with Greece, Macedonia, Kosovo, and Montenegro. The country has a population of 3 million inhabitants with the majority Albanians (95%) and other ethnic groups such as Greeks, Vlach, Roma, Macedonians, Serbian and Bulgarian (Central Intelligence Agency, 2020). The majority of the population is Muslim and the second largest group is Christian Orthodox, followed by Roman Catholics. Twenty-six percent of the population is under the age of 19 (Albanian Institute of Statistics, 2016) with youth aged 15–29 representing 25% of the total population (de Bruijn, Filipi, Nesturi, & Galanxhi, 2015).

Albania was part of the communist bloc and started its post-communist transition in 1991 with economic and social problems, which ended with protests and the collapse of the national financial system in 1997 (Bezemer, 2001). After more than 15 years of reforms, the economy was stabilized with some positive trends. Despite improvements in different areas, such as civic and political participation, health, well-being and education, one of the major threats for youth is the low rate of employment and overall life opportunities (Commonwealth, 2016). The unemployment rate among youth in Albania is 31%, which is relatively high compared to the global average of 20% and to the European regional average of 15% (Trading economics, 2020a). Regarding the Youth Development Index, Albania ranks 69 out of 189 countries (UNDP, 2019).

Kosovo

Kosovo is a landlocked state in the Balkan Peninsula and shares borders with Macedonia, Albania, Montenegro, and Serbia. According to the 2011 Census, Kosovo comprised nearly two million people with a majority Albanians (93%) and minority groups of Bosnians, Serbs, and Roma (Kosovo Agency of Statistics, 2018). However, the current data are debatable due to the serious flaws in the registration of the

population (Rugova, 2015). Kosovo has the youngest population in Europe with 20% of the population between 15 and 29 years old (Kosovo Agency of Statistics, 2018). The country has a long history of interethnic conflict with Serbia, which culminated in a war between 1998 and 1999 with nearly 10,000 deaths (Judah, 2008). Before 1999, Kosovar Albanians constituted the largest minority group in Serbia and during the war were expelled from the country (Burema, 2012). In 1999, Serbia signed an agreement with the international military forces following a 78-day air campaign against Serbia. Only in 2008, Kosovo declared independence from Serbia and Kosovar Albanians became a majority in the newest state in Europe. After the war, Kosovo experienced hard times, rebuilding the destroyed financial and education system and still remains one of the poorest countries in Europe (World Population Review, 2020). The current unemployment rate is nearly 26% (Trading economics, 2020b) that together with low participation in the public life, lack of health care, educational services and security represent major challenges that youth had faced after the war (Pasha et al., 2012). The latest report on youth challenges and perspectives in Kosovo showed that almost 60% of the respondents would consider leaving the country in the next 3 years (UNDP Kosovo, 2018).

Macedonia

Macedonia is located in the middle of the Western Balkans sharing borders with Albania, Kosovo, Serbia, Bulgaria and Greece. The Balkans are also called Balkan Peninsula comprising Albania, Bosnia and Herzegovina, Bulgaria, Kosovo, Croatia, Macedonia, Montenegro, Romania, Serbia, and Slovenia as well as portions of Greece and Turkey. Macedonia gained independence from the former Yugoslavia in 1991. The country has 2,125,971 million inhabitants of whom 25% are Albanians (Central Intelligence Agency, 2020; State Statistical Office of the Republic of Macedonia, 2015). Along Macedonian language, a considerable number of people speak Albanian,

Romani, Turkish, Serbian, Bosnian and Aromanian (Rugova, 2015). Young people aged 15 to 29 years old represent 23% of the total population (Central Intelligence Agency, 2020).

In 2001, ethnic Albanians initiated a protest for greater political and economic rights against the Macedonian security forces. The protest lasted for seven months with nearly 180,000 displaced people. The international community facilitated peace talks and a political solution was reached (Jerker Lock, 2003). The conflict ended with a framework agreement aimed at rebuilding the relations between Albanians and Macedonians in Macedonia. After the conflict, Macedonia made strong efforts to improve its economy. Despite such efforts, Macedonia was the third poorest country in South-East Europe in 2012 (Tosheva, 2016) with nearly 21% of the population living in poverty (Liu, 2017). Macedonia has slightly improved its indicators towards youth, ranking 39 out of 183 countries on the Youth Development Index. The lowest index values were identified in the fields of employment, education and civic participation (Youth Development Index, 2018).

Serbia

The Republic of Serbia is located in the Balkan Peninsula sharing borders with Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Kosovo, Macedonia, Montenegro, and Romania. The country has approximately 7, 5 million inhabitants of whom 5% are Albanians (Statistical Office of Republic of Serbia, 2012). Serbians represent the majority group (83%) followed by Hungarian, Roma, Bosnian and Montenegrin ethnic groups (Central Intelligence Agency, 2020). Serbian is spoken by the majority of the population along with other languages such as Albanian, Hungarian, Bosnian and Romani.

In the 1990s, the multi-ethnic Socialist Federal Republic of Yugoslavia (SFRY) broke up. Slovenia, Croatia, the former Yugoslav Republic of Macedonia and Bosnia and Herzegovina declared their independence and were recognized

as independent states in 1992. In 2006, Montenegrins voted an independence referendum and in 2008 Kosovo declared independence from Serbia. Thus, the history of the country in the last 30 years has been characterized by consequent separation of all the states and one autonomous province (Kosovo). The impact on Serbia's economy was significant. Despite many challenges, in recent years there was a modest economic growth. The unemployment rate decreased to 13% and the youth unemployment rate remained stable at 29% (Trading economics, 2020c). Serbia rates 48th on the Youth Development Index, much lower than Macedonia and Albania due to very low score on youth civic participation in the society and politics (Commonwealth, 2016).

Even though Albanians in the Balkan area share the same identity, culture and language, they are likely to experience different levels of developmental assets depending on socio-economic and political factors in their country of residence. Therefore, the chapter aims to compare the diversity of experienced developmental assets and their influence on relevant outcomes among Albanian youth living in Albania, Kosovo, Macedonia and Serbia.

The Present Chapter

The present chapter aims to explore ways in which developmental assets affect academic achievement and risky behaviors among Albanian youth in the Balkan area. The literature is dominated by studies conducted mainly in the United States and other Western European countries, while studies exploring developmental assets in South-East Balkan areas are rather rare. These countries may lack internal and external assets reflected on youth developmental outcomes. This is especially the case for ethnic minority groups (Dimitrova et al., 2018a, b), those living in the Balkans and Albanian minorities, who are mostly subjected to discrimination and social exclusion (Cardillo, 2010; Graf, Linhartova, & Sczesny, 2020). For example, Albanians living in

Macedonia experience high levels of discrimination, unemployment, and low educational prospects (Cardillo, 2010).

By addressing the above issues, the chapter was guided by three main aims. The first was to compare ways in which Albanian youth living in four Balkan countries experience the developmental assets, academic achievement and risky behaviors. The second aim was to explore the associations between developmental assets, academic achievement and risky behaviors, assuming that for all youth samples, developmental assets would relate positively with academic achievement and negatively with risky behaviors. The third aim was to examine contextually bound relations between developmental assets, academic achievement and risky behaviors across Albanian youth in the four Balkan countries. This is particularly salient for Albanians being an ethnic majority group in Albania and Kosovo, and an ethnic minority group in Macedonia and Serbia. For example, due to discrimination, social and acculturation challenges experienced by ethnic minority groups (Dimitrova, 2018; Dimitrova et al., 2018a, b; Dimitrova, Chasiotis, & van de Vijver, 2016; Phalet & Baysu, 2020), Albanian youth in Macedonia and Serbia may have diverse experience of developmental assets in relation to academic achievement and risky behaviors than their Albanian peers in Albania and Kosovo who as a majority would be more likely to have access to resources and opportunities in their contexts.

An Empirical Study Among Albanian Youth in Four Balkan Countries

This chapter presents data from a large international study on PYD across cultures covering more than 30 countries around the world (Dimitrova & Wiium, *this volume*; Wiium & Dimitrova, 2019). A total of 779 Albanian adolescents (60% girls) aged 12–19 years (M age = 14.59 years, SD = 1.42) from Albania (n = 179), Kosovo (n = 182), Macedonia (n = 200) and Serbia (n = 218) were involved

(Table 1). Participants were recruited from several public schools in major towns in Albania (Tirana and Shkodër), Kosovo (Prishtina), Macedonia (Skopje) and Serbia (Preshevë and Bujanovc). Prior to data collection, local school authorities, school principals, parents and students were contacted and informed about the purpose and procedure of the study to acquire their consent. Standard procedures were adopted in each country to conform to established guidelines for measure adaptation in cross-cultural research (International Test Commission, 2017). Participants completed a set of measures at their schools for approximately 30 minutes.

The developmental assets were measured with The Developmental Assets Profile ([DAP]; Benson, 2007), examining the 40 developmental assets through targeted items for external assets (e.g., support, empowerment, boundaries and expectations, and constructive use of time) and internal assets (e.g., commitment to learning, positive values, social competencies, and positive identity). Items were answered on a 4-point Likert scale from 1 (*not at all or rarely*) to 4 (*extremely or almost always*) with high scores indicating more assets. Reliability coefficients of the asset categories ranged from α = .61 to α = .82 across the four Albanian groups.

Academic achievement was measured with self-reported school grades with 8 response options from the lowest to highest grade calculated as a composite mean score. An overall high mean score indicated high levels of academic achievement. The use of self-reported academic achievement was based on past research confirming the accuracy of students' self-reported grades compared to their actual grades (Kuncel, Credé, & Thomas, 2005) and especially in adolescent samples from the Balkan area (Bankov, Mikova, & Smith, 2006; Dimitrova et al. 2018a, b). Table 2 shows the mean scores and standard deviations of self-reported academic achievement.

Risky behaviours were measured with 2 items regarding smoking and alcohol use during the last 30 days answered on a 4-point Likert's scale from 1 (*no*) to 4 (*yes, more than three times*). The

Table 1 Descriptive statistics for Albanian youth in each country

| | Albania (<i>n</i> = 179) | Kosovo (<i>n</i> = 182) | Macedonia (<i>n</i> = 200) | Serbia (<i>n</i> = 218) |
|----------------------|---------------------------|--------------------------|-----------------------------|--------------------------|
| Age in years, M (SD) | 16.29 (1.53) | 15.89 (.98) | 16.17 (1.29) | 17.00 (.90) |
| Gender, % | | | | |
| Male | 44 | 36 | 36 | 41 |
| Female | 56 | 64 | 64 | 59 |
| Residence, % | | | | |
| City | 65 | 36 | 36 | 14 |
| Village | 48 | 10 | 42 | 65 |
| Large town | 13 | 2 | 14 | 9 |
| Religion, % | | | | |
| Muslim | 55 | 99 | 97 | 98 |
| Catholic | 41 | – | 1 | 0 |
| Other | 4 | 1 | 2 | 2 |

Note. M = Mean; SD = Standard Deviation

Table 2 Descriptive statistics for developmental assets, academic achievement and risky behaviors

| | Country | | | |
|-----------------------------|---------------------------|--------------------------|-----------------------------|--------------------------|
| | Albania (<i>n</i> = 179) | Kosovo (<i>n</i> = 182) | Macedonia (<i>n</i> = 200) | Serbia (<i>n</i> = 218) |
| | M (SD) | M (SD) | M (SD) | M (SD) |
| Support | 4.14 (1.53) | 4.53 (1.12) | 4.64 (1.42) | 4.06 (1.61) |
| Empowerment | 4.34 (1.57) | 4.14 (1.34) | 4.48 (1.34) | 3.95 (1.50) |
| Expectations and boundaries | 5.85 (2.20) | 6.45 (1.62) | 6.25 (1.94) | 5.50 (2.15) |
| Constructive use of time | 1.20 (1.24) | 1.27 (1.10) | 1.76 (1.38) | 1.40 (1.27) |
| Commitment to learning | 5.21 (2.33) | 6.03 (1.39) | 5.54 (1.63) | 5.20 (1.82) |
| Positive values | 5.44 (2.03) | 6.42 (1.06) | 6.30 (1.17) | 5.90 (1.57) |
| Social competencies | 4.92 (2.16) | 5.48 (1.55) | 5.56 (1.57) | 4.98 (1.83) |
| Positive identity | 2.94 (1.41) | 3.54 (0.93) | 3.59 (0.93) | 3.23 (1.22) |
| Academic achievement | 6.20 (1.86) | 6.74 (1.19) | 5.59 (1.94) | 5.97 (1.72) |
| Risky behaviors | | | | |
| Alcohol use | 1.49 (0.76) | 1.19 (0.54) | 1.07 (0.37) | 1.18 (0.56) |
| Smoking cigarettes | 1.33 (0.69) | 1.19 (0.52) | 1.25 (0.62) | 1.49 (0.87) |

Note. M = Mean; SD = Standard Deviation

items were combined into one composite score of risky behaviors with high scores indicating high presence of risky behaviors.

Analytic Strategy and Main Findings

Preliminary analyses examined descriptive statistics for developmental assets, academic achievement and risky behaviours (Table 2). Further, measurement invariance to assure psychometrically reliable measurement of the developmental assets and allow comparison of parameter estimates (e.g., means and associations) across the four Albanian groups was performed (van de

Vijver et al., 2019). Goodness of fit for the models was assessed with the Root Mean Square Error of Approximation (RMSEA; recommended < .08) and the Comparative Fit Index (CFI; recommended > .95) (Rutkowski & Svetina, 2017). The results of invariance testing did not meet the requirements for scalar invariance allowing group comparisons. Yet, we were able to establish partial scalar invariance by relaxing the equality rule of intercepts for commitment to learning and boundaries and expectations (for Albanians in Kosovo), positive values and positive identity (for Albanians in Albania) and boundaries and expectations (for Albanians in Macedonia). The presence of partial scalar invariance allowed comparing group means for developmental assets (Table 3).

Table 3 Measurement invariance for the developmental assets across countries

| Model | Model fit indices | | | |
|---------------------------|-------------------|-------|------------------|------|
| | S-B χ^2 (df) | RMSEA | 90% CIs RMSEA | CFI |
| Configural invariance | 150.093 (76) | .071 | .054–.087 | .952 |
| Metric invariance | 170.356 (94) | .065 | .049–.080 | .951 |
| Scalar invariance | 242.115 (112) | .077 | .064–.091 | .917 |
| Partial scalar invariance | 204.404 (107) | .068 | .054–.082 | .937 |

Note. S-B χ^2 = Satorra-Bentler scaled χ^2 ; df = degrees of freedom; CIs = Confidence Intervals; RMSEA = Robust Root Mean Square Error of Approximation; CFI = Comparative Fit Index. Configural invariance tests whether all items/factors are associated with the assets allowing for subsequent tests to be conducted. Metric invariance tests whether all items/factors are associated with assets in the same way allowing the comparison of relations between these factors and other constructs. Scalar/partial invariance constrains factor loadings and intercepts to be equal among groups allowing to compare mean differences of the measured factors

The first aim (compare developmental assets, academic achievement and risky behaviors among Albanian youth in four Balkan countries) was addressed with a Multivariate Analysis of Covariance (MANCOVA), with country as independent variable, gender and age as covariates and developmental assets and youth outcomes as dependent variables. The results showed a statistically significant country differences for developmental assets and youth outcomes. Post hoc multiple comparisons showed that Albanians living in Serbia showed significantly lower external (support, empowerment, expectations and boundaries) and internal assets (commitment to learning, positive values, social competencies and positive identity) compared to their peers in Albania, Kosovo or Macedonia. In addition, Albanian youth in Kosovo showed higher academic achievement and those in Albania reported more risky behaviors than their peers in other countries (Table 4).

The second aim (explore associations between developmental assets, academic achievement and risky behaviors across samples) was addressed by simple correlations. The results suggested a

low to moderate positive correlations between assets and outcomes (Table 5). There was a positive correlation between academic achievement and empowerment, constructive use of time, commitment to learning, positive values, social and positive identity. Furthermore, there was a negative correlation between risky behaviours and commitment to learning (Table 5).

We also conducted separate correlations for each group to explore country specific relations between youth assets and outcomes (Table 6). The results showed that commitment to learning was negatively associated with risky behaviours for all four groups. In addition, support was negatively related to risky behaviours for Albanians in Albania and Kosovo, while boundaries and expectations, positive values and social competencies were negatively related to risky behaviours only among Albanians in Albania. Interestingly, constructive use of time and risky behaviours were positively related among Albanians in Kosovo and Macedonia. Similarly, diverse patterns of associations between assets and academic achievement emerged across groups. Except for constructive use of time, all other assets were positively related to academic achievement for Albanians in Albania. Among Albanians in Macedonia, empowerment, commitment to learning and positive values showed significant and positive associations with academic achievement. Conversely, none of the assets was positively related to academic achievement among Albanians in Kosovo and Serbia. Constructive use of time was negatively related to academic achievement among Albanians in Serbia (Table 6).

The third aim (examine contextually bound relations between developmental assets, academic achievement and risky behaviors across Albanian groups) was addressed by a Structural Equation Modeling (SEM) with a set of path models on developmental assets and youth outcomes (in the overall sample, across Albanian groups in Albania, Kosovo, Macedonia and Serbia and in minority vs. majority Albanian groups). All path models represented direct relations between internal and external assets with academic achievement and risky behaviors.

Table 4 Multivariate analysis of covariance on the developmental assets, academic achievement and risky behaviors across Albanian groups

| Factor | Dependent variables | Wilks' Lambda | df | F | p-value | Post-hoc comparison by country |
|--------------------|-----------------------------|---------------|----|-------|---------|--|
| Country | | .78 | 18 | 5.48 | < .01 | |
| Age (covariate) | | .93 | 63 | 4.33 | < .01 | |
| Gender (covariate) | | .82 | 63 | 13.08 | < .01 | |
| | Support | | 64 | 4.24 | < .05 | Macedonia > Serbia |
| | Empowerment | | 64 | 6.07 | < .01 | Albania > Serbia; Macedonia > Serbia |
| | Expectations and boundaries | | 64 | 5.79 | < .01 | Kosovo > Serbia; Macedonia > Serbia |
| | Constructive use of time | | 64 | 6.75 | < .01 | Macedonia > Kosovo; Macedonia > Albania |
| | Commitment to learning | | 64 | 6.72 | < .01 | Kosovo > Albania; Kosovo > Macedonia; Kosovo > Serbia |
| | Positive values | | 64 | 9.42 | < .01 | Kosovo > Albania; Kosovo > Serbia; Macedonia > Albania |
| | Social competencies | | 64 | 4.67 | < .01 | Kosovo > Serbia; Albania > Serbia |
| | Positive identity | | 64 | 7.95 | < .01 | Kosovo > Serbia; Macedonia > Albania; Kosovo > Serbia |
| | Academic achievement | | 64 | 14.04 | < .01 | Kosovo > Albania; Kosovo > Macedonia; Kosovo > Serbia; Albania > Macedonia |
| | Risky behaviors | | 64 | 6.58 | < .01 | Albania > Kosovo; Albania > Macedonia; Albania > Serbia |

Table 5 Correlation matrix for the developmental assets, academic achievement and risky behaviors for all Albanian groups

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
|--------------------------------|-------|-------|-------|-------|--------|-------|-------|------|-----|-----|
| 1. Support | – | | | | | | | | | |
| 2. Empowerment | .42** | | | | | | | | | |
| 3. Expectations and boundaries | .59** | .47** | | | | | | | | |
| 4. Constructive use of time | .27** | .27** | .32** | | | | | | | |
| 5. Commitment to learning | .35** | .30** | .44** | .13** | | | | | | |
| 6. Positive values | .30** | .22** | .40** | .21** | .64** | | | | | |
| 7. Social competencies | .35** | .34** | .45** | .25** | .51** | .58** | | | | |
| 8. Positive identity | .31** | .24** | .35** | .18** | .42** | .48** | .50** | | | |
| 9. Academic achievement | .07 | .11** | .07 | .08* | .32** | .18** | .12** | .09* | | |
| 10. Risky behaviors | .08* | –.01 | .06 | –.02 | –.12** | .08 | .05 | .03 | .13 | – |

Note. * $p < .05$; ** $p < .01$

The first model was represented by two latent factors of external (4 levels of support, empowerment, boundaries and expectations and constructive use of time) and internal assets (4 levels of commitment, personal values, social competence and positive identity) related to two factors of risky behaviors and academic achievement. The model tested for the overall sample showed appropriate fit, $\chi^2(31, 779) = 127.15$, $p < .001$, RMSEA = .063, CFI = .956. The results indicated significant relations among main constructs in that external assets were positively related to risky behaviors ($\beta = .34$, $p < .05$), whereas internal assets were negatively related to risky behaviors ($\beta = -.34$, $p < .001$), but positively to academic achievement, $\beta = .26$, $p < .001$. Additional path model in the whole sample with all 8 assets as measured variables related to risky behaviors and academic achievement showed a good fit, $\chi^2(1, 779) = 3.20$, $p = .074$, RMSEA = .053, CFI = .999. This model test on the impact of single assets as separate variables associated to youth outcomes revealed that commitment to learning was positively related with academic achievement ($\beta = .36$, $p < .001$) and negatively related with risky behaviors, $\beta = -.21$, $p < .001$), whereas creative use of time was negatively related to academic achievement ($\beta = -.12$, $p < .001$) and positively related to risky behaviors, $\beta = .15$, $p < .001$. These relations were largely confirmed in a multi-group path model

for all Albanian groups in the four countries investigated, $\chi^2(52, 779) = 107.08$, $p < .001$, RMSEA = .037, CFI = .973.

A second multi-group path model across four Albanian groups in Albania, Kosovo, Macedonia and Serbia tested the relations of the two latent factors of external (4 levels of support, empowerment, boundaries and expectations and constructive use of time) and internal assets (4 levels of commitment, personal values, social competence and positive identity) with two factors of risky behaviors and academic achievement. The results showed a good fit for the measurement weights model, $\chi^2(154, 779) = 341.71$, $p < .001$, RMSEA = .040, CFI = .909. More specifically, external assets were positively related to risky behaviors, whereas internal assets were negatively related to risky behaviors and positively related to academic achievement (Fig. 1). Similar multi-group path model was tested across the two groups of Albanian minority youth living in Macedonia and Serbia and Albanian majority youth living in Albania and Kosovo. The results of this additional model showed a good fit for the measurement residuals model, $\chi^2(91, 779) = 296.01$, $p < .001$, RMSEA = .054, CFI = .908, confirming the previously reported positive relation of external assets and risky behaviors, internal assets and academic achievement and negative relation of internal assets and academic achievement.

Table 6 Correlation matrix for developmental assets, academic achievement and risky behaviors in each country

| | Albania | | | | | | | | | |
|--------------------------------|---------|-------|-------|-------|--------|--------|--------|--------|-----|-----|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| 1. Support | – | | | | | | | | | |
| 2. Empowerment | .52** | | | | | | | | | |
| 3. Expectations and boundaries | .64** | .56** | | | | | | | | |
| 4. Constructive use of time | .35** | .32** | .40** | | | | | | | |
| 5. Commitment to learning | .57** | .42** | .55** | .35** | | | | | | |
| 6. Positive values | .49** | .39** | .51** | .34** | .77** | | | | | |
| 7. Social competencies | .51** | .47** | .55** | .33** | .72** | .68** | | | | |
| 8. Positive identity | .39** | .25** | .35** | .27** | .51** | .54** | .59** | | | |
| 9. Academic achievement | .44** | .38** | .23** | .15 | .40** | .37** | .30** | .27** | | |
| 10. Risky behaviors | -.20** | -.07 | -.18* | .11 | -.27** | -.24** | -.25** | -.24** | .05 | – |

| | Kosovo | | | | | | | | | |
|--------------------------------|--------|-------|-------|-------|--------|--------|--------|--------|-----|-----|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| 1. Support | – | | | | | | | | | |
| 2. Empowerment | .52** | | | | | | | | | |
| 3. Expectations and boundaries | .64** | .56** | | | | | | | | |
| 4. Constructive use of time | .35** | .32** | .40** | | | | | | | |
| 5. Commitment to learning | .57** | .42** | .55** | .35** | | | | | | |
| 6. Positive values | .49** | .39** | .51** | .34** | .77** | | | | | |
| 7. Social competencies | .51** | .47** | .55** | .33** | .72** | .68** | | | | |
| 8. Positive identity | .39** | .25** | .35** | .27** | .51** | .54** | .59** | | | |
| 9. Academic achievement | .44** | .38** | .23** | .15 | .40** | .37** | .30** | .27** | | |
| 10. Risky behaviors | -.20** | -.07 | -.18* | .11 | -.27** | -.24** | -.25** | -.24** | .05 | – |

| | Macedonia | | | | | | | | | |
|--------------------------------|-----------|-------|-------|-------|--------|--------|--------|--------|-----|-----|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| 1. Support | – | | | | | | | | | |
| 2. Empowerment | .52** | | | | | | | | | |
| 3. Expectations and boundaries | .64** | .56** | | | | | | | | |
| 4. Constructive use of time | .35** | .32** | .40** | | | | | | | |
| 5. Commitment to learning | .57** | .42** | .55** | .35** | | | | | | |
| 6. Positive values | .49** | .39** | .51** | .34** | .77** | | | | | |
| 7. Social competencies | .51** | .47** | .55** | .33** | .72** | .68** | | | | |
| 8. Positive identity | .39** | .25** | .35** | .27** | .51** | .54** | .59** | | | |
| 9. Academic achievement | .44** | .38** | .23** | .15 | .40** | .37** | .30** | .27** | | |
| 10. Risky behaviors | -.20** | -.07 | -.18* | .11 | -.27** | -.24** | -.25** | -.24** | .05 | – |

| | Serbia | | | | | | | | | |
|--------------------------------|--------|-------|-------|-------|-------|----|----|----|----|-----|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| 1. Support | – | | | | | | | | | |
| 2. Empowerment | .52** | | | | | | | | | |
| 3. Expectations and boundaries | .64** | .56** | | | | | | | | |
| 4. Constructive use of time | .35** | .32** | .40** | | | | | | | |
| 5. Commitment to learning | .57** | .42** | .55** | .35** | | | | | | |
| 6. Positive values | .49** | .39** | .51** | .34** | .77** | | | | | |

(continued)

Table 6 (continued)

| | Serbia | | | | | | | | | |
|-------------------------|--------|-------|-------|-------|--------|--------|--------|--------|-----|-----|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
| 7. Social competencies | .51** | .47** | .55** | .33** | .72** | .68** | | | | |
| 8. Positive identity | .39** | .25** | .35** | .27** | .51** | .54** | .59** | | | |
| 9. Academic achievement | .44** | .38** | .23** | .15 | .40** | .37** | .30** | .27** | | |
| 10. Risky behaviors | -.20** | -.07 | -.18* | .11 | -.27** | -.24** | -.25** | -.24** | .05 | - |

Note. * $p < .05$; ** $p < .01$

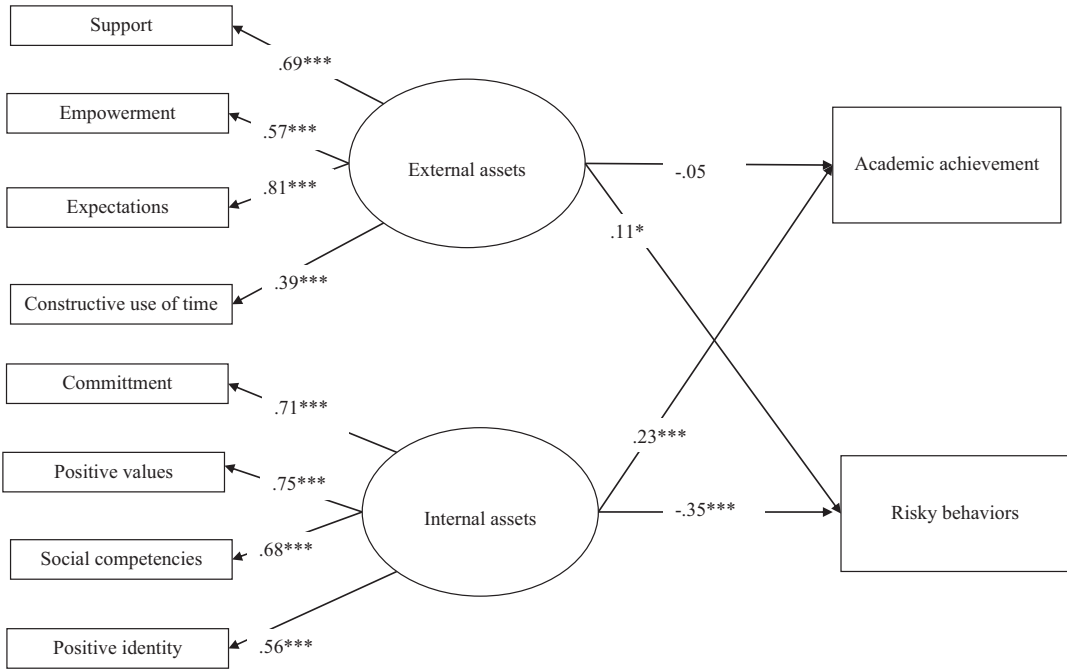


Fig. 1 Multigroup path model for developmental assets, academic achievement and risky behaviors of Albanians in Albania, Kosovo, Macedonia and Serbia (Note. Values represent mean score of standardized coefficients for the measurement weights model for Albanian youth in Albania, Kosovo, Macedonia and Serbia. * $p < .05$. *** $p < .001$)

Conclusions

The main goal of this chapter was to examine the relations between developmental assets and youth outcomes in terms of academic achievement and risky behaviors among Albanian youth living in four Balkan countries. In so doing, the chapter contributes to the growing cross-cultural PYD research base, providing evidence for the universality of the developmental assets and the specificities of relations between assets and youth outcomes in Albania, Kosovo, Macedonia and

Serbia. PYD research in these South-Eastern European countries is rare and to the best of our knowledge, this is the first effort to explore the degree to which the internal and external assets are related to academic achievement and risky behaviors among four distinct and widely understudied Albanian youth populations.

With regards to the first aim (compare ways in which Albanian youth in four Balkan countries experience the developmental assets, academic achievement and risky behaviors), we found that Albanian youth in Serbia showed less external

(support, empowerment, expectations and boundaries) and internal assets (commitment to learning, positive values, social competencies and positive identity) compared to their peers in Albania, Kosovo or Macedonia. In addition, Albanian youth in Kosovo registered higher academic achievement and those in Albania more risky behaviors than their peers in other countries.

Concerning the second aim (explore associations between developmental assets, academic achievement and risky behaviors), most assets were largely related to academic achievement. Consistent with prior work (Scales et al., 2019), Albanian youth experiencing more assets showed high academic achievement, confirming the universality of patterns between these two constructs. There were also positive relations between the assets and academic achievement (except for empowerment and expectations) and positive ones between the assets of support with risky behaviors. Arguably, the structure of support among Albanians in Southern Europe may be quite different from other contexts. However, separate analyses within each Albanian group largely confirmed the positive associations between the assets and academic achievement and negative ones between the assets and risky behaviors. Furthermore, commitment to learning was negatively associated with risky behaviours. Such negative relation was also mirrored by a path model on the impact of the single assets showing that commitment to learning was positively related with academic achievement and negatively with risky behaviors. This pattern of relations confirms previous U.S. based work in that more developmental assets are associated with more academic achievement and less risky behaviors (Scales et al., 2006). However, a similar work within the Balkan area has reported that only commitment to learning, positive values and empowerment were associated with a number of thriving indicators among Roma minority youth in Bulgaria and Kosovo supporting the idea that not all developmental assets relate to academic achievement and risky behaviours (Wiium & Uka, 2021). Arguably, the contextual resources available in the respective societies where

Albanian youth live may lack sufficient prosperity to promote assets needed for developmental growth and in turn prone risky behaviors (Ilic, 2020).

Regarding the third aim of this chapter (examine relations between developmental assets, academic achievement and risky behaviors of Albanian youth in the four Balkan countries), a multi-group path model indicated context specific relations among these constructs. Across groups, external assets were positively related to risky behaviors, whereas internal assets were positively related to academic achievement but negatively to risky behaviors. As previously suggested, it may be the lack of external asset building contexts to increase the propensity of Albanian youth for risky behaviors, given the devastating post-war reality and associated hardships in the Balkans (Belloni, 2020). Yet, in line with established work, across all countries and cultural groups, the experience of internal assets appears a relevant component in promoting academic achievement among youth (Adams et al., 2019). The present chapter adds incremental knowledge to such work arguing that resources available to PYD vary across countries and may be related to different outcomes.

Prospects

The present chapter provides useful prospects for future work in a number of ways. First, a replication with more culturally diverse samples would increase reliability and generalizability of the models tested. Second, a longitudinal design would provide useful information on the direction of associations between developmental assets and youth outcomes. Third, the chapter was concerned with youth attending school, thereby limiting generalizations to other groups in South-Eastern European countries. Youth who dropped out of the school and those living in poverty have high prevalence in these countries and can provide better insights regarding the relations between the assets and youth outcomes across more marginalized groups (Korosteleva & Stępień-Baig, 2020).

Implications for Research, Policy and Practice

This chapter provides relevant implications for research, policy and practice regarding PYD in South-Eastern Europe. Concerning research, the chapter confirms the importance of the developmental assets model of PYD for understudied youth populations in these European countries by providing evidence on the cross-cultural applicability of the model through invariance testing. Interested researchers are further facilitated to use the assets measure when comparing mean differences among Albanian samples in Albania, Kosovo, Macedonia and Serbia as well as examining relations between assets, academic achievement and risky behaviours.

This chapter informs policy to develop strategies to improve developmental assets and consequently youth development in school and other youth contexts in South-Eastern Europe. Policy makers can benefit from this chapter speaking for the diverse impact of external assets available to youth. Relevant policy actions can develop and support structured and adult-supervised activities and resources for youth as to promote PYD and prevent risky behaviours.

Finally, the current chapter lays the groundwork for practice through promotion of PYD. Interventions aiming to enhance internal and specifically external assets, which influence positive youth outcomes can benefit from this chapter. For example, practitioners can focus their work to strengthen external assets and youth relationships across multiple contexts through support, empowerment, boundaries and expectations, and constructive use of time to increase academic achievement and reduce risky behaviours. Also, given that family and social support plays a significant role for the assets, programs and interventions can involve families and social practitioners to promote PYD.

In conclusion, the current chapter replicates and extends research on developmental assets and youth outcomes in Western countries by providing evidence for relevant relations between developmental assets, academic achievement and

risky behaviors for Albanian youth living in four South-Eastern European countries. The chapter confirms the relevant impact of the developmental assets for good academic achievement and reduced prevalence of risky behaviours. Nevertheless, the chapter points out to meaningful context and asset specific influences on the ways in which external and internal developmental assets impact academic achievement and risky behaviours among Albanian youth in Albania, Kosovo, Macedonia and Serbia.

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Developmental Assets and Identity Among Emerging Adults in Turkey

Ayfer Dost-Gözkan and Nora Wiium

Abstract

Identity formation (searching for identity alternatives in various domains and committing to certain roles) is a fundamental developmental task for young people, whereas achieving a coherent sense of identity through explorations and commitments is crucial for healthy development. Yet, achieving a sense of coherent identity is more challenging today as compared to previous decades where life choices were fewer and the pathways towards social roles were more pre-determined. The present chapter advocates for the utility of the asset-based approach to identity formation, and presents two empirical studies from Turkey. These studies test the assumptions that social-environmental (external) (i.e., empowerment, support, boundaries and expectations, constructive use of time) and individual (internal) (i.e., social competence, positive values, commitment to learning) developmental assets are strongly related to identity statuses (Study 1) and identity dimen-

sions (Study 2), through a positive sense of self. The findings of both studies showed direct and indirect pathways between developmental assets and identity statuses (Study 1; achievement, moratorium, foreclosure, and diffusion), and identity dimensions (Study 2; exploration in-breadth, exploration in-depth, commitment making, identifications with commitment, and ruminative exploration). This chapter extends Positive Youth Development (PYD) scholarship in under-investigated cultural context by highlighting the relevant role of external and internal assets for healthy identity among young people.

Keywords

Developmental assets · Identity · Emerging adulthood · PYD · Turkey

Defining, maintaining and modifying who a person is in terms of attitudes, personality, social roles, and various commitments are some of the fundamental day-to-day endeavors of young people (Ferrer-Wreder & Kroger, 2020). Although awareness of self as a social entity emerges in early childhood, adolescence has been identified as the developmental period in which childhood identifications are integrated and a coherent sense of self is achieved (Erikson, 1968). Yet, recent evidence has suggested that due to prolonged

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education and more options presented by the modern society, identity formation takes place during the twenties, an age window, which has been referred to as emerging adulthood (Arnett, 2000, 2018). Moreover, relevant work has also shown that identity formation is a harder task today as compared to previous decades, because young people have to choose from a wide range of identity alternatives, which exerts a psychological burden on them. Such work has also emphasized that in cultures with a heterogeneity and conflict in values, norms, and lifestyles, navigating through identity formation process and synthesizing a coherent sense of identity may be even harder and require extra efforts (Ryan & Deci, 2017; Sugimura, 2020).

This chapter adopts a Positive Youth Development (PYD) perspective to examine the links between developmental assets and identity formation among emerging adults in Turkey. In so doing, the chapter employs two empirical examples that provide novel insights into PYD by adopting an asset-based approach to identity formation task in emerging adulthood (Roehlkepartain & Blyth, 2020; Scales, 2011; Scales, Roehlkepartain, & Shramko, 2017). In addition, the chapter offers empirical evidence for the link between developmental assets and identity in a cultural context, which poses challenges to achieve a coherent sense of identity due to the conflicting norms and values accumulated throughout its social history and rapid social changes (Bugra, 2020; Erçelik & Dost-Gözkan, 2020; Sen, 2020).

The chapter furthers PYD scholarship on both conceptual and methodological grounds. Conceptually, the experience of developmental assets is explored in relation to identity formation, a process involving explorations of identity alternatives in different domains (e.g., work, religion, marriage, gender) and commitments to certain identities, or lack thereof. Methodologically, the empirical examples reported here, expand prior work by testing a mediational path model with two different identity formation paradigms referring to identity status and identity process. These empirical examples investigated the extent to which developmental assets are associated

with identity statuses (Study 1) and identity dimensions (Study 2) through a positive sense of self (positive identity). Study 1 applied the identity status paradigm (Marcia, 1966), which frames identity as an outcome of exploration and commitment processes, and examined the relation between external assets (i.e., empowerment, support, constructive use of time, boundaries and expectations), internal assets (i.e., social competence, commitment to learning and positive values) and four identity statuses (i.e., achievement, moratorium, foreclosure, and diffusion; Marcia, 1966). Study 2 applied the identity process paradigm, which frames identity as an ongoing process of explorations and commitments, and examined the links between external and internal assets and identity dimensions, conceptualized as processes (i.e., exploration in breadth, exploration in depth, commitment making, identification with commitments, and ruminative exploration; Luyckx, Goossens, & Soenens, 2006; Palmeroni et al., 2020).

The chapter begins with a literature overview on PYD, developmental assets and identity. Then, the global context and specific aspects of the Turkish cultural context as settings of identity formation are addressed. Finally, the findings of the two studies are presented and discussed in view of their contribution to the PYD field with relevant implications for research, policy, and practice.

Positive Youth Development, Developmental Assets, and Identity

Relevant scholarship has increasingly recognized the need for a more focused physical, mental and social wellness research, policy and practice through a positive perspective (Dimitrova, 2018; Dimitrova, Sam, & Ferrer-Wreder, 2021; Dimitrova & Wiium, *this volume*). Such perspective on human wellness is embedded in humanistic psychological approaches such as positive psychology and the PYD which argue that human beings have potentials to self-actualize and that the social context can either facilitate or hamper one's ability to thrive (Ryan & Deci, 2017). As

opposed to the deficiency-oriented approaches, focused on risks and problems, PYD addresses youth strengths, assets, and environmental opportunities to help them achieve optimal development (Koller & Verma, 2017; for new PYD conceptualizations see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., 2021; Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). Importantly for the present chapter, PYD sees healthy development in terms of the developmental tasks that young people can achieve such as a coherent sense of identity (Waid & Uhrich, 2020).

One of the most influential PYD models refers to the developmental assets, which consists of social-environmental (external) and individual (internal) resources as two key components of healthy development. Internal assets reflect individual and psychological qualities, such as commitment to learning (e.g., motivation for success and commitment to school), positive values (e.g., honesty and responsibility), social competence skills (e.g., decision-making and resilience skills), and positive identity (e.g., having positive feelings and a sense of control about one's life and future). External assets indicate the contextual and relational characteristics of the social system, such as support (e.g., supportive school and family environment), empowerment (e.g., how society values youth), boundaries and expectations (e.g., rules and expectations from young people), and constructive use of time (e.g., creative activities). Extant research has been conducted on the assets model confirming that developmental assets are associated with a variety of positive outcomes, including leadership, prosocial behaviors, valuing diversity, positive health behavior, academic achievement, coping skills and volunteering (Benson, 2007; Chen, Wiium, & Dimitrova, 2019; Kasic, Wiium, & Dimitrova, [this volume](#); Scales et al., 2017; Uka et al., [this volume](#); Wiium & Dimitrova, 2019; Wiium & Kozina, [this volume](#)).

Closely related to the assets and considered as a PYD indicator is identity achievement through making meaningful commitments to a variety of roles (occupational, familial, relational, ethnic, religious) in a person's socio-cultural context

(Schwartz, 2005). Erikson (1968) proposed that the crisis experienced during the task of identity formation is resolved either with an *identity achievement* or *identity confusion*. Accordingly, identity achievement reflects one's self-chosen values, goals, and commitments to form an identity. Conversely, identity confusion refers to the inability to generate useful goals and making commitments. In the identity formation process, making identity commitments after exploring some alternatives has been considered as an endeavor closely related to thriving (Erikson, 1968; Ferrer-Wreder & Kroger, 2020; Kroger, 2007).

Marcia (1966) elaborated the Erikson's identity theory by suggesting two distinct processes involved in the identity formation: *exploration* and *commitment*. Exploration refers to trying out different social roles and evaluating alternatives, while commitment involves adopting a set of roles and values. The combinations of these two processes give four identity statuses of achievement, moratorium, foreclosure, and diffusion. Identity achievement is reached when a person has explored different identities and made a commitment to suitable roles and values. In contrast, identity diffusion describes a situation where there has not been any clear exploration or commitment. In moratorium, there is an ongoing exploration without commitment. Lastly, foreclosure reflects an identity status where commitment has been made without engaging in exploration. Study 1, reported in this chapter, applied the identity status paradigm and examined a mediational model where developmental assets were associated with identity statuses though positive identity.

The focus on identity status has been extended by scholars arguing that the status paradigm does not fully capture the dynamic nature of the identity formation process (Crocetti, 2018; Luyckx et al., 2006). In an attempt to assess identity as a process, Luyckx et al. (2006) differentiated the dimensions of exploration and commitment. Exploration consists of three dimensions each representing a qualitatively different process of searching for an identity. *Exploration in breadth* is similar to Marcia's conceptualization of explo-

ration and involves searching for a range of options before commitment-making. Exploration, however, is assumed to continue even after commitments are made, in which the individual engages in an in-depth assessment of the extent to which commitments are concomitant with the already existing internal standards. *Exploration in-depth* refers to an examination of committed identity in pursuit of integrating it into the self-system. Although exploration has been considered as adaptive and conducive to healthy identity formation, extended exploration has been shown to be associated with psychological adjustment problems, such as anxiety, depression and poor well-being (Luyckx et al., 2006). This third dimension of exploration is conceptualized as *ruminative exploration* defined as being stuck in the search for alternatives and having difficulty in finalizing exploration with meaningful commitments (Luyckx et al., 2008).

Identity commitment is further divided into two dimensions of *commitment making* and *identification with commitment* (Luyckx et al., 2006). Commitment making is similar to the conceptualization of commitment in Marcia's taxonomy (1966) and refers to making choices and adapting to roles. Identification with commitment refers to a more elaborate form of commitment, which involves the degree to which the individual identifies with the existing commitments. Study 2, reported in this chapter, applied the identity process paradigm and examined how positive identity mediated the relation between developmental assets and identity dimensions.

The Global and Turkish Contexts of Identity Formation

In recent years, emerging adulthood has increasingly become the focus of identity research as the task of identity formation has been pushed to ages between 18 and 29 in industrialized and urban settings (Arnett, 2018; Dimitrova, 2018; Mehta, Arnett, Palmer, & Nelson, 2020). Such relevant work has also shown that navigating through various alternatives and making meaningful commitments to social roles is more chal-

lenging today as young people have several options to choose as compared to previous generations, where social roles, professions, marriages, and social environments were more pre-determined (Ryan & Deci, 2017).

Relatedly, the Turkish-American social psychologist Muzafer Sherif addressed this challenge as early as the 1930s when Turkey was a young nation, built in 1923 after the collapse of the Ottoman Empire. The Turkish society was undergoing radical changes in social norms and societal and legal structures as a result of the reforms implemented for the modernization (or Westernization) of the new nation. Referring to his studies with adolescents in rural and urban areas in the young Turkish Republic in the 1930s, Sherif suggested that radical social transformation exerts a toll on the young generation. Furthermore, he argued that in rapidly changing societies, defining the self in the transition to adulthood could be more challenging as it would require addressing often conflicting norms and values (Sherif, 1948). Sherif further stated that in Western industrialized societies, the transition from childhood to adulthood takes a longer time because partaking in the adult world require increasingly more complex skills and training. Therefore, for a long period of time, adolescents find themselves betwixt and between which becomes harder to endure if in-betweenness prolongs without having stable commitments (Sherif & Sherif, 1965).

Sherif's remarks on the challenges of the transition to adulthood in the 1950s and 1960s describe the situation in his time but foreshadowed increasing challenges involved in identity formation task for today's youth. This remark continues to be valid for young people in Turkey because of the socio-historical context of the Turkish society. The Turkish society has different value systems accumulated throughout its social history, such as collectivist, Islamic and secularist-Western values (Nauck & Klaus, 2008). This heterogeneity has created a niche for the synthesis of traditional and Western value systems for developing individuals and families (Kağıtçıbaşı, 2007). Yet, achieving a synthesis, compromising conflicting perspectives, and mak-

ing commitments in such cultural heterogeneity may be a demanding task for young people.

Turkey has one of the highest percentages of young population aged 15–29 years in Europe. Currently, young people constitute about 28% of the total Turkish population of nearly 82 million (Eurostat, 2020). Young people are assets for socio-economic development, and Turkey is considered to be in a critical time window to promote its youth potential. These demographic indicators also call for special attention to the conditions, practice and policy to promote positive development. Scholars have strongly emphasized the need for policies and practices that will promote the actualization of youth potential and this chapter suggests relevant venues in this direction (Baş, 2017).

This is where PYD perspective comes in and provides a useful framework, which may have implications for positive identity across the globe and especially in social and cultural contexts where identity formation may be more demanding. According to the PYD, all young people have strengths, and when they are empowered with the necessary skills and active roles in various settings, they not only thrive and self-actualize but also create human resource and value for the society (Dimitrova & Wiium, [this volume](#); Roehlkepartain & Blyth, 2020; Scales et al., 2017). The developmental assets that young people have play an important role in the facilitation of identity formation.

The Present Chapter

This chapter focuses on the role of developmental assets for identity formation of young people in Turkey by providing two empirical examples applying the identity status paradigm (Marcia, 1966), and the identity process paradigm (Luyckx, Schwartz, et al., 2008; Luyckx, Vansteenkiste, Goossens, & Duriez, 2009). More specifically, Study 1 examined the associations between developmental assets and identity statuses (achievement, moratorium, foreclosure, and diffusion), and Study 2 explored the relations between developmental assets and identity

dimensions (exploration in breadth, exploration in-depth, commitment making, identification with commitments and ruminative exploration).

In both studies, positive identity has been assumed to mediate the relation between developmental assets and identity related variables. Positive identity has originally been defined as one of the internal developmental assets in Benson's (2007) taxonomy. Positive identity as an asset is framed more like positive self-concept, which involves perceiving control over one's life and future (perceived autonomy and agency) and feeling good about oneself and one's future (optimism and hope). The reported empirical examples assume that developmental assets contribute to a positive sense of identity, which in turn facilitate explorations and commitments leading to a coherent sense of identity. This conceptualization is based on the self-determination theory (SDT), which states that gratification of basic psychological needs (i.e., autonomy, support, relatedness and competence feedback) contributes to the development of identity through enhancing internalization of values and goals (La Guardia, 2009; Ryan & Deci, 2017). More specifically, the conceptual models tested in both studies are based on the assumption that external and internal assets contribute to the nurturance of a positive sense of self in terms of agency, control over one's life and future, which provides an internal motivating source that guides purposeful explorations and meaningful commitments.

The first study advances the assumption that the developmental assets are positively associated with positive identity and that positive identity relates to identity statuses characterized by exploration (i.e., identity achievement and moratorium). Conversely, the developmental assets are assumed to be negatively related to two identity statuses lacking exploration (i.e., foreclosure), or both exploration and commitment (i.e., diffusion). The second study advances the assumption that the developmental assets are positively associated with all identity dimensions involving purposeful exploration and meaningful commitments, and negatively associated with ruminative exploration, characterized by anxiety driven and unsure explorations. The links

between the developmental assets and identity dimensions are assumed to be mediated by positive identity.

Study 1: The Examination of the Links between Developmental Assets and Identity Statuses

The sample used for this study consisted of 292 emerging adults (60% females; $M_{age} = 18.70$, $SD = 1.50$) from different universities in two metropolitan cities in Turkey. The study followed the standard ethical procedures with approval by the Research Ethics Board of the first author's affiliated university. Informed consent was obtained from the participants who were informed about the goals of the study, voluntary participation, and anonymous data treatment. The participants filled out an online questionnaire including demographics (i.e., gender, age and maternal and paternal education as an index of socioeconomic status, SES) and several measures described below.

The Developmental Assets Profile ([DAP]; Benson, 2007; Search Institute, 2016) adapted in Turkey (Dost-Gözkan, 2016) assessed internal assets of commitment to learning, positive values, social competencies and positive identity and external assets of support, empowerment, boundaries and expectations and constructive use of time rated on a 4-point Likert scale from 1 (*not at all or rarely*) to 4 (*extremely or almost always*). For the present sample, the Cronbach's reliability coefficients for external assets ranged between $\alpha = .60$ and $\alpha = .82$ and for internal assets between $\alpha = .70$ and $\alpha = .86$.

The Extended Version of the Objective Measure of Ego Identity Status ([EOM-EIS]; Bennion & Adams, 1986) adapted in Turkey (Oskay, 1998) was used to assess identity statuses with 64 items rated on a 6-point Likert scale from 1 (*completely agree*) to 6 (*completely disagree*). Two major identity domains, reflecting subdomains of ideological identity (political, vocational, religious, and philosophical self) and interpersonal identity (gender roles, leisure activities and friendship, and romantic commitment)

were measured. The items assessed exploration and commitment in respective subdomains and yielded four identity statuses of achievement, moratorium, foreclosure and diffusion. The four identity statuses were examined as an aggregate of each status across all domains (e.g., achievement score represented achievement across ideological identity and interpersonal identity subdomains). For the present sample, Cronbach's reliability coefficients ranged between $\alpha = .79$ and $\alpha = .93$.

Developmental Assets and Identity Statuses Model Test

For a preliminary examination of the associations among variables, correlation analyses were conducted. Bivariate correlations indicated that SES was positively associated with support, empowerment, boundaries and expectations, and constructive use of time. Age was inversely related to SES, support, empowerment, boundaries and expectations, and moratorium. Partial correlational analyses controlling for gender, SES, and age, showed that all assets were positively associated with identity achievement (except constructive use of time) and negatively associated with diffusion. All assets were negatively and significantly associated with moratorium except three assets of constructive use of time, commitment to learning, and social competence. Support, and boundaries and expectations were positively correlated to foreclosure, whereas commitment to learning and positive values showed negative associations (Table 1).

The mediational model linking developmental assets to identity statuses via positive identity was tested with a bootstrapping approach in a path model using Structural Equations Modeling (SEM). Goodness of fit for the models was assessed with the Chi Square (χ^2) test, the Root-Mean-Square Error of Approximation (RMSEA; recommended $< .08$), the Comparative Fit Index (CFI; recommended $> .95$) and the Tucker Lewis Index (TLI; recommended $> .90$) (Rutkowski & Svetina, 2017).

Table 1 Partial correlations of developmental assets and identity statuses controlling for age, gender and SES (Study 1)

| | M (SD) | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
|-----------------------------|-------------|--------|---------|--------|--------|--------|--------|--------|---------|--------|--------|
| 1. Support | 2.84 (.65) | | | | | | | | | | |
| 2. Empowerment | 3.19 (.56) | .63*** | | | | | | | | | |
| 3. Boundaries/ expectations | 2.80 (.57) | .71*** | .62*** | | | | | | | | |
| 4. Constructive use of time | 2.37 (.92) | .24*** | .22*** | .20*** | | | | | | | |
| 5. Commitment to learning | 3.27 (.55) | .39*** | .45*** | .42*** | .25*** | | | | | | |
| 6. Positive values | 3.49 (.47) | .27*** | .40*** | .27*** | .09 | .52*** | | | | | |
| 7. Social competence | 3.16 (.47) | .36*** | .47*** | .37*** | .19** | .56*** | .56*** | | | | |
| 8. Positive identity | 2.99 (.74) | .39*** | .46*** | .38*** | .17** | .47*** | .52*** | .61*** | | | |
| 9. Achievement | 3.93 (.80) | .12* | .23*** | .14* | .09 | .34*** | .35*** | .31*** | .38*** | | |
| 10. Foreclosure | 2.14 (1.01) | .26*** | .00 | .18** | .11 | -.17** | -.11 | -.07 | .05 | -.16** | |
| 11. Moratorium | 2.29 (.68) | -.08* | -.23*** | -.16** | .03 | -.09 | -.09 | -.17** | -.25*** | .01 | .28*** |

Note. M = Mean; SD = Standard Deviation
 *p < .05; **p < .01; ***p < .001

The results showed a good model fit, $\chi^2(31, 292) = 38.37, p = .17, RMSEA = .027, CFI = .987, TLI = .976$. The examination of the direct links between developmental assets and identity statuses indicated that positive values were positively associated with identity achievement and negatively with foreclosure. Commitment to learning was negatively associated with foreclosure and diffusion. Unexpectedly, three external assets (i.e., support, boundaries and expectations, and constructive use of time) were positively associated with foreclosure. Among developmental assets, support, empowerment, positive values, and social competence were positively associated with the mediator (positive identity). The indirect links from these four assets to identity statuses of achievement, moratorium, and diffusion were significant. Confidence intervals of the estimates indicated that positive identity mediated the links between four developmental assets (support, empowerment, positive values, and social competence) and identity achievement, moratorium, and diffusion (Table 2 and Fig. 1).

Conclusions on the Developmental Assets and Identity Status Model

The identity status model tested confirmed the existence of meaningful relations between developmental assets and identity statuses via positive identity. There were also unexpected and unique findings that are informative for future conceptualizations and research. The direct positive link between positive values and achievement is in line with previous research showing a positive association between identity achievement and positive outcomes, such as prosocial behavior (Hardy & Kissing, 2009) and better interpersonal relationships (Beyers & Seiffge-Krenke, 2010). Such relations suggest that having positive values, such as taking responsibilities, helping others, standing for what one believes in, may connote an attitude towards life that instigates purposeful explorations for making meaningful commitments. There was also a negative link between commitment to learning (enjoying and

valuing learning and reading, caring about schoolwork) and diffusion. Given that diffusion is characterized by a lack of exploration and commitment, its negative association with being open to learning and new experiences was reasonable.

The direct links between developmental assets and foreclosure yielded an interesting pattern. Internal assets (commitment to learning and positive values), as expected, were negatively linked to foreclosure (commitment without exploration) but external assets (support perceived in the social environment and constructive use of time), unexpectedly, had positive links to foreclosure. This pattern suggests that low levels of some internal resources, such as valuing learning and taking responsibilities, may hamper the motivational processes that instigate exploration before commitments. An external asset, on the other hand, such as perceived support might take different forms in its respective socio-cultural context. That is, it is possible that mere commitment to certain identities is deemed as optimal in some contexts where young people perceive available options as advantageous. In such contexts, support from the social environment may take the form of encouragement to commit to what is available or already obtained rather than encouragement for further explorations.

It is important to note that the sample used to test the model consisted of college students who had already attained or in the process of attaining presumably worked out identities (especially an occupational identity), and perceived support may serve to encourage commitment to these options. This is in line with the criticism directed to the pejorative view of foreclosure (Kroger, 2007) suggesting that foreclosure may be adaptive in cultural contexts that are characterized by valuing interdependence (Bosma & Kunnen, 2001). Indeed, foreclosure in non-Western contexts may take the form of internalization of values and beliefs from significant authority figures (i.e., parents and professors) (Cheng & Berman, 2012). A related study found a positive association between foreclosure and life satisfaction and less internalizing symptoms, providing empirical support for the fact that foreclosure may not be

Table 2 Direct and indirect effects and confidence intervals (Study 1)

| | Direct effects | | Indirect effects | | 95% CIs |
|---|----------------|------|------------------|------|--|
| | Beta (S.E.) | p | Beta (S.E.) | p | |
| Positive identity (the mediator) | | | | | |
| Positive values | .21 (.04) | .000 | – | – | .103, .314 |
| Social competence | .35 (.04) | .000 | – | – | .240, .465 |
| Support | .13 (.04) | .035 | – | – | .010, .249 |
| Empowerment | .15 (.04) | .023 | – | – | .021, .272 |
| Identity achievement | | | | | |
| Positive identity | .19 (.05) | .002 | – | – | .112, .334 |
| Positive values | .23 (.05) | .000 | .05 (.02) | .004 | .120, .338 (direct) .021, .088 (indirect) |
| Commitment to learning | – | – | – | – | – |
| Social competence | – | – | .08 (.03) | .001 | .036, .135 |
| Support | – | – | .03 (.02) | .07 | .004, .068 |
| Empowerment | – | – | .04 (.01) | .047 | .006, .075 |
| Identity foreclosure | | | | | |
| Positive identity | – | – | – | – | – |
| Positive values | –.11 (.05) | .044 | – | – | –.211, –.004 |
| Commitment to learning | –.22 (.06) | .000 | – | – | –.344, –.099 |
| Social competence | – | – | – | – | – |
| Constructive use of time | .14 (.05) | .002 | – | – | .058, .229 |
| Support | .16 (.05) | .030 | – | – | .011, .287 |
| Empowerment | – | – | – | – | – |
| Boundaries and expectations | .15 (.07) | .026 | – | – | .022, .292 |
| Identity moratorium | | | | | |
| Positive identity | –.25 (.05) | .000 | – | – | –.348, –.214 |
| Positive values | – | – | – | – | – |
| Commitment to learning | – | – | –.06 (.02) | .000 | –.097, –.033 |
| Social competence | – | – | –.11 (.02) | .000 | –.154, –.072 |
| Constructive use of time | – | – | – | – | – |
| Support | – | – | –.04 (.01) | .011 | –.072, –.016 |
| Empowerment | – | – | –.06 (.02) | .000 | –.097, –.030 |

(continued)

Table 2 (continued)

| | Direct effects | | Indirect effects | | 95% CIs |
|--------------------------|----------------|----------|------------------|----------|--------------|
| | Beta (S.E.) | <i>p</i> | Beta (S.E.) | <i>p</i> | |
| Identity diffusion | | | | | |
| Positive identity | -.20 (.05) | .000 | – | – | –.315, –.114 |
| Positive values | – | – | –.04 (.02) | .003 | –.080, –.016 |
| Commitment to learning | –.21 (.02) | .000 | –.04 (.01) | .003 | –.313, –.108 |
| Social competence | – | – | –.07 (.02) | .003 | –.120, –.031 |
| Constructive use of time | – | – | – | – | – |
| Support | – | – | –.03 (.02) | .062 | –.060, –.004 |
| Empowerment | – | – | –.03 (.02) | .06 | –.070, –.005 |

Note. CIs = Confidence Intervals; *p* = test significance

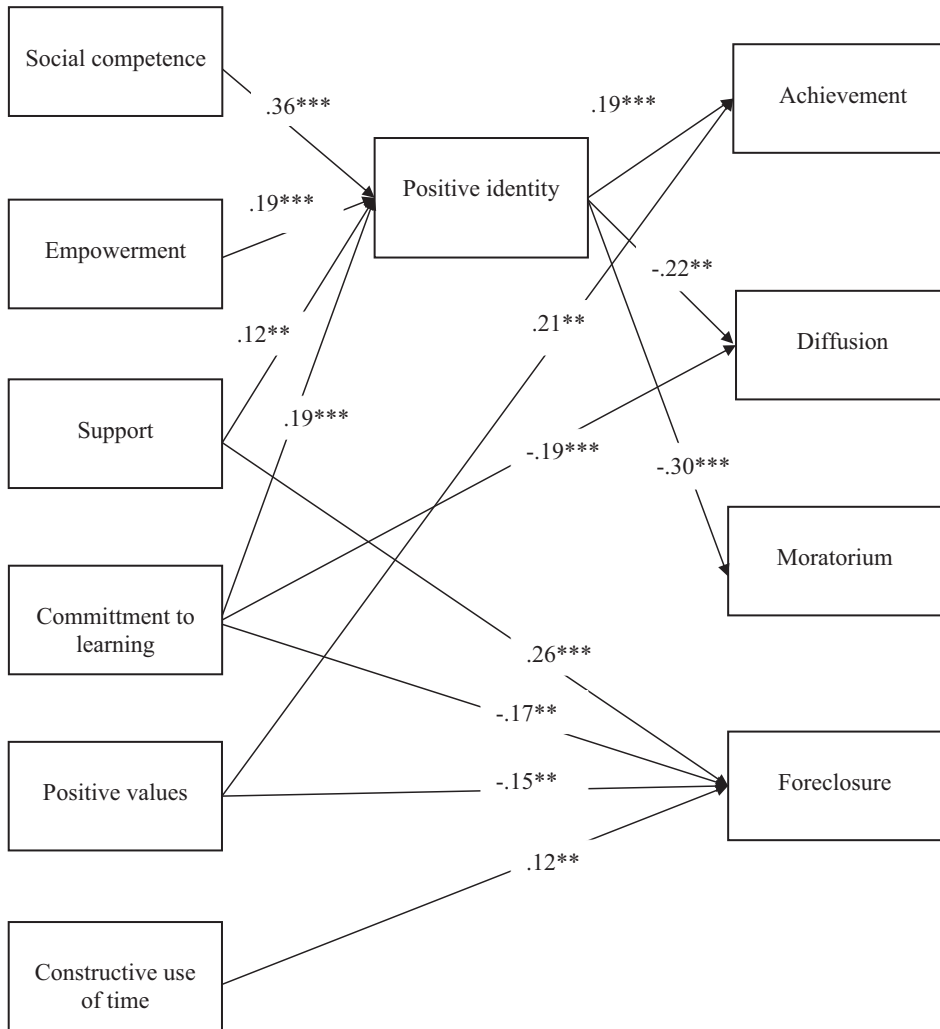


Fig. 1 Path model of developmental assets and identity statuses (Study 1). (Note. Coefficients represent significant paths in the model. External assets include empowerment, support, constructive use of time and boundaries and

expectations. Internal assets include social competence, commitment to learning, positive values and positive identity (the mediator). Non-significant paths and variables were dropped from the model. ** $p < .01$; *** $p < .001$)

maladaptive in some contexts (Schwartz et al., 2011).

Another relevant aspect of the model tested was that positive identity mediated the links between social competence (e.g., building friendships, resolving conflicts, being sensitive to others' needs and feelings), positive values, social support and empowerment, and all identity statuses except foreclosure. All these assets had positive links with positive identity. Positive identity, originally defined as an internal asset in the developmental assets model,

involves hope, optimism, agency, purposefulness, and self-acceptance (Benson, 2007). The present model suggests that emerging adults in Turkey showing strong positive identity are more likely to make an identity commitment through exploration (achievement) and less likely to have a diffused identity or engage in mere exploration (moratorium). Therefore, identity achievement can be facilitated via reinforcing a positive sense of who the young person is, which involves agency, self-acceptance, and purposefulness.

A final interesting aspect of the model was the negative link between positive identity and moratorium. Such negative link and the correlational analyses indicating negative associations between moratorium and developmental assets, suggest that moratorium may not entirely be indicative of a positive form of exploration. Such finding was reported in earlier work showing that mere exploration is associated with anxiety, depression, and psychological adjustment problems (Luyckx et al., 2006). Indeed, Luyckx et al. (2008) conceptualized maladaptive form of exploration as *ruminative exploration* and empirically showed that it is not conducive to healthy development. The second empirical example provided in this chapter provides further support for the above reported facets on ruminative exploration.

Study 2: The Examination of the Links between Developmental Assets and Identity Dimensions

The sample used for this study consisted of 331 emerging adults (72% females; $M_{age} = 21.5$, $SD = 1.22$) from four different colleges in Istanbul, following the same data collection procedure adopted in the first study reported in this chapter.

The Developmental Assets Profile ([DAP]; Benson, 2007; Search Institute, 2016) adapted in Turkey (Dost-Gözkan, 2016) was used showing good Cronbach's reliability coefficients for external assets between $\alpha = .69$ and $\alpha = .82$, and internal assets between $\alpha = .66$ and $\alpha = .88$.

The Dimensions of Identity Development Scale ([DIDS]; Luyckx et al., 2008) adapted in Turkey (Morsunbul & Cok, 2014) was applied. The scale consisted of five identity dimensions (commitment making, exploration in breadth, ruminative exploration, identification with commitments, exploration in depth) rated on a 5-point Likert scale from 1 (*totally disagree*) to 5 (*totally agree*). The Cronbach's reliability coefficients for the present sample ranged between $\alpha = .81$ and $\alpha = .94$.

Developmental Assets and Identity Dimensions Model Test

Bivariate correlational analyses indicated that SES and constructive use of time were positively related. Partial correlation analyses were conducted controlling for SES and gender to examine the relations between the variables included in the further path analysis (Table 3). The results indicated that all developmental assets and the mediator, positive identity, had positive associations with commitment making, exploration in depth, exploration in breadth, and identifications with commitment. Ruminative exploration had few significant associations being negatively related with support, empowerment, and positive identity.

A path analysis applying a bootstrapping approach to test the mediational model linking developmental assets to identity dimensions via positive identity, showed a good model fit, $\chi^2(35, 331) = 42.02$, $p = .19$, $RMSEA = .018$, $CFI = .994$, $TLI = .991$. The examination of the path coefficients indicated two direct links between the developmental assets and identity dimensions (Table 4 and Fig. 2). Constructive use of time was positively associated with exploration in breadth, and boundaries and expectations were positively associated with exploration in depth. Support, empowerment, social competence, and commitment to learning were all positively associated with the mediator, positive identity, which had positive associations with all identity dimensions, except ruminative exploration where the relation was negative and significant. Support, empowerment, social competence, and commitment to learning were indirectly linked to all identity dimensions. The examination of confidence intervals for the estimates of indirect links, confirmed that positive identity mediated the relations between these assets and identity dimensions (Table 4).

Table 3 Partial correlations of developmental assets and identity dimensions controlling for SES and gender (Study 2)

| | M (SD) | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. |
|-------------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|
| 1. Support | 3.06 (.56) | | | | | | | | | | | | |
| 2. Empowerment | 3.30 (.51) | .62*** | | | | | | | | | | | |
| 3. Boundaries/expectations | 3.00 (.56) | .69*** | .63*** | | | | | | | | | | |
| 4. Constructive use of time | 2.43 (.95) | .31** | .36*** | .37*** | | | | | | | | | |
| 5. Commitment to learning | 3.32 (.55) | .47*** | .48*** | .52*** | .37*** | | | | | | | | |
| 6. Positive values | 3.60 (.42) | .34*** | .35*** | .36*** | .21** | .33*** | | | | | | | |
| 7. Social competence | 3.27 (.49) | .40*** | .52*** | .56*** | .32*** | .58*** | .54*** | | | | | | |
| 8. Positive identity | 3.20 (.74) | .55*** | .57*** | .49*** | .31*** | .62*** | .29*** | .62*** | | | | | |
| 9. Commitment making | 3.90 (.92) | .27*** | .35*** | .31*** | .20** | .39*** | .20** | .35*** | .56*** | | | | |
| 10. Exploration in breadth | 4.03 (.80) | .23*** | .35*** | .30*** | .27*** | .41*** | .27*** | .38*** | .52*** | .67*** | | | |
| 11. Ruminative exploration | 3.19 (.89) | -.16* | -.15* | -.10 | -.07 | -.10* | .04 | -.06 | -.22*** | -.21*** | -.05 | | |
| 12. Identification with commitments | 3.89 (.88) | .36*** | .45*** | .36*** | .27*** | .42*** | .25*** | .41*** | .61*** | .77*** | .70*** | -.18** | |
| 13. Exploration in depth | 3.84 (.75) | .37*** | .34*** | .40*** | .17 | .38*** | .26*** | .38*** | .44* | .55*** | .60*** | .16*** | .56*** |

Note. M = Mean; SD = Standard Deviation

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 4 Direct and indirect effects and confidence intervals (Study 2)

| | Direct effects | | Indirect effects | | 95% CIs |
|---|----------------|----------|------------------|----------|--------------|
| | Beta (S.E.) | <i>p</i> | Beta (S.E.) | <i>p</i> | |
| Positive identity (the mediator) | | | | | |
| Positive values | .19 (.04) | .000 | – | – | .062, .157 |
| Social competence | .36 (.04) | .000 | – | – | .148, .254 |
| Support | .12 (.04) | .009 | – | – | .020, .122 |
| Empowerment | .19 (.04) | .000 | – | – | .059, .158 |
| Commitment making | | | | | |
| Positive identity | .56 (.04) | .000 | – | – | .470, .641 |
| Commitment to learning | – | – | .11 (.03) | .000 | .055, .139 |
| Social competence | – | – | .20 (.03) | .000 | .126, .231 |
| Support | – | – | .07 (.03) | .008 | .019, .107 |
| Empowerment | – | – | .11 (.03) | .000 | .052, .142 |
| Exploration in breadth | | | | | |
| Positive identity | .49 (.05) | .000 | – | – | .390, .580 |
| Constructive use of time | .09 (.03) | .029 | – | – | .006, .162 |
| Commitment to learning | – | – | .10 (.03) | .000 | .055, .139 |
| Social competence | – | – | .17 (.03) | .000 | .126, .231 |
| Support | – | – | .06 (.03) | .008 | .019, .107 |
| Empowerment | – | – | .09 (.03) | .000 | .052, .142 |
| Ruminative exploration | | | | | |
| Positive identity | –.23 (.06) | .000 | – | – | –.334, –.113 |
| Commitment to learning | – | – | –.05 (.02) | .002 | –.078, –.020 |
| Social competence | – | – | –.08 (.02) | .000 | –.130, –.041 |
| Support | – | – | –.03 (.03) | .025 | –.058, –.008 |
| Empowerment | – | – | –.04 (.03) | .005 | –.083, –.020 |
| Identification with commitments | | | | | |
| Positive identity | .61 (.04) | .000 | – | – | .525, .689 |
| Commitment to learning | – | – | .12 (.03) | .000 | .068, .168 |
| Social competence | – | – | .22 (.03) | .000 | .164, .276 |
| Support | – | – | .07 (.03) | .008 | .022, .130 |
| Empowerment | – | – | .12 (.03) | .000 | .064, .171 |

| | Direct effects | | Indirect effects | | 95% CIs |
|-----------------------------|----------------|----------|------------------|----------|------------|
| | Beta (S.E.) | <i>p</i> | Beta (S.E.) | <i>p</i> | |
| Exploration in depth | | | | | |
| Positive identity | .34 (.06) | .000 | – | – | .225, .449 |
| Commitment to learning | | | .07 (.03) | .000 | .035, .105 |
| Social competence | | | .12 (.03) | .000 | .077, .174 |
| Boundaries and expectations | .21 (.05) | .000 | – | – | .119, .306 |
| Support | – | – | .04 (.02) | .018 | .012, .082 |
| Empowerment | – | – | .07 (.03) | .000 | .033, .104 |

Note. CIs = Confidence Intervals; *p* = test significance

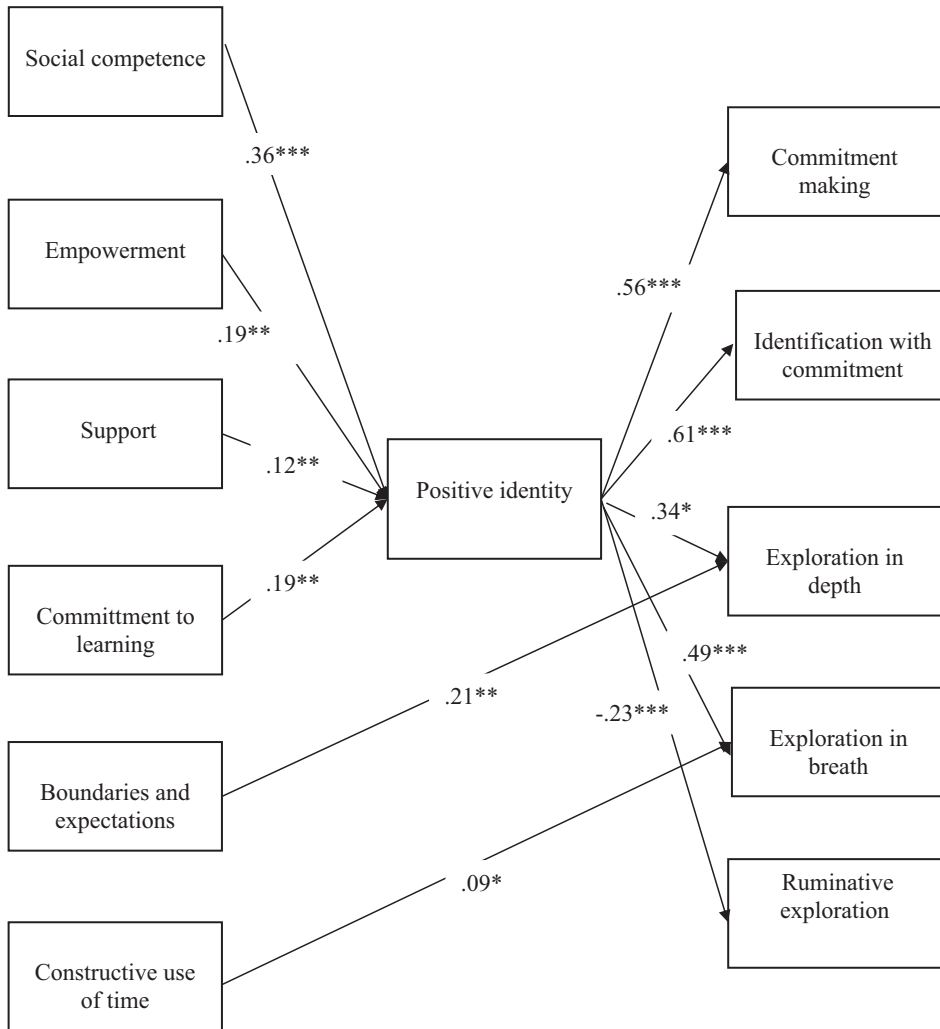


Fig. 2 Path model of developmental assets and identity dimensions (Study 2). (Note. Coefficients represent significant paths in the model. External assets include empowerment, support, boundaries and expectations and constructive use of time. Internal assets include social

competence, commitment to learning, positive identity (the mediator) and positive values. Non-significant paths and variables were dropped from the model. * $p < .05$; ** $p < .01$; *** $p < .001$)

Conclusions on the Developmental Assets and Identity Dimensions Model

The developmental assets and identity dimensions model provided further support for the mediational model tested in Study 1. Study 2

underlined the salience of four assets (i.e., positive values, social competence, social support, and empowerment) as contributors of the mediator, positive identity. This suggests that positive identity plays a crucial role in identity processes (i.e., in-breadth and in-depth explorations), which involve considering alternatives, thinking about them thoroughly and purposefully and

making meaningful commitments. These findings add to earlier work on the positive links between identity explorations and individual assets, such as psychological cohesion, autonomy, problem solving competence, well-being and self-confidence (Berzonsky, 2003; Lebedeva, Dimitrova, & Berry, 2018; Zahaj & Dimitrova, 2018), as well as self-assertiveness, goal centeredness, and agency (Schwartz, Côté, & Arnett, 2005).

In conclusion, both empirical examples reported here provide evidence for the utility of the asset-based approach to identity formation. The models tested confirmed the importance of the social contexts and supports that nurture identity achievement (Erçelik & Dost-Gözkın, 2020; Sznitman, Zimmermann, & Van Petegem, 2019). Although the models were based on cross-sectional datasets, a relevant pathway emerged from fostering external and internal developmental assets for an empowered positive sense of identity, which could function as an internally regulated instigator of healthy, purposeful and confident explorations as well as meaningful identity commitments.

Implications for Research, Policy, and Practice

The present chapter contributes to the PYD field and related research by empirically validating the role of internal and external assets as potential facilitators in the pursuit of a coherent sense of identity. The strongest message of the chapter regards the need to foster developmental assets to improve a positive sense of identity, consisting of purposefulness and agency. This message is relevant for future research to further dig into the context specific factors that may assist a positive sense of self and optimal identity formation in young people's respective socio-cultural environments (Dimitrova, Musso, et al., 2017; Dimitrova, van de Vijver, et al., 2017).

This chapter has also implications for policy and practice for youth development in the Turkish

as well as global contexts. Policy applications as well as practice may provide young people with skill-building opportunities (e.g., training) and ways to participate in work (e.g., internships), school (e.g., clubs, entrepreneurship opportunities), and social life (e.g., voluntary work, various forms of civic engagement). These efforts may also comprise giving young people a chance to make a difference in their own lives as well as in their social environments (Fernandes, Fetvadjev, Wium, & Dimitrova, *this volume*; Smith, Yunes, & Fradkin, *this volume*; Titzmann, Ferrer-Wreder, & Dimitrova, 2018). In fact, Turkey has an evidence based national youth policy that sets goals for the empowerment of youth across different domains (e.g., life skills, volunteering, career development, employment, vocational training, entrepreneurship, participation, social inclusion) (European Commission, 2020). Although having an explicit youth policy is a very important step towards achieving goals, the realization of even explicit policies requires appropriate implementation plans (Martin & Alacaci, 2015). For the implementation purposes, the present chapter points out the assets and resources to be targeted within the individual as well as those available in the immediate social environment.

In conclusion, compared to previous decades, globally, identity formation today is getting harder due to the variety of identity options available and the increasing standards on the skills that young people need to acquire. Identity formation may be even more demanding in some cultural contexts, where identity options are more heterogeneous and achieving a coherent identity requires an extra effort. The present chapter advocates for the usefulness of PYD to identity formation by pointing out the importance of developmental assets in the healthy identity pursuit among emerging adults in Turkey, a cultural context hosting different value systems compared to the widely researched Western European or American contexts. The evidence within such unique Turkish context provides a niche for the synthesis of the collectivist, Islamic, traditional

and Western value systems and the complexities involved in identity processes. The developmental assets and identity models adopted in the present chapter, frame the fundamental psychological principles to promote PYD across the globe, regardless of the load and stress that may accompany identity formation. Support, provision of opportunities and competence, serve to build an inner compass for youth that enables them to self-regulate their own identity formation (Ryan & Deci, 2017). Both theory and empirical evidence imply that improvement of supportiveness, encouragement and empowerment that young people can get from their social environments can be targets of interventions. Families, professionals in school and work contexts, may be informed about the fundamental principles of development and the psychological needs of young people to provide opportunities for their optimal development.

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Social Support Among Slovene Minority and Italian Majority Youth in Italy: Links with Positive Identity, Social Competence and Academic Achievement

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Abstract

This chapter applies the Positive Youth Development (PYD) framework to explore the influence of social support (family, community and school) on academic achievement and internal assets of PYD (i.e., positive identity and social competence) in a sample of Slovene minority ($n = 172$, 40% females) and Italian majority youth ($n = 354$, 43% females) in Northern Italy. A path model suggested that in both groups, social support was positively related to positive identity, social competence and academic achievement such that creating supportive relationships within schools, fami-

lies and communities can foster PYD. The chapter provides valuable evidence prompting educators, parents, practitioners and policy-makers to use PYD approaches to empower youth and optimize their overall well-being.

Keywords

Social support · Positive identity · Social competence · Academic achievement · Slovene minority · Italy

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The present chapter applies the Positive Youth Development (PYD) framework (Burkhard, Robinson, Murray, & Lerner, 2019; Dimitrova & Wiium, [this volume](#); Scales, Roehlkepartain, & Shramko, 2017; Wiium & Dimitrova, 2019) to a unique European context on the Italian-Slovene borderland, where Slovene minority and Italian majority youth in Italy cohabit. This context is relevant and novel because of the unique situation of Slovene-Italians as a bilingual long-term acculturated minority (Aydinli-Karakulak, Tepe, Nurcan, & Dimitrova, 2019; Dimitrova, van de Vijver, et al., 2017) and the extension of PYD scholarship beyond heavily represented U.S. context. Despite challenging historical or current socio-cultural circumstances, this minority appears to be fairly resilient and doing well

psychologically and socially (Kosic & Dimitrova, 2017). Yet, studies on their minority rights, bilingualism, ethnic and linguistic identity maintenance or integration rather than factors fostering well-being have been a mainstay. In the present chapter, we focus on the importance of supportive relationships within youth contexts, such as family, school, and community. We particularly look at how perceived support from relations within these contexts affects youth identity, social competence and academic achievement in a unique setting of bilingual minority in Italy, hardly explored in prior work.

The chapter starts with a brief presentation of the developmental assets model of PYD (Roehlkepartain & Blyth, 2020; Scales et al., 2017) and meaningful relations with social support, identity, social competence, and academic achievement. Further, an overview of the socio-cultural and contextual features of the Slovene minority in Italy is offered by providing arguments for the relevance of such context and advanced knowledge to the field. Next, the chapter provides empirical evidence for the validity of the main constructs of interest as well as significant patterns on how social support promotes positive identity, social competence and academic achievement among Slovene minority and Italian majority youth in Italy. The chapter concludes by outlining the major implications for research, policy and practice in a local and global perspective.

Developmental Assets Model, Social Support, Identity, Social Competence, and Academic Achievement

This chapter builds on one of the most influential asset-based models of PYD, which sees all youth as individuals who have strengths (Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#); Roehlkepartain & Blyth, 2020; Scales et al., 2017). Developmental assets comprise youth strengths or *internal assets*, such as commitment to learning, positive values, belief in the future and sense of purpose, and contextual resources or *external*

assets, such as empowerment opportunities, support from family and community, accessibility to services and creative activities. The more assets an individual possesses (especially when there is a good combination of both internal and external assets), the more the individual is able to remain physically and psychologically healthy, as well as actively participating in the society.

The assets model has received an increasing acknowledgement across a variety of countries in Africa, Asia, Latin and North America and Europe (Adams, Wiium, & Abubakar, 2019; Chen, Wiium, & Dimitrova, 2018; Desie, 2020; Drescher, Johnson, Kurz, Scales, & Kiliho, 2018; Kaur et al., 2019; Pashak, Handal, & Scales, 2018; Soares, Pais-Ribeiro, & Silva, 2019; Uka et al., [this volume](#); Vera-Bachmann, Gálvez-Nieto, Trizano-Hermosilla, Salvo-Garrido, & Polanco, 2020; Wiium, Dost-Gözkán, & Kosic, 2019; Wiium & Kozina, [this volume](#)). Despite such empirical interest, relatively little work has applied the model in culturally diverse samples of youth with minority and majority background. We were able to retrieve only two PYD inspired studies that included youth samples with Italian and Slovene majority background in Italy and Slovenia, respectively. A first comparative study on the developmental assets in three European countries, documented that youth in Italy reported less internal and external assets compared to their counterparts in Norway and Turkey (Wiium et al., 2019). A second study examined the associations between academic achievement with another major PYD model represented by the 5Cs of character, confidence, connection, and caring in Slovenian youth in Slovenia (Kozina, Wiium, Gonzalez, & Dimitrova, 2019). The study found significant positive associations between math achievement and two PYD indicators of character (values of responsibility, honesty and equity) and confidence (self-esteem and hope). Yet, these studies have focused on majority youth with Italian and Slovene background rather than bilingual Slovene-Italian minority youth. This chapter builds on such relevant work by examining both external and internal assets in Slovene ethnic minority and Italian majority youth in Italy. In so doing, we were concerned with specific types of internal and external assets for relevant concep-

tual and developmental considerations as further specified below.

Concerning external assets, we focus on *social support*, operationalized as support and affection from the family, parental involvement in schooling, caring neighborhoods and an encouraging school (Scales, 2011; Scales et al., 2017). Extant research has shown that social support and good relationships with peers and adults are protective factors for well-being in school, better social competence and academic achievement (Fritz, 2020; Mishra, 2020; Poots & Cassidy, 2020; Wilson, Weiss, & Shook, 2020). Social support from adult role models has been observed to correlate positively with better school engagement (Di Fabio & Kenny, 2015; Yang, Chiu, Sin, & Lui, 2020), and improved sense of self-efficacy and thriving (Chan, 2020; Ettinger et al., 2020). The perception of being cared for and valued by significant others increases positive views of the self (e.g., feeling worthy and valuable), good social interactions, as well as school attendance, attitude towards learning and academic achievement (Bradley, Ferguson, & Zimmer-Gembeck, [this volume](#); Whitlock, Wyman, & Moore, 2014). Especially among ethnic minorities, social support facilitates good mental health, sense of well-being, successful social integration and PYD (Lee, Hong, Zhou, & Robles, 2020; Ma, 2020; Mishra, 2020).

Concerning internal assets, we focus on *positive identity*, defined as a clearly structured, coherent and confident sense of self, including beliefs of personal power, value, purpose and control over events with an optimistic view of the future (Scales, 2011). Because adolescence is a crucial developmental period for identity formation, it is important to study positive identity in that period and particularly in ethnic minority groups (Anderson & Mac, 2019). For ethnic minority youth, positive identity is sustained by social support from family, school, or neighborhood (Fisher, Wheeler, Arora, Chaudry, & Barnes-Najor, 2019). In fact, good relationships with supportive others are associated with positive identity, which in turn facilitates PYD (Crocetti, Erentaite, & Žukauskienė, 2014; Dost-Gözkan & Wium, [this volume](#)). Related studies with Slovene and other ethnic minority youth

confirmed that positive identity (comprised of ethnic, familial, and religious sense of belonging) predicts well-being, with a potential to bolster self-esteem, academic achievement and social competence of these youth (Dimitrova & Aydinli, 2016; Dimitrova, Özdemir et al., 2017; Kopic & Dimitrova, 2017).

Another internal asset studied here is *social competence*, which comprises planning, decision-making skills and interpersonal competencies, such as empathy, sensitivity and ability to make friendships (Scales, 2011). International as well as Italian studies have repeatedly shown that social competence fosters academic achievement (Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000; Elias & Haynes, 2008). Therefore, the present chapter focuses also on *academic achievement* in terms of accomplished goals in educational settings because of its relevance for PYD and strong relations to social competence, social support and positive identity (Chi et al., 2020; Ho, Schweitzer, & Khawaja, 2017; Steinmayr, Meissner, Weidinger, & Wirthwein, 2017).

The Slovene-Italian Minority

This chapter presents data from Friuli Venezia-Giulia Region, in Northeastern Italy, on the border with Slovenia, hosting nearly 46,000 Slovene minority members out of a total population of 1,200,000 (Steinicke, Jelen, Lieb, Löffler, & Čede, 2016). The Slovenes are Italian national citizens, fluent in both Italian and Slovenian language but with Slovene ethnic, linguistic and cultural roots (Kopic, 2012). Due to their historical settlement in the region, they are protected by the National Law 482/1999 and given special rights with regard to the use of Slovenian language in schools, cultural associations, press and road signs (Kopic, Medeot, & Vidau, 2013).

There are other relevant characteristics of this minority worthy of consideration. First, they are autochthonous, long-term acculturated community who started to populate the area between sixth and seventh century. Second, they are minority community with economic, politically-administrative and cultural situation originating

from relatively limited use of social power compared to the Italian majority. Third, they are a border community as the current political border between Italy and Slovenia separates them from their native land and national community that since 1991 has its own sovereign state, the Republic of Slovenia. Fourth, the Slovene community in Italy is ethnically vital with own family and businesses in various areas (e.g., catering, handicrafts, wholesale, shipping and international trade, farming and banking). Slovenes are also elected in different representative bodies and party coalitions and have Slovene minority schools as part of the Italian public school system. A very important factor for this minority is its own mass media, radio stations, periodic publications, cultural, sport clubs and associations. Therefore, compared to the mainstream Italian population Slovenes hold a peculiar minority status as an integral part of the ethnic composition of the local population (Brezigar, 1999, 2014). Slovenes are a bilingual minority, linguistically similar but ethnically diverse from the Italian majority and at the same time, a long term acculturated community that makes them particularly interesting and unique group to study PYD.

This Chapter

The present contribution draws on the PYD because of its relevance to the study of personal and contextual factors leading to optimal development. In so doing, it also extends related research with an empirical study that investigates aspects of the developmental assets model in a bicultural context with the potential to inform PYD policies and programmes in that context. While the theoretical and empirical evidence of PYD are quite strong in the American context, evidence-based research across diverse populations and nations are still emerging. So far, most studies have found evidence for the generalizability of the PYD constructs, while it is also important to consider the specific contexts and how PYD constructs can be applied to these contexts (van de Vijver, 2017). This chapter takes a step further in testing invariance of all measures

(i.e., the statistical property of measurement indicating that the same construct is being measured in the same and consistent way across groups) as to provide culturally appropriate and psychometrically valid tools to measure PYD in an Italian context.

Further, the chapter extends the relevance of PYD in a novel setting with ethnic minority and majority youth by testing a model on the relations between social support, positive identity, social competence, and academic achievement. We propose and test a model based on the assumption that perceived social support, as external asset, would be associated with internal assets of positive identity, social competence and academic achievement. Since the model is exploratory and no prior local research pointed to differences among the two sampled groups, we expect the model to hold true for both Slovene and Italian groups.

The Slovene Minority and Italian Majority Youth Samples in Italy

This chapter builds on data from a large international study on PYD (Dimitrova & Wium, [this volume](#); Wium & Dimitrova, 2019). A total of 526 youth with Slovene minority ($n = 172$) and Italian majority background ($n = 354$) were involved (Table 1). Standard procedures were adopted to conform to established guidelines for linguistic equivalence and measure adaptation in cross-cultural research (International Test Commission, 2017; van de Vijver et al., 2019). All measures showed very good reliability estimates (Table 1).

Participants were recruited through several public schools with Slovene as the instructional language in two major towns with a high concentration of Slovene ethnic minority members (i.e., Trieste and Gorizia), and in Italian schools of the same cities. Prior to data collection, local school authorities were informed about the purpose and method of the study to acquire their consent and participation. Data were collected during normal school hours by the first author who is also bilingual Slovene-Italian member of the Slovene

Table 1 Descriptive statistics and reliability coefficients for main variables among Slovene and Italian youth

| | Slovene (n = 172) | Italian (n = 354) |
|----------------------|------------------------------|------------------------------|
| Age | | |
| Range | 15–22 | 14–21 |
| M (SD) | 17.30 (1.08) | 16.31 (1.47) |
| Gender, % | | |
| Males | 60 | 57 |
| Females | 40 | 43 |
| Measures, M (SD) | | |
| Social support | 2.78 (.52) $\alpha = .71$ | 2.56 (.52) $\alpha = .68$ |
| Social competence | 2.94 (.47) $\alpha = .70$ | 2.88 (.46) $\alpha = .72$ |
| Academic achievement | 2.86 (.91) | 3.23 (.86) |
| Positive identity | 2.82 (.67) $\alpha = .76$ | 2.67 (.72) $\alpha = .74$ |

Note. M = Mean; SD = Standard Deviation; α = Cronbach’s alpha reliability coefficient

community in Italy. Written and oral instructions informed students that participation was voluntary and confidential and they were free to discontinue their participation at any time. Data collection took approximately 30–45 min.

Social support, social competence and positive identity were measured with The Search Institute Profiles of Student Life: Attitudes and Behavior Survey ([PSL-AB]; Scales, 2011). *Social support* was measured as a composite mean of 7 items that assessed the degree to which youth perceived their parents, school and neighborhood as supportive. Responses were coded on a 4-point Likert scale from 1 (*not at all*) to 4 (*almost always*) with high scores indicating high levels of perceived social support. *Positive identity* was measured with 4 items rated on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*almost always*). Sample items referred to feeling to have control of own life, future and feeling good about oneself. A mean score was obtained with high scores indicating more positive identity. *Social competence* was measured with 7 items answered on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*almost always*). Sample items referred to making plans, building friend-

ships. An average score was computed with high scores indicating better social competence.

Academic achievement was measured by asking the participants to rate their academic performance. Responses were given on 5-point Likert scales ranging from 1 (*poor*) to 5 (*excellent*) with high scores suggesting good academic achievement. We chose self-reported academic achievement based on prior research documenting the accuracy of students’ self-reports that correlated highly with their actual school grades (Kuncel, Credé, & Thomas, 2005). Reliability of self-reported academic achievement as a good estimate of actual school grades has also been reported in previous work with ethnic minority and majority youth samples in Europe (Bankov, Mikova, & Smith, 2006; Dimitrova, Ferrer-Wreder, & Ahlen, 2018).

Main Findings

The purpose of this chapter was to test a novel model on relations between social support, positive identity, social competence and academic achievement in Slovene minority and Italian majority youth in Italy. In preliminary analyses, we sought to examine the psychometric properties and invariance of the measures via Confirmatory Factor Analysis (CFA). Next, we tested the conceptual model assuming that high levels of perceived support in the family, school and neighborhood would be associated with strong positive identity, social competence and academic achievement.

Confirmatory Factor Analyses

Three CFA models were employed to establish whether the factor structure of all measures fit the data well. Goodness of fit for the models was assessed with the Root-Mean-Square Error of Approximation (RMSEA; recommended < .08) and the Comparative Fit Index (CFI; recommended > .95) (Rutkowski & Svetina, 2017). For each measure, we performed Multi-group Confirmatory Factor Analyses (MGCFA) to test

Table 2 Fit statistics for multi-group confirmatory factor analyses for measures used with Slovene and Italian youth

| Measure | Model fit | | | |
|----------------------------|-----------|----|------|-------|
| | χ^2 | df | CFI | RMSEA |
| Social support | | | | |
| Configural invariance | 75.44*** | 24 | .909 | .064 |
| Metric invariance | 78.69*** | 30 | .914 | .052 |
| Scalar invariance | 159.14*** | 37 | .785 | .072 |
| Social competence | | | | |
| Configural invariance | 41.18*** | 22 | .949 | .041 |
| Metric invariance | 50.66*** | 28 | .939 | .039 |
| Scalar invariance | 58.72*** | 35 | .936 | .036 |
| Positive identity | | | | |
| Configural invariance | 7.91 | 4 | .995 | .043 |
| Metric invariance | 9.40 | 7 | .997 | .026 |
| Scalar invariance | 15.45 | 11 | .994 | .028 |
| Model test | | | | |
| Unconstrained model | 16.32*** | 4 | .928 | .077 |
| Structural weights model | 19.34*** | 7 | .928 | .058 |
| Structural residuals model | 21.62 | 12 | .944 | .039 |

Note. χ^2 Chi-square test, *df* degrees of freedom, *CFI* Comparative Fit Index, *RMSEA* Root Mean Square Error of Approximation

*** $p < .001$

for three levels of invariance: configural, metric and scalar. Configural invariance allows the same set of items to form a latent factor in each group and, if a good fit is obtained, subsequent tests may be conducted. Metric invariance assesses the factor loadings that are constrained to be equal across groups and allows comparison of relations, whereas scalar invariance constrains factor loadings and intercepts to be equal across groups and allows comparison of means (van de Vijver et al., 2019).

For social support, a solution with one latent variable and seven item indicators was tested, suggesting good configural and metric invari-

ance. For positive identity, a solution with one latent variable and four observed item indicators was tested. The results indicated that the model fit at configural, metric and scalar invariance levels was very good. For social competence, a solution with one latent variable and seven observed item indicators was tested. The results indicated that the model fit was acceptable at configural, metric and scalar invariance levels. The model fit indices for all measures are presented in Table 2.

Model Test of Social Support, Identity, Social Competence and Academic Achievement

In a preliminary step, associations among main variables were explored by means of Pearson bivariate correlations. There were strong, significant and positive correlations among all variables (Table 3). Having established factorial validity for the measured constructs allowed to test the conceptual model (Fig. 1). After estimating an unconstrained model (i.e., configural invariance), a structural weights model and a structural residuals model (i.e., metric invariance), we chose the structural residuals model as the most restrictive with a good fit, $\chi^2(12, 526) = 21.62$, $p = .042$, $CFI = .944$, $RMSEA = .039$. Standardized coefficients of the relations between social support, positive identity and academic achievement are reported in Fig. 1. As observed, social support was positively and consistently associated with positive identity, social competence and academic achievement confirming main assumptions and the model tested.

Conclusions

The present chapter aimed at testing a PYD model on the relations of social support, positive identity, social competence and academic achievement among Slovene minority and Italian majority youth in Italy, an under-represented sample on this topic. The chapter confirmed the significant role of perceived social support in boosting positive identity, social competence, and academic achievement, adding strength to

Table 3 Correlations among main variables

| Variable | 1. | 2. | 3. | 4. |
|-------------------------|--------|--------|--------|----|
| 1. Social support | — | | | |
| 2. Social competence | .80*** | | | |
| 3. Academic achievement | .80*** | .69*** | | |
| 4. Positive identity | .62*** | .64*** | .52*** | |

Note. *** $p < .001$

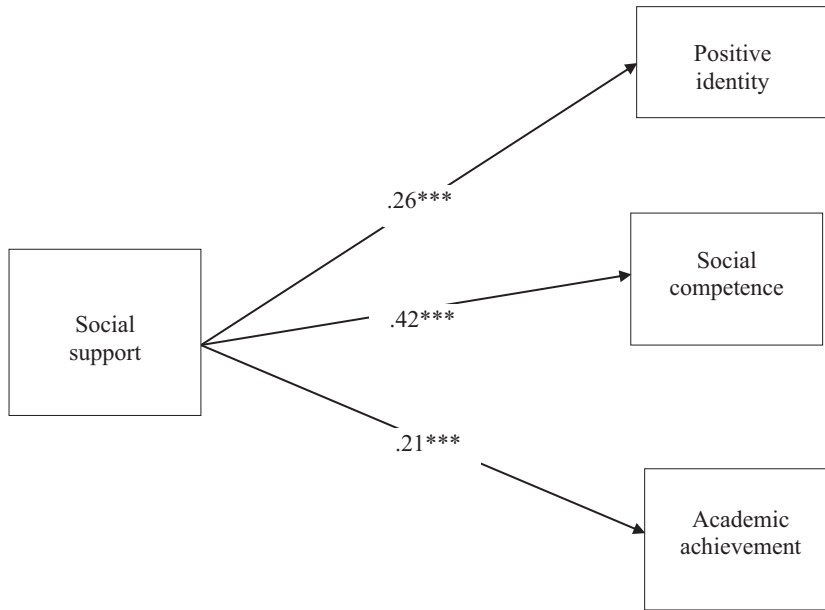


Fig. 1 Path model of social support, positive identity, social competence and academic achievement for Slovene minority and Italian majority youth (Note. Multi-group path model with estimates representing mean scores of the standardized coefficients for the structural residuals model for Slovene and Italian groups, *** $p < .001$)

the PYD model in a new understudied minority context in Italy (Wiium & Dimitrova, 2019).

Independently of ethnic group, perceived support from the family, neighborhood and school enhanced positive identity, social competence and academic achievement. Such evidence confirms previous research, suggesting that in contexts, where youth are adequately supported, they are equipped with opportunities to develop social, emotional and academic competence in multiple relationships with parents, teachers and peers (Cataldi, Laird, & Kewalramani, 2009; Guerra & Bradshaw, 2008). Further, the perception of social support was directly related to a sense of positive identity. Consistent with ear-

lier work, youth who felt supported by significant others or institutional services in their family, neighborhoods, schools or communities, are more likely to develop a good sense of self and better equipped with assets that facilitate better academic achievement (Whitlock et al., 2014). Overall, this chapter joins prior work in promoting social support as a significant factor for PYD and the link between developmental assets and positive developmental outcomes. In addition, the results on Slovene minority and Italian majority youth in Italy extend the validity and generalizability of the developmental assets model of PYD in these understudied ethnic groups.

Despite the promising results confirming theoretical assumptions and past research, future replications need to expand on several grounds. In future work, social support can be measured separately for family, school and neighborhood to understand the influence of each context and properly intervene based on that influence. Future work with Slovene and Italian youth may also consider distal contexts such as the social welfare system, mass media, cultural and institutional settings that can influence PYD. Next, social desirability and contextual issues (e.g., time of the school year when data are collected – beginning/middle or end of the term) might have influenced responses related to participants' subjective perception of academic achievement (Elias & Haynes, 2008). Follow-up work may therefore collect data at the beginning and at the end of the school year to increase the validity of findings. Finally, a combination of quantitative and qualitative designs, such as focus group discussions, in-depth interviews and measures from parents, teachers, significant adults, and peers are worthy to apply.

Implications for Research, Policy and Practice

This chapter offers a novel base for research, policy and practice when applying the PYD model in Slovene minority and Italian majority youth in Italy. The most relevant implication for research regards the evidence for the application of the PYD constructs in new contexts by testing invariance of all measures applied. Therefore, local and international researchers can use these measures as valid tools to measure PYD in the Italian context. They can also meaningfully compare levels of social competence and positive identity between Slovene and Italian ethnic groups given that measurement invariance was established at scalar level indicating that these constructs are being measured in the same and consistent way across these groups. This is a novel step in testing the PYD model in new understudied contexts and minority groups (van de Vijver, 2017).

This chapter provides important policy implications. The positive effects of social support can inform policy makers to ensure that initiatives can offer positive and supportive social contexts for Slovene and Italian youth in Italy. A solid collaboration among service providers at educational, health, and after school levels should be enhanced to apply these initiatives. Policy makers with both Slovene and Italian background can also contribute to teacher and parenting training programs to help them engage and bond with youth, encourage their strengths and a sense of belonging and empowerment (Im, Hughes, & West, 2016). Since developmental assets are consistently linked to indicators of school success, these assets can be used as both targets and measures to assess the effectiveness of school reform efforts in the region with Slovene minority students in Italy.

The present chapter provides relevant suggestions for practice given that a PYD model with core developmental contexts (e.g., schools, families, neighborhoods) matters for promoting the developmental nutrients youth need to succeed in life. The evidence that academic achievement is affected by perceived social support backs intervention programs for families, teachers and school psychologists to work on students' social competence, classroom and school climate (Elias & Haynes, 2008). Providing support and competence-promotion interventions to all youth in schools would have a positive impact on their competence in multiple domains, self-efficacy, and academic achievement (Weissberg, Durlak, Domitrovich, & Gullotta, 2015). Further, after-school services and vocational trainings are among the most important environments where adolescents can be engaged in strength-based interventions (Zeldin, Krauss, Kim, Collura, & Abdullah, 2016). Specifically in the Slovene minority context, given the social vitality of this community, cultural and sports associations can benefit from interventions to engage youth in positive community or neighborhood activities where they can receive support and feel connected.

In conclusion, the current chapter joins efforts in advancing PYD research and its implementation in an under-represented European samples of youth

by confirming the relevance of social support for positive identity, social competence and academic achievement in Slovene minority and Italian majority youth. The chapter supports the idea that healthy connections with caring significant others in youth immediate contexts matter for both minority and majority groups alike. These supportive connections make a difference for youth social and academic outcomes with the potential to put them on healthy developmental paths.

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Positive Youth Development and Subjective Happiness: Examining the Mediating Role of Gratitude and Optimism in Spanish Emerging Adults

Diego Gomez-Baya, Margarida Gaspar de Matos, and Nora Wiium

Abstract

This chapter addresses relevant calls for more PYD based research among emerging adults in Southern Europe and related psychological adjustment mechanisms during this life stage. In so doing, the chapter applies the 5Cs model of PYD (connection, competence, confidence, character and caring) to examine meaningful relations with subjective happiness and the mediating role of gratitude and optimism among emerging adults in Spain. The chapter presents an empirical example of a cross-sectional study with 768 emerging adults from Andalusia, Southern Spain who completed measures on the 5Cs, subjective happiness, gratitude and optimism. The main findings indicate that gratitude and optimism were partial mediators of the relation between the 5Cs

of PYD and subjective happiness. When young people experience high levels of the 5Cs, they show more happiness through a positive effect on gratitude and optimism. The chapter suggests that subjective happiness of emerging adults in Spain may be a function of the joint influence of both the 5Cs of PYD and character strengths, such as gratitude and optimism.

Keywords

The 5Cs · Positive youth development · Gratitude · Happiness · Optimism · Emerging adults · Spain

Relevant scholarship has argued that the transition to adulthood now occupies a significant life period affecting health and well-being of young people (Bishop, Walker, Herting, & Hill, 2020; Sawyer, Azzopardi, Wickremarathne, & Patton, 2018). Related conceptualizations identified the relevance of emerging adulthood as a developmental life stage that starts from late adolescence and continues through the twenties (Arnett, 2014; Arnett, Žukauskienė, & Sugimura, 2014; Shelley, McCarthy Veach, LeRoy, & Redlinger-Grosse, 2020). The present chapter aims to examine how indicators of positive development are associated

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with subjective happiness in emerging adulthood through the mediation effects of character strengths, such as gratitude and optimism.

Emerging adulthood is an important stage of transition to adulthood spanning the ages of 18–29 years, representing a prolonged period of exploration and change, new challenges and opportunities (Arnett, 2014). Emerging adulthood has been indicated as the most unstable life span period with most frequent changes in love and work as well as highly self-focused life time with less daily social roles and obligations to others (Arnett, 2014, 2018). As such, emerging adulthood is an especially critical period to promote optimal outcomes and life prospects.

This chapter applies the Positive Youth Development (PYD) framework within the conceptualization of emerging adulthood (Burkhard, Robinson, Murray, & Lerner, 2019; Geldhof et al., 2015). PYD as a strength-based conception of human development is operationalized here to the transition to adulthood in line with the recent focus of global scholarship on optimal development, health and well-being (Dvorsky et al., 2019). This perspective is fully embraced by the positive psychology field, encouraging the scientific study of optimal human functioning and developmental outcomes by understanding the origins, processes and mechanisms leading to such outcomes (Sari & Schlechter, 2020; Seligman & Csikszentmihalyi, 2000).

In applying the PYD framework to emerging adulthood, this chapter employs one of the most influential models of the 5Cs of PYD represented by competence, confidence, connection, character, and caring (Geldhof et al., 2015; for expanded 7Cs model see Dimitrova et al., *this volume*). The model assumes that all 5Cs of *competence* (academic, social, vocational skills), *confidence* (sense of mastery, positive identity, and self-worth), *character* (integrity, moral commitment, and personal values), *connection* (healthy relation to community, friends, family, and school) and *caring* (empathy and sympathy) have the potential to optimize developmental growth and well-being. The 5Cs model has been applied and adopted in a wide range of cross-sectional and longitudinal study designs primarily in the United

States (Bowers et al., 2010; Dvorsky et al., 2019; Geldhof et al., 2014; Shek, Dou, Zhu, & Chai, 2019) with emerging global focus (Abdul Kadir et al. *this volume*; Dimitrova et al. *this volume*; Fernandes et al. *this volume*; Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, et al., *this volume*) and across various countries in Europe (Årdal, Holsen, Diseth, & Larsen, 2018; Conway, Heary, & Hogan, 2015; Dimitrova et al., *this volume*; Kozina, Wiium, Gonzalez, & Dimitrova, 2019; Truskauskaitė-Kunevičienė, Romera, Ortega-Ruiz, & Žukauskienė, 2020), Africa (Kabir & Wiium, *this volume*; Wiium, Ferrer-Wreder, Chen, & Dimitrova, 2019) and Asia (Chen, Wiium, & Dimitrova, 2018; Li, He, & Chen, *this volume*). Yet, much research is still needed in Southern areas of Europe such as Spain, a largely neglected context in PYD work (Paricio, Herrera, Rodrigo, & Viquer, 2020). Closing this gap is particularly relevant for emerging adults in Spain who experience longer stay in parental home, delayed entrance into workforce and older marriage age (Fierro Arias & Moreno Hernández, 2007). To this end, the present chapter examines the 5Cs model of PYD in emerging adults from Spain and explores related psychological adjustment mechanisms during this life stage.

Positive Youth Development, Subjective Happiness, Gratitude and Optimism

The development of the 5Cs of PYD is associated with a life trajectory marked by positive contribution to the self, family, community and the civil society (Geldhof et al., 2015; Shek et al., 2019). Many positive outcomes have been documented as a consequence of the 5Cs of PYD, such as healthy life styles, greater resilience, better competences of self-regulation, academic success, positive social behavior, less conduct problems and emotional distress (Gaspar de Matos, Santos, Reis, & Marques, 2018; Gomez-Baya, Tomé, Reis, & Gaspar de Matos, 2020; Wiium & Dimitrova, 2019). Relatedly, it has been argued that subjective well-being is an important outcome of PYD to be considered as the ultimate

goal of PYD inspired research and programs (Johnson, Kilpatrick, Bolland, & Bolland, 2020; Park, 2004a).

Closely related to well-being is subjective happiness, defined as an overall affective assessment of whether one is a happy or an unhappy person (Lyubomirsky & Lepper, 1999). Related work has consistently documented the relevance of happiness among young people and emerging adults in a variety of cultural contexts including Spain and meaningful relations with positive development (Aksoy & Arli, 2020; Cavallo et al., 2015; Demir, Tyra, & Özen-Çıplak, 2019; García-Alandete, Martínez, Pilar, & Beatriz, 2018; Godoy-Izquierdo et al., 2020; Gómez-López, Viejo, & Ortega-Ruiz, 2019; Iannello, Sorgente, Lanz, & Antonietti, 2020). Therefore, more empirical and community efforts to promoting happiness in this relevant stage leading up to adulthood are necessary actions for well-being of young people. Such efforts embedded within the PYD framework have the potential to build character strengths that enable youth to flourish (Park, 2004b) by promoting health and optimal well-being (Shek et al., 2019).

Character strengths have received major interest in the field of positive psychology referring to the psychological processes or mechanisms that define a good life (Park & Peterson, 2008). Based on relevant work (Benson, Scales, Hamilton, & Sesma, 2006; Park, 2004a, 2004b), this chapter proposes a model to understand the relations between character strengths of gratitude and optimism, subjective happiness and the 5Cs of PYD, with the latter assumed to be related to subjective happiness through character strengths. More specifically, gratitude and optimism are among the character strengths highly associated with subjective happiness (Peterson, Ruch, Beermann, Park, & Seligman, 2007). Gratitude (i.e., a life orientation towards noticing and appreciating positive things in life and those that another person has intentionally given or done; Wood, Froh, & Geraghty, 2010), enhances well-being by increasing positive emotions (Sun & Kong, 2013), social resources and moral behaviors of young people (Emmons & Mishra, 2011). Similarly, optimism (i.e., the extent to which peo-

ple have generalized favorable expectancies for their future; Carver, Scheier, & Segerstrom, 2010) has a positive impact on psychological well-being (Rand, Shanahan, Fischer, & Fortney, 2020). Based on these premises, this chapter proposes and tests a model on the 5Cs of PYD and relevant associations with subjective happiness, through a positive relation with gratitude and optimism.

Positive Youth Development in Spain

Spain is located in Southern Europe with Andorra, France, Gibraltar, Morocco and Portugal as neighboring countries. Politically, Spain is a parliamentary democracy and constitutional monarchy with the prime minister as the head of government, and the monarch as the head of state. As a unitary state, the country is composed of 17 autonomous communities and 2 autonomous cities with varying degrees of autonomy. Recent demographic data from the Spanish Institute for Youth (2017) reported a total of 7,117,534 young people aged 15–29 years old (51% males), representing 15% of the total population in Spain of nearly 47 million people.

Very few studies have addressed PYD in Spain, mainly focusing on adolescents between 12 and 17 years old, rather than older adolescents and emerging adults. In a qualitative study, Oliva et al. (2010) built a model of positive development based on the ideas of a panel of Spanish experts in psychology, psychiatry and education. The proposed model involved five areas of emotional, social, cognitive, moral, and personal development. Based on this work, Antolín Suárez, Oliva Delgado, Pertegal Vega, and López Jiménez (2011) developed a scale to assess values for positive development in a sample of Spanish adolescents aged 12–17 years old. The study revealed a three-factor model, in which the first factor included the dimensions of honesty, responsibility and integrity, the second one was comprised of prosociality, social justice and equality, and social commitment, while the third one included hedonism and social recognition.

Further analyses showed that adolescents reported medium to high satisfaction of these positive development values in their lives. Thus, rather than risk behaviors and emotional problems, adolescents in Spain are also experiencing positive values and competencies.

In Spain, some youth policies were put in place to promote PYD and well-being by fostering youth empowerment and social participation. The Spanish Institute for Youth (2018a) has set up a number of interventions to promote international cooperation (e.g., voluntary work camps and youth mobility) and youth associationism (supporting youth organizations and national-scope entities offering youth services). The Institute annually announces the Prize for Youth Creation fostering creative activity of young artists, their diffusion and incorporation in the professional field. Other two remarkable actions see the promotion of youth information and training of information agents in addition to activities related to youth training and exchange of experiences (e.g., Youth Researcher Prize and the Euro-Latin-American Youth Centre).

However, public policies to increase youth social participation and labor integration need to be further developed in Spain. Only 27% of Spanish youth collaborate in an organization and 61% report little or no interest in politics (Comas Arnau, 2010). Moreover, the unemployment rate among young people in Spain increased to 33% in 2020 (Trading economics, 2020). Thus, global public policies are needed and especially in the autonomous Andalusia, a region in Southern Spain with a population of 1,414,386 youth aged 15–19 years old representing nearly 20% of all Spanish youth (Spanish Institute for Youth, 2017). Andalusia has the greatest number of unemployed youth in Spain with an unemployment rate of 39% (Spanish Institute for Youth, 2018b). Furthermore, data from the Program for International Student Assessment (PISA) in Andalusia showed overall scores in science, mathematics and reading below the national average and that of other countries of the Organization for Economic Cooperation and Development (OECD) (Ministry of Education, Culture and Sport, 2016). However, concerning

students' well-being, the highest score was found in Andalusia with an average of 7.58 on a 10-point scale. Thus, despite the detrimental consequences of economic crisis, high rates of youth unemployment and poor academic attainment, Andalusian youth experience more well-being than youth from other OECD countries (Ministry of Education, Culture and Sport, 2017).

The Present Chapter

The present chapter examines the 5Cs model of PYD in Spanish emerging adults by testing a model that adds new evidence on relevant relations with subjective happiness and character strengths of gratitude and optimism as mechanisms implicated in these relations. In so doing, specific aims were to examine the relations of (a) the overall and each of the 5Cs of PYD with subjective happiness; (b) the overall and each of the 5Cs of PYD with gratitude and optimism; (c) the mediating role of gratitude and optimism on the relation between the overall and each of the 5Cs of PYD and subjective happiness.

Empirical Example with Emerging Adults in Spain

The empirical example reported in this chapter involved a total of 768 emerging adults (60% female) between 17 and 29 years old ($M_{age} = 19.50$, $SD = 2.27$) enrolled in 10 educational institutions in Andalusia. In order to collect a heterogeneous sample, these institutions were selected from different provinces and educational environments (40% rural and 60% urban) and different types of school (40% public and 60% private). Following an approval by the University of Huelva's ethics board, all invited educational institutions agreed to participate with full student participation. Informed consent was obtained from all participants and parents of those under the age of 18. An anonymous self-report paper and pencil survey administered during normal class included measures of the 5Cs of PYD, subjective happiness, gratitude and optimism, as

well as relevant socio-demographic data (i.e., gender, age, nationality, cohabitation and parental education).

The sample differed on type of studies and educational levels (43% had 2 years of high school, 19% first or second year of vocational training, and 38% had the first two years of a university degree). The vast majority of the participants were Spanish (96%) and the rest were from other European or Latin-American countries. Up to 90% lived with either parents or other adults, while the remaining 10% lived with their flat mates, partners or alone. Concerning the educational level of fathers, 36% had university degree, 23% had vocational training, 21% had completed secondary education, and 21% had primary education. With regards to the educational level of mothers, 35% had university degree, 25% had vocational training, 23% had completed secondary education, and 16% had primary education.

The 5Cs of PYD were measured with The PYD Short Form ([PYD-SF]; Geldhof et al., 2014) comprised of 34 items distributed in 5 subscales to measure competence, confidence, character, connection and caring. Response options were given on a 5-point Likert scale with high score indicating high experience of the 5Cs. The PYD-SF was back translated from English to Spanish by native speakers with expertise in psychology, showing good internal reliability for an overall PYD factor with a Cronbach $\alpha = .86$. Good internal consistency was observed for confidence ($\alpha = .74$), connection ($\alpha = .73$) and caring ($\alpha = .86$) and moderate values for competence ($\alpha = .69$) and character ($\alpha = .65$). In addition, a confirmatory factor analysis following established procedures for adaptation of measures in cross-cultural research (Rutkowski & Svetina, 2017) revealed a good fit for the 5Cs factor model of PYD among the sample of emerging adults in Spain, $\chi^2(2, 768) = 11.75, p < .001, RMSEA = .08, 90\% CIs [.05, .13], CFI = .987$. For the purposes of further analyses, a mean score was calculated for each subscale with high scores indicating high experience of each C. An overall PYD score was created by calculating the mean score of all 5Cs of PYD.

Subjective happiness was measured with the Spanish adaptation of The Subjective Happiness

Scale (Extremera & Fernández-Berrocal, 2014; Lyubomirsky & Lepper, 1999) composed of four items regarding the personal experience and perception of happiness with 7 response options. All items were transformed in a composite mean score with high score indicating more happiness. Good internal reliability indicated a Cronbach's coefficient of $\alpha = .80$.

Gratitude was measured with the Spanish adaptation of The Gratitude Questionnaire (Bernabé Valero, García-Alandete, & Gallego-Pérez, 2013; Froh et al., 2011) composed by 6 items (e.g., having so much in life to be thankful for, having a long list to be grateful for etc.) answered on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*) and high score indicating more experienced gratitude. Internal reliability for the sample was $\alpha = .73$.

Optimism was measured with the Spanish adaptation of The Optimism subscale from The Life Orientation Test-Revised ([LOT-R]; Ferrando, Chico, & Tous, 2002; Scheier, Carver, & Bridges, 1994). This subscale was composed by 3 items (i.e., having the best expectations in uncertain times, being always optimistic about own future etc.) answered on a 5-point Likert scale from 0 (*I agree a lot*) to 4 (*I disagree a lot*). The mean score for all items ranged from 0 to 4 with high score indicating high levels of optimism. The optimism subscale showed moderate reliability in the present sample ($\alpha = .67$).

Analytic Plan and Main Findings

Descriptive statistics (i.e., mean, standard deviation, minimum and maximum scores) were calculated for all study variables. Zero order Pearson bivariate correlations were analyzed for the 5Cs of PYD, an overall 5Cs of PYD mean score, subjective happiness, gratitude and optimism. In order to test the main model proposed in this chapter, five regression analyses were conducted to analyze the mediation effect of gratitude (M_1) and optimism (M_2) on the relation between each 5C of PYD (X) and subjective happiness (Y). Another multiple mediation analysis was per-

formed by examining the overall 5Cs of PYD factor as independent variable (X).

The multiple mediation model was tested following relevant analytical procedures (Hayes, 2017). First, total effects of the 5Cs of PYD on subjective happiness were examined (c), as direct effects of PYD (c') on subjective happiness, when the two mediators (i.e., gratitude and optimism) were introduced in the regression analyses. Then, indirect effects were analyzed in the relation of the 5Cs of PYD with subjective happiness through gratitude and optimism. A regression-based macro for SPSS called Process v3.0 developed by Hayes (2017) was used to perform these analyses, following the recommendations described by Preacher and Kelley (2011). Specifically, a multiple partial mediation was implemented with 5000 bootstrap samples estimated for bias-corrected bootstrap 95% Confidence Intervals (CIs) for specific indirect effects. Standardized variables were created to perform these analyses, and *F* statistics, *R*² values, effect coefficients, CIs and measurement errors were reported. Figure 1 presents the multiple mediation model tested.

Descriptive Statistics and Bivariate Correlations

Table 1 presents descriptive statistics and zero-order bivariate Pearson correlations of the 5Cs of PYD, overall 5Cs of PYD factor, subjective happiness, gratitude and optimism. Descriptive statistics showed high scores in the overall 5Cs of PYD and in each C. The highest means emerged for caring (*M* = 4.07, *SD* = .70) and character (*M* = 3.85, *SD* = .47), whereas the lowest mean was found for competence (*M* = 3.18, *SD* = .65). High mean scores were reported for subjective happiness (*M* = 5.09, *SD* = 1.15), gratitude (*M* = 5.59, *SD* = .90) and optimism (*M* = 2.61, *SD* = .82).

Regarding correlation analyses, the 5Cs showed positive associations with subjective happiness, gratitude and optimism (Table 1). Confidence, $r(766) = .60, p < .001$ and connection, $r(766) = .45, p < .001$, presented the strongest positive correlations with subjective happiness, while caring showed the weakest one, $r(766) = .08, p = .029$. Moderate correlation was observed between confidence and optimism,

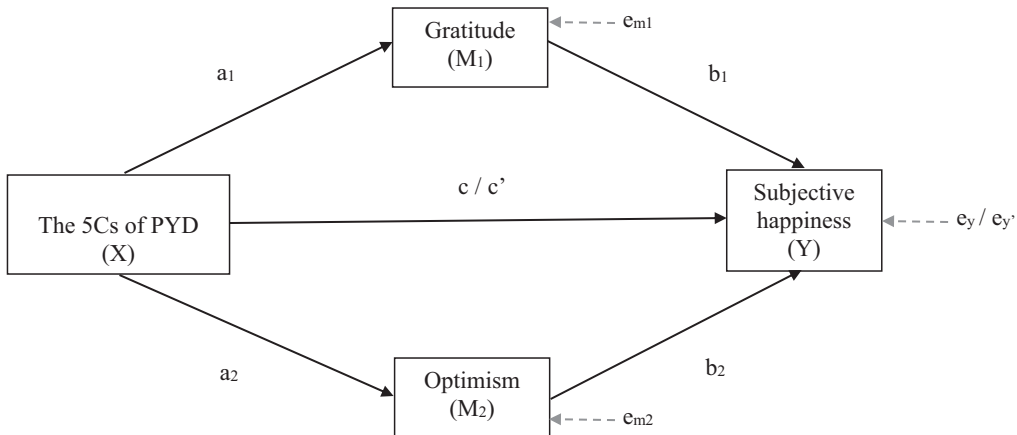


Fig. 1 Multiple partial mediation model of gratitude and optimism on the relation between the 5Cs of PYD and subjective happiness (Note. X = independent variable; M₁ = first partial mediator; M₂ = second partial mediator; Y = dependent variable; a₁ = effect of X on M₁; a₂ = effect

of X on M₂; b₁ = effect of M₁ on Y; b₂ = effect of M₂ on Y; c = total effect of X on Y; c' = direct effect of X on Y; e_{m1} = error for M₁; e_{m2} = error for M₂; e_y = Error for Y in the total effect model; e_{y'} = Error for Y in the direct effect model)

Table 1 Descriptive statistics, internal reliability and bivariate correlations of main variables

| | M | SD | Min | Max | α | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
|-------------------------|------|------|------|------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. Competence | 3.18 | .65 | 1.33 | 4.83 | .69 | | | | | | | | |
| 2. Confidence | 3.69 | .63 | 1.00 | 5.00 | .74 | .53*** | | | | | | | |
| 3. Connection | 3.66 | .56 | 1.63 | 5.00 | .73 | .34*** | .49*** | | | | | | |
| 4. Caring | 4.07 | .70 | 1.00 | 5.00 | .86 | .03 | .09* | .28*** | | | | | |
| 5. Character | 3.85 | .47 | 1.75 | 4.88 | .65 | .17*** | .37*** | .44*** | .55*** | | | | |
| 6. Overall 5Cs of PYD | 3.69 | .40 | 2.27 | 4.83 | .86 | .63*** | .73*** | .73*** | .59*** | .71*** | | | |
| 7. Subjective happiness | 5.09 | 1.15 | 1.00 | 7.00 | .80 | .36*** | .60*** | .45*** | .08* | .28*** | .52*** | | |
| 8. Gratitude | 5.59 | .90 | 1.83 | 7.00 | .73 | .15*** | .34*** | .46*** | .37*** | .42*** | .51*** | .44*** | |
| 9. Optimism | 2.61 | .82 | 0.00 | 4.00 | .67 | .29*** | .49*** | .39*** | .14** | .24*** | .45*** | .52*** | .38*** |

Note. *M* = Mean; *SD* = Standard Deviation; *Min* = Minimum; *Max* = Maximum; α = Cronbach's alpha reliability coefficient

* $p < .05$; ** $p < .01$; *** $p < .001$

$r(766) = .49, p < .001$, as well as between connection and gratitude, $r(766) = .46, p < .001$. Furthermore, the 5Cs of PYD were positively correlated with the exception of the correlation between competence and caring, which did not reach statistical significance. The strongest associations among the 5Cs were observed between competence and confidence, $r(766) = .53, p < .001$ and between caring and character, $r(766) = .55, p < .001$. Moreover, subjective happiness, gratitude and optimism were also positively associated with moderate correlation coefficients (Table 1).

Multiple Partial Mediation

Table 2 reports the findings of the regression analyses testing the mediation effect of gratitude

and optimism on the relation of the overall 5Cs of PYD and each C with subjective happiness. First, the findings from the total effects in the regression analyses are presented. All 5Cs of PYD had a positive total effect on subjective happiness, $t(766) = 16.71, p < .001, 95\% \text{ CIs } [.46, .58]$. Moreover, the overall 5Cs of PYD factor had a positive effect on both gratitude, $t(766) = 16.29, p < .001, 95\% \text{ CIs } [.45, .57]$ and optimism, $t(766) = 14.08, p < .001, 95\% \text{ CIs } [.39, .52]$.

Further regression analyses examined the effects of each of the 5Cs on subjective happiness and the two character strengths (i.e., gratitude and optimism). Regarding total effects on subjective happiness, competence, $t(766) = 10.58, p < .001, 95\% \text{ CIs } [.29, .42]$, confidence, $t(766) = 20.64, p < .001, 95\% \text{ CIs } [.54, .65]$, connection, $t(766) = 14.08, p < .001, 95\% \text{ CIs } [.39, .52]$, caring, $t(766) = 2.18, p = .029, 95\% \text{ CIs }$

Table 2 Regression analyses of the partial mediation of gratitude and optimism on the relation between the 5Cs, overall 5Cs of PYD and subjective happiness

| X | | Competence | Confidence | Connection | Caring | Character | Overall 5Cs of PYD |
|--|-----------------|------------|------------|------------|-----------|-----------|--------------------|
| Gratitude (M ₁) | R ² | .02 | .12 | .21 | .14 | .18 | .26 |
| | F | 17.46*** | 102.77*** | 200.81*** | 122.76*** | 165.88*** | 265.26*** |
| | a ₁ | .15*** | .34*** | .46*** | .37*** | .42*** | .51*** |
| | e _{m1} | .98 | .88 | .79 | .86 | .82 | .74 |
| Optimism (M ₂) | R ² | .08 | .24 | .15 | .02 | .06 | .21 |
| | F | 67.99*** | 244.39*** | 134.47*** | 14.34*** | 45.87*** | 198.33*** |
| | a ₂ | .29*** | .49*** | .39*** | .14*** | .24*** | .45*** |
| | e _{m2} | .92 | .76 | .85 | .98 | .94 | .79 |
| Direct effect model Subjective happiness (Y) | R ² | .38 | .46 | .37 | .34 | .34 | .39 |
| | F | 154.69*** | 215.06*** | 151.44*** | 132.87*** | 131.00*** | 161.99*** |
| | c' | .22*** | .41*** | .23*** | -.09** | .07* | .28*** |
| | β ₁ | .27*** | .20*** | .20*** | .31*** | .25*** | .17*** |
| | β ₂ | .36*** | .24*** | .36*** | .41*** | .41*** | .33*** |
| | e _y | .62 | .54 | .63 | .66 | .66 | .61 |
| Total effect model Subjective happiness (Y) | R ² | .13 | .36 | .21 | .01 | .08 | .27 |
| | F | 111.95*** | 426.04*** | 198.16*** | 4.78* | 62.98*** | 279.40*** |
| | C | .36*** | .60*** | .45*** | .08* | .27*** | .52*** |
| | e _y | .87 | .64 | .80 | .99 | .92 | .73 |

Note. X = independent variable; M₁ = first partial mediator; M₂ = second partial mediator; Y = dependent variable; a₁ = effect of X on M₁; a₂ = effect of X on M₂; b₁ = effect of M₁ on Y; b₂ = effect of M₂ on Y; c' = total effect of X on Y; c' = direct effect of X on Y; e_{m1} = Error for M₁; e_{m2} = Error for M₂; e_y = Error for Y in the total effect model; e_y = Error for Y in the direct effect model; R² = explained variance; F = snedecor's F statistic
* $p < .05$; ** $p < .01$; *** $p < .001$

[.01, .15] and character, $t(766) = 7.94, p < .001$, 95% CIs [.21, .34] presented positive relations. The findings indicated that the greatest total associations with subjective happiness were observed for confidence and connection, whereas the lowest was found for caring. Moreover, the 5Cs showed positive effects on both gratitude and optimism, although with some size differences. Competence, $t(766) = 4.18, p < .001$, 95% CIs [.08, .22], confidence, $t(766) = 10.14, p < .001$, 95% CIs [.28, .41], connection, $t(766) = 14.17, p < .001$, 95% CIs [.39, .52], caring, $t(766) = 11.08, p < .001$, 95% CIs [.31, .44] and character, $t(766) = 12.88, p < .001$, 95% CIs [.36, .49] had a positive association with gratitude. The findings revealed that connection, character and caring presented the greatest effects on gratitude. Regarding optimism, competence, $t(766) = 8.25, p < .001$, 95% CIs [.22, .35], confidence, $t(766) = 15.63, p < .001$, 95% CIs [.43, .55], connection, $t(766) = 11.60, p < .001$, 95% CIs [.32, .45], caring, $t(766) = 3.79, p < .001$, 95% CIs [.06, .21] and character, $t(766) = 6.77, p < .001$, 95% CIs [.17, .31] also showed a positive effect. Confidence, connection and competence had the strongest effect on optimism.

In a second step, the findings of the partial mediation in the regression analyses are described. The overall 5Cs of PYD showed a positive direct effect on subjective happiness, $t(764) = 8.18, p < .001$, 95% CIs [.22, .35] when gratitude, $t(764) = 5.01, p < .001$, 95% CIs [.10, .23] and optimism, $t(764) = 10.08, p < .001$, 95% CIs [.26, .39] were introduced as partial mediators. Thus, the overall 5Cs of PYD had a positive effect on subjective happiness both directly and indirectly through gratitude, $\beta = .09$, BootSE = .02, Boot 95% CIs [.04, .13], and optimism, $\beta = .15$, BootSE = .02, Boot 95% CIs [.10, .20] which in turn were positively related to subjective happiness.

The findings also indicated that optimism had a greater effect on subjective happiness than gratitude. The variables in the multiple partial mediation model explained 39% of the variance in subjective happiness. Concerning each 5C of PYD, after the inclusion of the partial mediators (i.e., gratitude and optimism), competence, $t(764) = 7.23, p < .001$, 95% CIs [.16, .27], confi-

dence, $t(764) = 13.14, p < .001$, 95% CIs [.35, .47], connection, $t(764) = 6.77, p < .001$, 95% CIs [.16, .29] and character, $t(764) = 2.26, p = .024$, 95% CIs [.01, .14] showed positive relations with subjective happiness, whereas caring had a negative one, $t(764) = -2.97, p = .003$, 95% CIs [-.16, -.03]. Table 3 presents the findings for the indirect effects by the overall 5Cs of PYD and each C of PYD on subjective happiness through gratitude and optimism.

In summary, competence, confidence, connection, caring and character had significant indirect positive effect on subjective happiness through gratitude and optimism. The strongest effect on subjective happiness was observed for confidence, and the lowest for character. Competence and connection showed similar size effects on subjective happiness. Caring had a negative indirect effect on subjective happiness after including the mediation effects of gratitude and optimism.

Conclusions

This chapter examined the relation between the 5Cs of PYD and subjective happiness, and the mediation effects of gratitude and optimism in a Spanish sample of emerging adults for the first time. Three major findings were observed. First, the overall 5Cs of PYD factor as well as each C presented a positive relation with subjective happiness in line with earlier work (Benson et al., 2006). Second, the overall PYD factor and the 5Cs presented a positive relation with both gratitude and optimism, also consistent with prior work (Park, 2004b). Third, both gratitude and optimism were partial mediators of the relations between the 5Cs of PYD and subjective happiness. In turn, both gratitude and optimism had a positive effect on subjective happiness as also confirmed by relevant related work (Oriol, Miranda, Bazán, & Benavente, 2020; Salces-Cubero, Ramírez-Fernández, & Ortega-Martínez, 2019; Sun & Kong, 2013). Thus, the 5Cs of PYD showed a positive association with subjective happiness both directly and indirectly through its positive impact on gratitude and optimism.

Table 3 Indirect effects of overall 5Cs of PYD and each C on subjective happiness through gratitude and optimism

| Indirect Effects of X on Subjective Happiness | | Competence | Confidence | Connection | Caring | Character | Overall 5Cs of PYD |
|---|-----------|------------|------------|------------|--------|-----------|--------------------|
| Gratitude | B | .04 | .07 | .09 | .12 | .11 | .09 |
| | Boot SE | .01 | .02 | .02 | .02 | .02 | .02 |
| | Boot LLCI | .02 | .04 | .05 | .08 | .07 | .04 |
| | Boot ULCI | .07 | .10 | .13 | .15 | .15 | .13 |
| Optimism | B | .10 | .12 | .14 | .06 | .10 | .15 |
| | Boot SE | .02 | .02 | .02 | .02 | .02 | .02 |
| | Boot LLCI | .06 | .08 | .10 | .03 | .06 | .10 |
| | Boot ULCI | .14 | .16 | .19 | .09 | .14 | .20 |

Note. X = independents variables; B = coefficients; Boot SE = Bootstrapped Standard Error; Boot LLCI = Bootstrapped Lower Level Confidence Interval; Boot ULCI = Bootstrapped Upper Level Confidence Interval

Based on the empirical example reported in this chapter, three specific mechanisms of the influence of the 5Cs of PYD on subjective happiness were observed. First, competence and confidence had strong positive effect on subjective happiness directly and indirectly through their influence on optimism. Second, connection had a strong positive effect on subjective happiness directly and indirectly through its positive influence on optimism and gratitude. Third, caring and character had moderate effect on subjective happiness directly and indirectly through their influence on gratitude.

Based on such evidence, considerations for the relevant and novel contributions of this chapter may be underlined. The chapter examined PYD in Spanish emerging adults providing empirical support for the 5Cs model consistent with previous research in the U.S., Europe, Asia and Africa (Bowers et al., 2010; Chen et al., 2018; Conway et al., 2015; Wiium et al., 2019). To date, only few studies have focused on positive development in Spain, targeting primarily adolescent samples. Furthermore, the present chapter has integrated the PYD framework within the positive psychology field providing a developmental approach to the analysis of optimal functioning in emerging adulthood (Larson, 2000; Seligman & Csikszentmihalyi, 2000).

The main contribution of this chapter lies in the novel model test on the relation between the 5Cs of PYD and subjective happiness and related explanatory mechanisms. The present chapter adds evidence on the mediational role of character strengths in the association between PYD and well-being (Benson et al., 2006; Park, 2004b). Character strengths in terms of gratitude and optimism partly explained the relation between the 5Cs of PYD and subjective happiness (Peterson et al., 2007). The 5Cs were positively related with subjective happiness directly and through the influence of gratitude and optimism. Moreover, the differential role of each C is also an important contribution. From a 5-component model of PYD, specific Cs presented differential effect on subjective happiness through optimism and gratitude, confirming that positive expectations about the future require a positive self-

efficacy in the interaction with the environment, as well as a positive assessment of the social context as supportive (Karademas, 2006).

Concerning the Spanish context, despite high unemployment rate and low social participation in youth (Comas Arnau, 2010; Spanish Institute for Youth, 2018b), the high scores in subjective well-being shown in the PISA report (Ministry of Education, Culture and Sport, 2017) and corroborated in this chapter, could be explained by the experience of high PYD competencies and high grateful and optimistic dispositions. In fact, a strong propensity and experience of PYD was already documented among adolescent (Antolín Suárez et al., 2011) and adult samples in Spain (Azañedo, Fernández-Abascal, & Barraca, 2014).

Despite these contributions, some future prospects are worth mentioning. As a cross-sectional design was used, no causal relations can be inferred nor associations between antecedents and consequences. Prospective and experimental designs are recommended as future research lines. Furthermore, a self-reported data may be complemented with socioeconomic and objective measures on quality of life as well as data provided by relevant others, for instance teachers, family, or peers.

Implications for Research, Policy and Practice

Relevant implications derive from this chapter. Regarding research, interested researchers can reliably apply the 5Cs of PYD by enlarging the age range and diversity of regions and ethnic groups in Spain. Based on the model presented here, a qualitative research with focus groups or individual interviews could provide a deeper understanding of the relations between the 5Cs of PYD, character strengths and subjective happiness. Importantly, this chapter provides methodological evidence for the 5Cs model of PYD in Spain, so that an international comparison may be of interest, as well as further PYD refinements in the transition to adulthood across global contexts and cultures (Wiium & Dimitrova, 2019).

The present chapter outlines relevant implications for policy formulation and implementation.

To date, policy actions in Spain have focused on adolescents with less attention to emerging adults. Although most school health promotion programs in Spain have tried to prevent risk behaviors, rather than developing competencies, the importance of PYD models has increased in the last decade (Adler & Seligman, 2016; Pertegal, Oliva, & Hernando, 2010). For example, Pertegal et al. (2010) list major components for school-based PYD policy programs to increase effectiveness, the improvement of the climate in the educational center, and the training and involvement of educators. Further policy implications promoted by this chapter may involve the positive education framework to foster positive emotions, engagement, meaning and accomplishment among emerging adults through the 5Cs, subjective happiness, gratitude and optimism (Hameed, Mehrotra, & Murthy, 2020).

Relevant practice implications may be derived to design programs. The model presented in this chapter suggests the integration of PYD and positive psychology interventions to promote subjective happiness in emerging adults. Practice that builds on the joint development of the 5Cs of PYD and character strengths of gratitude and optimism can foster well-being during the transition to adulthood. Yet, to date, intervention programs have addressed separately PYD competences and character strengths. On the one hand, programs to promote PYD are effective in school, family and community systems as well as developing subjective well-being (Hull et al., [this volume](#); Waid & Urich, 2020). On the other hand, some positive psychology interventions (i.e., treatment programs or intentional activities) aimed at cultivating positive feelings, behaviors, or cognitions effectively enhance well-being and reduce depressive symptoms (Sin & Lyubomirsky, 2009). This chapter suggests the integration of interventions to develop the 5Cs and strategies to build character strengths to promote PYD. Character strengths may be initially examined in order to guide the promotion of the 5Cs and allow young people to flourish. Competence development may present a greater impact on subjective happiness through the use of own character

strengths. Thus, nurturing competence, confidence, character, connection and caring in young people may have strong impact on subjective happiness when optimism and gratitude are used as thriving mechanisms.

In conclusion, this chapter provided evidence for the mechanisms through which the 5Cs of PYD relate to happiness in emerging adults in Spain. The model presented in the chapter indicated that the relation between the 5Cs of PYD and subjective happiness was partly explained through associations with character strengths of gratitude and optimism. In the case of Spanish emerging adults, subjective happiness was reflected by a set of PYD competencies and character strengths. Such evidence suggests the integration of research, policy and practice efforts to foster PYD and character strengths in order to increase effectiveness in the promotion of well-being during the transition to adulthood (Dimitrova & Wiium, [this volume](#)).

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Positive Youth Development and Resilience Among Youth in Iceland: The Importance of Social Context and Self-Esteem for Life Satisfaction

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Abstract

Building on two developmental science approaches of Positive Youth Development (PYD) and resilience, the aim of this chapter is to explore correlates of life satisfaction among youth in Iceland. In particular, the association between youth social experiences, self-esteem and life satisfaction is investigated for an overall youth sample and for two sub-samples of youth reporting family conflict/violence or sexual abuse. We present data from a cross-sectional national school survey among 5803 youth in Iceland. The findings

indicated that while negative experiences of family conflict/violence and sexual abuse were related to less life satisfaction among youth, positive social experiences of parental support, friends' support, positive attitude towards school and sport participation were associated with more life satisfaction (main effects). Positive social experiences were both directly and indirectly (mediation effects through high self-esteem) related to life satisfaction. Finally, self-esteem was more strongly related to life satisfaction among youth reporting family conflict/violence or sexual abuse than those who did not report such experiences (interaction effects). These findings underscore the importance of family, friends, schools and extracurricular activities when fostering life satisfaction among youth. Furthermore, the chapter highlights the importance of high self-esteem when understanding life satisfaction of youth facing negative experiences of family conflict/violence or sexual abuse.

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Keywords

Life satisfaction · Positive youth development
· Resilience · Social environment · Self-
esteem · Sexual abuse · Family conflict/
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Life satisfaction is a relevant dimension of subjective well-being considered an individual global judgment or appraisal of own quality of life (Diener, Suh, Lucas, & Smith, 1999; Gilman & Huebner, 2003). Life satisfaction and subjective well-being are essential for good mental health and related research has been greatly encouraged (Proctor, Linley, & Maltby, 2009; Willroth, Atherton, & Robins, 2020), especially regarding the interaction between social environment, personal experiences and youth life satisfaction (Masten, 2014; Povedano-Diaz, Muñiz-Rivas, & Vera-Perea, 2020). Building on two developmental science approaches of Positive Youth Development (PYD) and resilience, the goal of this chapter is to explore the associations between youth social experiences, self-esteem and life satisfaction.

Positive Youth Development

The PYD approach holds that the best way to increase the likelihood of youth health and well-being and prevent problems is to assist youth in reaching their full potential through support and opportunities in their community (Roehlkepartain & Blyth, 2020). Core PYD assumption regards the existence of critical experiences, opportunities and supports, labelled as developmental assets, which foster positive development and well-being (Scales, Roehlkepartain, & Shramko, 2017). These assets include family relationships and support (Bradley, Ferguson, & Zimmerman-Gembeck, *this volume*; Kosic, Wiium, & Dimitrova, *this volume*), supportive peers with positive values (Bradley et al., *this volume*), commitment to school and learning (Abubakar & Dimitrova, 2016; Acosta, Chinman, & Phillips, *this volume*; Chen, Wiium, Dimitrova, & Chen, 2019) and constructive use of time (Uka et al., *this volume*) through participation in organized extracurricular activities (Kaniušonytė & Truskauskaitė-Kunevičienė, *this volume*; Larsen & Holsen, *this volume*; for new PYD conceptualizations see Abdul Kadir, Mohd, & Dimitrova, *this volume*; Dimitrova et al., *this volume*; Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, *this volume*).

A large cross-cultural study conducted in 11 countries supported the importance of family, peers, school and community factors for subjective well-being (Lee & Yoo, 2015). Although economic variables including Gross Domestic Product (GDP) and inequality were not significantly related to well-being, after controlling for country specific and cultural factors, the most consistent correlates of life satisfaction across countries were positive social interactions among children, family members and peers as well as their feelings of safety in their community. This is in accordance with recent cross-national and longitudinal studies demonstrating the importance of family, friends and leisure activities when predicting life satisfaction of youth (Marcionetti & Rossier, 2019; Mínguez, 2020; Schmiedeberg & Schroder, 2017).

Positive experiences and good social relationships correlate positively with life satisfaction, whereas negative experiences with less life satisfaction among youth (Proctor et al., 2009). Several studies among youth in the United States and Europe found that both acute negative life events and chronic life stressors were independently related to less life satisfaction (Ash & Huebner, 2001; Kettlewell et al., 2020; McMahon, Creaven, & Gallagher, 2020). Further, the high number of stressful life events was significantly and independently related to less life satisfaction among youth when controlling for important personality variables (McKnight, Huebner, & Suldo, 2002). Longitudinal studies have supported the detrimental effects stressful life events in childhood, including sexual abuse and family conflict/violence, can have on later mental disorders and well-being (Fergusson, McLeod, & Horwood, 2013; Paradis et al., 2009). Our earlier studies among Icelandic youth echo these results and show that family conflict/violence and childhood sexual abuse are independently associated with varied emotional and behavioral problems, such as depressed mood, anger, substance use, delinquency, suicidal behaviour and self-injurious behaviors (Asgeirsdottir, Gudjonsson, Sigurdsson, & Sigfusdottir, 2010; Asgeirsdottir, Sigfusdottir, Gudjonsson, & Sigurdsson, 2011; Sigfusdottir, Asgeirsdottir, Gudjonsson, & Sigurdsson, 2008). Such empirical evidence

underscores the importance of including stress related contextual variables in comprehensive models of youth life satisfaction (Luhmann, Fassbender, Alcock, & Haehner, 2020; McKnight et al., 2002).

Resilience Among Youth

Both developmental science approaches of positive youth development and resilience aim for understanding and promoting positive adaptation (Masten, 2014, 2019). However, while the PYD focuses on youth in general, the resilience is concerned with positive adaptation among individuals or groups who are faced with significant adversity or risk. Capitalizing on both approaches allows for the investigation of predictors of positive adaptation among the general population of youth as well as among particular groups of youth who are at specific risk for problematic outcomes (Masten, 2014). Accordingly, scholars have pointed out the value of combining or integrating these approaches in light of their strengths and weaknesses (Arat & Wong, 2018; Masten, 2014; Small & Memmo, 2004). One of the weaknesses of the PYD approach is that it overlooks the fact that some youth face hazardous adversities and risks, which can completely jeopardize their health and adaptation if overlooked (Small & Memmo, 2004). These individuals or groups may need specific support to protect them from harm, help them to adapt or to recover.

The detection of protective factors and their underlying processes is of key interest when studying resilience of youth as it helps to explain positive outcomes when facing particular adverse experiences (Masten, 2013). Protective factors have been hypothesized to operate on three broad interrelated levels—the individual, family and community. These levels are generally assumed to interact with stressful life experiences (interaction effect) and serve a more powerful functioning in the context of risky or hazardous experience (Masten, 2013, 2014, 2019). If an interaction effect is not present, but the factor significantly associates with the outcome variable under study, indicating a main effect, the term promotive fac-

tor is used referring to factors, which relate to better adaptation across varying levels of risk (Masten, 2014). According to Masten (2014), the protective and promotive factors observed in resilience studies are strikingly similar to the assets described in the PYD approach.

A recent review including 22 studies of resilience factors of youth aged 13–25 years, who had experienced childhood adversity, including family discord, traumatic life events and childhood abuse and maltreatment, supported the protective role of individual, family and community factors. The results indicated that individual (i.e., high self-esteem), family (i.e., family support, cohesion and parental involvement) and community factors (i.e., high social support) were particularly important when predicting less likelihood of psychopathology among youth facing childhood adversity (Fritz, de Graaff, Caisley, van Hermelen, & Wilkinson, 2018). Related work of resilience highlights the influence of the social context when predicting psychopathology among youth at risk. This is even more so when taking into account that some individual level factors, including self-esteem, are shaped and modified by the individual social experiences, such as family and friends' support, positive perception of school climate and extracurricular activities (Dimitrova, Ferrer-Wreder, & Ahlen, 2018; Slutzky & Simpkins, 2009; Way & Robinson, 2003). Accordingly, self-esteem is an important mediator between these social experiences of youth and their mental health outcomes (Asgeirsdottir et al., 2010; Gaylord-Harden, Ragsdale, Mandara, Richards, & Petersen, 2007).

Concerning well-being, most studies examining protective factors for adverse childhood experiences have focused on negative outcomes in terms of psychopathology and problem behaviors (Afifi & MacMillan, 2011; Fritz et al., 2018). Less attention has been given to positive outcomes, such as life satisfaction and subjective well-being (Seligman & Csikszentmihalyi, 2000). One recent prospective study indicated that positive opinion of school, engagement in extracurricular activities and not being bullied were predictors of mental well-being among youth who had experienced maltreatment in

childhood before the age of 5 (Khambati, Mahedy, Heron, & Emond, 2018). Because of few cases of sexual abuse before age of 5 years, the researchers could only investigate factors associated with physical and emotional maltreatment. Further studies are needed to establish the protective role of individual, family and community level factors in the understanding of youth life satisfaction. This is particularly true for child sexual abuse, since little work has addressed this important issue for that subgroup of youth who can be faced with life threatening circumstances (Fergusson et al., 2013; Fuller-Thomson, Lacombe-Duncan, Goodman, Fallon, & Brennenstuhl, 2020; Sigfusdottir, Asgeirsdottir, Gudjonsson, & Sigurdsson, 2013).

The Icelandic Context and Positive Youth Development

Iceland is a Nordic country, an island in the North Atlantic. The population is 348,450 people of which 67% belong to the Lutheran Church, 4% to the Catholic Church and 29% to other smaller religious communities or no religious group (Statistics Iceland, 2018). Young people aged 15–24 years represent approximately 13% of the total population (Central Intelligence Agency, 2020). Schooling is obligatory up to 15 years and is funded by the municipalities and supervised by the Ministry of Education. After secondary school, 95% of 16 year olds start upper secondary school, 88% continue at age 17 and 83% at age 18 (Statistics Iceland, 2018).

Iceland is a welfare state with emphasize on governmental responsibility for the welfare of its citizens (Ydesen & Buchardt, 2020). The country has one of the lowest infant mortality rates and potential years of life lost compared to other OECD (Organization for Economic Co-operation and Development) countries in the last two decades (OECD, 2018). In addition, the country scores high on gender equality (World Economic Forum, 2017) and has repeatedly been among the top 5 countries on measures of happiness and life satisfaction among youth and adults (Helliwell et al., 2020; OECD, 2018).

In the late 1990s, Iceland was faced with robust increase in youth substance use that prompted authorities, practitioners, parents and researchers to join forces to address these increasing rates (Sigfusdottir, Thorlindsson, Kristjansson, Roe, & Allegrante, 2008). The aim was to develop an evidence-based model to prevent early substance use and to promote health and well-being among youth in Iceland. This model, called the Icelandic Model, is a community based primary prevention model drawing on some strengths of PYD and resilience approaches. The model aims to promote a broad range of protective factors and reduce risk factors of youth substance use by improving social environment, through family, peer groups, schools and extra-curricular activities (Kristjansson et al., 2020). In line with the PYD approach, the model focuses on the promotion of health and well-being of youth, emphasizing the importance of mobilizing community involvement in positive social reform and recognizing that risk and protective factors may vary in importance for individuals or subgroups according to the resilience approach (Asgeirsdottir, Kristjansson, Sigfusson, Allegrante, & Sigfusdottir, 2020; Sigfusdottir, Thorlindsson, et al., 2008).

As part of the Icelandic model, a survey called Youth in Iceland is administered regularly among youth in all schools in the country, which is used to guide decision making and outcome evaluation of the model at a community level. Since the implementation of the model in Iceland, alcohol and smoking behaviors among youth have dramatically decreased. In addition, positive changes in youth social environment have occurred, including higher levels of parental monitoring and support as well as increased participation of youth in organized leisure time activities supervised by adults (Kristjansson et al., 2016; Kristjansson, James, Allegrante, Sigfusdottir, & Helgason, 2010). Similar results have been observed following implementation of the model in other cultural settings (Asgeirsdottir et al., 2020). Additional outcome measures have also been studied, including happiness among youth, which increased significantly through 2000 and 2010 in Iceland and has been linked to improved

parental support during that same period (Gudmundsdottir et al., 2016).

The Present Chapter

In this chapter, we use the Youth in Iceland survey to explore the relations between the social experiences of 16–17 years old youth with their family, peer group, school and sport participation, and self-esteem and life satisfaction. Building on both developmental approaches of PYD and resilience (Masten, 2014), these relations were examined for an overall youth sample and for two subgroups of youth who have experienced family conflict/violence or sexual abuse. By doing so, this chapter contributes to the PYD field by addressing a potential limitation of PYD of not taking into account that social resources and opportunities may vary in importance for subgroups of youth facing very stressful experiences compared to those who do not (Small & Memmo, 2004). This chapter also contributes to the resilience literature by using an outcome variable that measures positive adaptation in the form of life satisfaction rather than lack of psychopathology as is more common in that field of study (Twum-Antwi, Jefferies, & Ungar, 2020).

Building on the literature from PYD and resilience fields, four hypotheses were advanced in that (1) negative life experiences in the form of family conflict/violence and sexual abuse are associated with less life satisfaction among youth; (2) positive life experiences in the form of parental support, friends' support, positive attitude towards school and organized sport participation are independently associated with more life satisfaction among youth; (3) self-esteem mediates the relation between social experiences (i.e., parental support, friends' support, positive attitude towards school and sport participation) and life satisfaction among youth; (4) parental support, friends' support, positive attitude towards school, organized sport participation and self-esteem are stronger predictors of life satisfaction among youth who report family conflict/violence or sexual abuse compared to those who do not report such experiences.

To our knowledge, this is the first investigation on the interaction effects between sexual abuse and family conflict/violence with individual, family and wider community factors when predicting life satisfaction among youth. Earlier studies have indicated gender differences on the impact of stressful experiences as well as self-esteem and social support on psychological outcomes (Asgeirsdottir et al., 2010; Sigfusdottir, Asgeirsdottir, et al., 2008). Thus, we examined whether the effects of parental support, friends' support, attitude towards school, sport participation, self-esteem, sexual abuse and family conflict/violence on life satisfaction differed by gender. Potentially confounding demographic variables, including age (Currie et al., 2012), family structure (Levin & Currie, 2010) and socio-economic status (Schels, 2020) were controlled for.

An Empirical Study of Youth in Iceland

A cross-sectional survey was conducted among students in all upper secondary schools in Iceland. In total, 5803 youth aged 16–17 years old (51% females) participated representing nearly 71% of all registered students in this age group (see Table 1). Approximately 68% of the participants lived with both parents, 88% reported speaking only Icelandic in their home, 10% both Icelandic and another language, and 2% reported speaking only another language than Icelandic in their home.

Demographic variables included gender (0 = *females*, 1 = *males*), age (0 = *16 years*, 1 = *17 years*), family structure (0 = *living in other family arrangements*, 1 = *living with both biological parents*) and as an indicator of socio-economic status (SES), participants were asked about how well off financially their family was in comparison to the average family in Iceland (answers ranged from 0 = *much worse off* to 6 = *much better off*).

Family conflict/violence was assessed with three questions developed for the Youth in Iceland survey, asking whether the participants had ever

Table 1 Descriptive statistics of main variables for the whole sample and gender

| Categorical variables | Total | | | Females | Males | GP |
|--------------------------|----------|--------|-------------|-------------|-------------|----|
| | <i>n</i> | Value | % | % | % | |
| Age | | | | | | |
| 16 years | 3119 | 0 | 53.7 | 53.5 | 54.0 | |
| 17 years | 2684 | 1 | 46.3 | 46.5 | 46.0 | ns |
| Family status | | | | | | |
| Other arrangements | 1823 | 0 | 31.8 | 32.6 | 31.1 | |
| Both biological parents | 3901 | 1 | 68.2 | 67.4 | 68.9 | ns |
| Sexual abuse | | | | | | |
| No | 4606 | 0 | 84.9 | 77.5 | 92.9 | |
| Yes | 820 | 1 | 15.1 | 22.5 | 7.1 | ** |
| Family conflict/violence | | | | | | |
| No | 4203 | 0 | 72.4 | 70.1 | 74.9 | ** |
| Yes | 1600 | 1 | 27.6 | 29.9 | 25.1 | |
| Scales | <i>n</i> | Range | Mean (SD) | Mean (SD) | Mean (SD) | |
| Life satisfaction | 5713 | 0–0.60 | 0.48 (0.14) | 0.47 (0.15) | 0.50 (0.14) | ** |
| Family SES | 5758 | 0–6 | 3.6 (1.1) | 3.5 (1.1) | 3.7 (1.1) | ** |
| Parental support | 5692 | 0–15 | 12.6 (3.2) | 12.8 (3.2) | 12.5 (3.2) | * |
| Friends' support | 5688 | 0–15 | 11.6 (3.4) | 12.4 (3.0) | 10.7 (3.5) | ** |
| Attitude towards school | 5546 | 0–56 | 41.0 (8.0) | 40.9 (7.9) | 41.2 (8.1) | ns |
| Sport participation | 5483 | 0–5 | 1.6 (1.9) | 1.4 (1.9) | 1.76 (2.0) | ** |
| Self-esteem | 5465 | 0–30 | 21.2 (6.4) | 19.7 (6.6) | 22.9 (5.8) | ** |

Note. Values for life satisfaction are reported after normal transformation of the measure. *SD* = Standard Deviation; *SES* = Socio-Economic Status; *GP* = Gender Comparison
 * $p < .01$; ** $p < .001$; *ns* = non-significant

witnessed severe arguments between parents, physical violence at home or experienced physical violence at home. Each statement was rated as either present (1) or absent (0) (Asgeirsdottir et al., 2010).

Sexual abuse was assessed with five questions asking whether the participants had ever been exposed to a set of examples of sexual acts against their will (Mossige, 2017). Each statement was rated as either present (1) or absent (0) (Asgeirsdottir et al., 2010; Mossige, 2017).

Protective factors investigated here were represented by parental support, friends' support, attitude towards school, organized sport participation and self-esteem. *Parental support* was assessed with The Perceived Parental Support Scale, developed for the *Youth in Iceland* survey and has demonstrated good construct validity and reliability (Kristjansson, Sigfusdottir, Karlsson, & Allegrante, 2011). The scale consisted of five items asking how difficult or easy it is for youth

to get from their parents caring and warmth, discussion on personal affairs, advice about studies. Response options on a 4-point Likert scale ranged from 0 (*very difficult*) to 3 (*very easy*). The five items were combined into a composite score with responses ranging from 0–15 points and good reliability indicated by Cronbach's alpha ($\alpha = .91$). In addition, *friends' support* was assessed with the same five items used for parental support adapted for friends. The five items were transformed in a composite score with Cronbach's alpha of $\alpha = .90$, indicating good reliability of the measure.

Attitude towards school was assessed with a scale developed for the *Youth in Iceland* survey with demonstrated good reliability (Asgeirsdottir et al., 2010). The scale consisted of 14 items on attitudes and feelings towards school, school work, teachers and fellow students. Response options on a 5-point Likert scale ranged from 0 (*almost always applies to me*) to 4 (*almost never*

applies to me). A composite score of the items ranged from 0–56 points, with high scores indicating more positive attitudes towards school and Cronbach's alpha of $\alpha = .81$, indicating good reliability of the measure.

Sport participation was measured with one question on the frequency of engagement in sports (practice or compete) in a sports club. The question was part of a scale developed for the Youth in Iceland survey measuring participation in sports or physical training (Asgeirsdottir et al., 2010). The responses were rated on a 6-point Likert scale from 0 (*almost never*) to 5 (*almost every day*).

Self-esteem was measured with The Rosenberg Self-Esteem Scale ([RES]; Rosenberg, 1965). The scale comprised 10 self-appraisal statements, five positively formulated and five negatively formulated answered on a 4-point Likert scale ranging from 0 (*strongly agree*) to 3 (*strongly disagree*). The positively formulated statements were recoded (reversed) and combined with the negatively formulated statements into a composite score ranging from 0–30 point, with high scores indicating high degree of self-esteem and Cronbach's alpha of $\alpha = .90$, indicating good reliability of the measure (Asgeirsdottir et al., 2010).

Life satisfaction was measured by asking participants to rate their life satisfaction on a 4-point Likert scale from 0 (*very badly*) to 3 (*very well*). This question was adjusted from the single measure used for the OECD Better Life Index (OECD, 2020). The criterion validity of single-item life satisfaction measures has been established and it has been argued that such measures compare very similarly to multiple-item life satisfaction measures (Cheung & Lucas, 2014).

The survey was administered by The Icelandic Centre for Social Research and Analysis (IS CRA). In all schools, teachers administered paper-based questionnaires in their classes. The participants had 80 min to complete the questionnaire and seal in a blank envelope. The data collection was conducted in accordance with the Privacy and Data Protection Authority in Iceland.

Statistical Analyses and Main Findings

Descriptive statistics were run for all study variables, for the total sample and for females and males separately. To test for gender differences, Pearson's chi square test of independence and independent samples *t*-test were conducted (see Table 1). To test the first hypotheses, regarding the relation between family conflict/violence and sexual abuse and life satisfaction of youth, Pearson's chi square test of independence was calculated for females and males separately. To test the question of whether the association between negative experiences and life satisfaction were significantly different in strength for gender, two multivariate linear regression models were run, one including main and interaction terms for gender and sexual abuse when predicting life satisfaction and another, including main and interaction terms for gender and family conflict/violence when predicting life satisfaction.

The hypotheses two to four called for a test of main, mediation and interaction effects. Multivariate linear regression was used in accordance with established guidelines (Baron & Kenny, 1986). Five block wise models were run, using life satisfaction as the outcome variable. The first model included the control variables (Model (1)). In the second model, the main effects of sexual abuse and family conflict/violence were added (Model (2)). In the third model, the main effects of parental support, friends' support, attitude towards school and sport participation were added (Model (3)) and in the fourth model, the measure of self-esteem was added (Model (4)). To test for possible mediation role of self-esteem between family, friends, school and sport participation variables and life satisfaction, the four main steps were followed (Baron & Kenny, 1986). These four steps included establishing (1) correlation between each of the independent variables (i.e., family, friends, school and sport participation) and the outcome variable (life satisfaction); (2) correlation between each of the independent variables and the hypothesized

Table 2 Percentages of females and males stating “I am satisfied with my life” by reported experiences of sexual abuse and family conflict/violence

| | Applies very badly | Applies rather badly | Applies rather well | Applies very well |
|--------------------------|--------------------|----------------------|---------------------|-------------------|
| | Females-males | Females-males | Females-males | Females-males |
| Sexual abuse | | | | |
| Yes | 9.8–6% | 25–14.8% | 41.2–42.6% | 24–36.6% |
| No | 4–3.6% | 12.9–9.6% | 44.9–38.1% | 38.2–48.7% |
| Family conflict/violence | | | | |
| Yes | 8.6–5.1% | 23.1–13.7% | 43.7–41.6% | 24.6–39.6% |
| No | 3.8–3.3% | 12.3–9.0% | 44.4–37.2% | 39.5–50.5% |

mediator (self-esteem); (3) correlation between the hypothesized mediator and the outcome variable; (4) that significant correlation in step 1 becomes insignificant after including the mediator in the model. If all steps are met a full mediation is indicated, if the first three steps are met a partial mediation is indicated. These steps were followed up by Sobel test to calculate the critical ratio as a test of whether the mediating effects via self-esteem were significantly different from zero (Serang & Jacobucci, 2020).

In the fifth model (not shown in tables), the interaction terms between sexual abuse and family conflict/violence and the hypothesized protective factor variables were added to the model. We tested whether the interaction terms added significantly to the explained variance of life satisfaction beyond the main effects. Finally, to test if predictors of life satisfaction differed by gender, when taking into account the effects of all other variables, the final model was run testing for interaction effects between gender and the hypothesized protective factors. If the interaction terms added significantly to the explained variance of life satisfaction after the main effects had been controlled for, the results would confirm that the gender difference was statistically significant.

Descriptive statistics of all variables are shown in Table 1 indicating that while males reported on average higher mean levels of life satisfaction, sport participation and self-esteem, females reported on average higher mean levels of social support from both parents and friends. Furthermore, females were more likely than

males to report experience of sexual abuse and family conflict/violence. Table 2 shows the relation between family conflict/violence and sexual abuse and life satisfaction for females and males. The results indicated that females, $\chi^2(3, 2813) = 108, p < .001$ and males, $\chi^2(3, 2577) = 13.0, p < .004$ who reported sexual abuse were less likely to be satisfied with their life than those who had not experienced sexual abuse. The same applied to family conflict/violence, where females, $\chi^2(3, 2929) = 113, p < .001$ and males, $\chi^2(3, 2754) = 31, p < .001$ who reported such experiences were less likely to be satisfied with their life than those who did not report family conflict/violence. Looking at the strength of these associations, the results of the two multivariate regression models further indicated that the links between sexual abuse and life satisfaction and between family conflict/violence and life satisfaction were significantly stronger for females than males. This was indicated by a significant interaction between gender and sexual abuse when predicting life satisfaction and between gender and family conflict/violence when predicting life satisfaction (gender*sexual abuse, $B = .03, p = .04$ and gender*family conflict/violence, $B = .05, p = .001$).

Table 3 shows bivariate associations and results for Models 1 to 4 when testing the hypothesized main and mediation effects. The bivariate associations indicated that all demographic and predictor variables were significantly and positively associated with life satisfaction. Model 1 showed that all demographic variables were significantly associated with life satisfaction, being

Table 3 Multivariate lineal regression models predicting life satisfaction

| | Bivariate associations | Model 1 | Model 2 | Model 3 | Model 4 |
|--|------------------------|----------|----------|----------|----------|
| Demographic variables | <i>B</i> | <i>B</i> | <i>B</i> | <i>B</i> | <i>B</i> |
| Gender | .11*** | .10*** | .07*** | .13*** | .01 |
| Age | -.05*** | -.05** | -.05** | .00 | -.02 |
| Family structure | .08*** | .03* | .00 | -.02 | -.02 |
| Family SES | .17*** | .17*** | .16*** | .18*** | .04*** |
| Abuse/violence | | | | | |
| Sexual abuse | -.17*** | | -.12*** | -.04** | -.02* |
| Family conflict/violence conflict/violence (0–1) | -.15*** | | -.11*** | -.02 | -.01 |
| Protective factors | | | | | |
| Parental support | .35*** | | | .19*** | .11*** |
| Friends' support | .27*** | | | .15*** | .09*** |
| Attitude towards school | .44*** | | | .33*** | .17*** |
| Sport participation | .16*** | | | .07*** | .03** |
| Self-esteem | .61*** | | | | .46*** |
| Adjusted <i>R</i> Square | | .05 | .07 | .31 | .45 |
| <i>F</i> | | 59*** | 65*** | 219*** | 351*** |

Note. *B* = Standardized Coefficients Beta; *F* = *F* test for overall significance of each model; SES = Socio-Economic Status

p* < .05; *p* < .01; ****p* < .001 (two-tailed tests)

a male, having higher family SES, being younger and living with both biological parents relating to more life satisfaction. As to other demographic variables, family SES had the strongest association with life satisfaction. Model 2 showed that sexual abuse and family conflict/violence were independently related to life satisfaction after controlling for the demographic variables.

In Model 3, social protective factors were included. All protective factors were statistically significant predictors of life satisfaction with higher levels of support from parents and friends, more positive attitude towards school and participation in sports contributing to higher levels of life satisfaction. In Model 4, self-esteem was added and emerged as a strong predictor of life satisfaction. After adding self-esteem to the model, parental support, friends' support, attitude towards school and sport participation were shown to be independently related to life satisfaction. Looking at the adjusted *R* square for Model 4, this model explained 45% of the variance in the outcome variable, life satisfaction (Table 3).

To address the question of whether self-esteem significantly mediated the relation between social experiences of parental support, friends' support, positive attitude towards school, sport participation and life satisfaction, a Sobel test was conducted. The test revealed that self-esteem partially mediated the effects of parental support ($z = 13.5, p < .001$), friends' support ($z = 9.5, p < .001$), attitude towards school ($z = 28.6, p < .001$) and sport participation ($z = 7.4, p < .001$) on life satisfaction (see Models 3 and 4).

To examine whether parental support, friends' support, positive attitude towards school, sport participation and self-esteem were stronger predictors of life satisfaction among youth who reported family/conflict violence or sexual abuse compared to those who did not report such experiences, interaction terms were added to Model 4 (not shown in the Table). Two of the interaction terms added significantly to the model predicting life satisfaction. These were the interaction terms between sexual abuse and self-esteem (sexual abuse*self-esteem, $B = .03, p = .01$) and between

family conflict/violence and self-esteem (family conflict/violence**self-esteem*, $B = .03$, $p = .02$). The other interaction terms did not add significantly to the explained variance of life satisfaction. Finally, we tested whether the relation between predictor variables in the final model and life satisfaction differed by gender. The results showed that friends' support and attitude towards school were stronger predictors of life satisfaction for females, $B = -.03$, $p = .001$ than for males, $B = -.05$, $p < .001$.

Conclusions

The purpose of the current chapter was to examine the role of parental support, friends' support, attitude towards school, sport participation and self-esteem on life satisfaction of youth in Iceland facing negative experiences of family conflict/violence or sexual abuse. This context is unique because we used population representative data to examine core hypotheses of PYD (i.e., youth social support and opportunities in their community), and resilience approaches (i.e., protective mechanisms for at risk youth to understand important elements of their life satisfaction) (Masten, 2014; Small & Memmo, 2004; Twum-Antwi et al., 2020).

We tested four hypotheses. First, it was assumed that negative life experiences in the form of family conflict/violence and sexual abuse would be associated with less life satisfaction among youth. This assumption was supported since both females and males who reported either of these experiences were less likely than other youth to be satisfied with their lives. This is in line with studies showing that the experience of child sexual abuse and family conflict/violence are negative predictors of life satisfaction in adolescent and early adulthood years (Ash & Huebner, 2001; Fergusson et al., 2013).

Second, positive life experiences of parental support, friends' support, positive attitude towards school and sport participation turned out to be independently and positively associated with life satisfaction. This is in line with a recent study carried out in several nations, including

Algeria, Brazil, Chile, England, Israel, Romania, South Africa, South Korea, Spain, Uganda and the United States. The study showed that children's immediate social surroundings and support networks, such as family and friends, school and local community play key roles in predicting subjective well-being (Lee & Yoo, 2015). Longitudinal studies have further demonstrated the importance of family, friends and leisure activities when predicting life satisfaction of youth (Marcionetti & Rossier, 2019; Schmiedeberg & Schroder, 2017).

Third, self-esteem turned out to be strongly and independently related to higher levels of life satisfaction among youth and as expected, partially mediated the relation between social experiences of parental and friends' support, attitude toward school, sport participation and life satisfaction. This underscores the view of self-esteem as an important predictor of life satisfaction (Coffey & Warren, 2020), but also as a component of the individual social experience and social environment influences such as youth parental and peer support, experience in school and sports participation (Asgeirsdottir et al., 2010; Huang, Wang, & Ringel-Kulka, 2015; Slutzky & Simpkins, 2009; Way & Robinson, 2003).

Fourth, it was of key interest to examine whether parental and friends' support, attitude toward school, sport participation and self-esteem were stronger predictors of life satisfaction among youth who reported family conflict/violence or sexual abuse compared to those who did not. This turned out to be the case for self-esteem interacting with both family conflict/violence and sexual abuse when predicting life satisfaction. A protective effect of self-esteem for mental health problems has been documented in the literature for youth facing sexual abuse (Asgeirsdottir et al., 2010; Dubow et al., 2012). However, this is the first evidence to demonstrate such protective effect of self-esteem for life satisfaction of youth in Iceland facing sexual abuse and family conflict/violence.

As regards gender differences, females turned out to be three times more likely than males to report having experienced sexual abuse, more likely to report family conflict/violence and less

likely to report life satisfaction. These results are in accordance with a number of studies demonstrating that females are at higher risk for sexual abuse than males (Cortoni & Stefanov, 2020; Lahav, Ginzburg, & Spiegel, 2020; Pan et al., 2020). For example, a comparison of 38 studies on child sexual abuse from 21 different countries showed that globally, females experience child sexual abuse 1.5 to 5.5 times the rate of males (Pereda, Guilerab, Fornsa, & Gómez-Benitob, 2009). As regards gender difference in life satisfaction, our results are similar to other studies conducted among this age group and European samples with females being less likely to report being satisfied with their lives compared to males (Chen, Cai, He, & Fan, 2020; Jayasinghe, Selvanathan, & Selvanathan, 2020).

Furthermore, the study reported in this chapter showed that the experiences of sexual abuse, family conflict/violence, support of friends and positive attitude towards school were more strongly related to life satisfaction for females than males. This is in line with the literature indicating that females and males may respond differently to environmental influences and support. Prior studies also showed that females may be more sensitive than males to feedback from social experiences (Asgeirsdottir et al., 2010). The current findings confirm our prior work in Iceland, indicating that reactions to stressful experiences may be gender related, depending on the outcome measured. In particular, sexual abuse among females seems to be more strongly linked to internalizing problems, including depressed mood and suicidal behaviors, while sexual abuse among males is more strongly linked to externalizing problems, including delinquency (Asgeirsdottir et al., 2011; Sigfusdottir, Asgeirsdottir, et al., 2008).

The study presented in this chapter calls for further refinements due to the use of cross-sectional design that precludes conclusions on the temporal sequence of the constructs under investigation. The use of multiple informants beyond self-reports may be addressed in further work on stressful experiences or behaviors related to sexual abuse and family conflict/violence. Yet, in line with common prac-

tice of studies on adverse childhood experiences, this study used a clear operationalization of sexual abuse and family conflict/violence variables, retrospective reports from 16 to 17 years old and anonymous survey format, minimizing the likelihood of report biases, especially false negatives (Hardt & Rutter, 2004). Finally, future work may measure life satisfaction with more inclusive measures beyond the use of a single question. Yet, the criterion validity of single-item measures has been established along with the comparability of these measures with multiple-item life satisfaction measures (Cheung & Lucas, 2014).

Implications for Research, Policy and Practice

For future research, this chapter underlines the importance of studying multivariate social and individual mechanisms when the aim is to understand life satisfaction among youth. Therefore, researchers should consider individual, family and community level mechanisms when seeking to predict life satisfaction. Furthermore, the chapter supports the notion that predictors of life satisfaction can vary in strength for different subgroups of youth. Therefore, future research should use longitudinal design to look further into predictors of positive youth development among youth facing stressful experiences (Halldorsdottir et al., 2020; Masten, 2014, 2019).

The current chapter has important implications for policy as it demonstrates the critical importance of reducing the likelihood of stressful circumstances in the lives of youth while increasing their social support, constructive school experiences and opportunities to participate regularly in organized extracurricular activities in their local community. In Iceland, we have witnessed that such changes are possible. This has been done through collaborative effort of researchers, policy makers, practitioners and stakeholders in the communities by implementing the Icelandic Model prevention program. The aim was to reduce substance use through fostering support, monitoring and constructive opportunities for youth while minimizing risk factors for substance

use. Since the implementation of the model, significant positive changes in youth social environment have been documented, including high levels of parental monitoring and support, increased participation of youth in organized sport activities and decreased substance use (Kristjansson et al., 2010, 2016). A study among Lithuanian adolescents has further supported this model by indicating that these results are not unique to the Icelandic setting (Asgeirsdottir et al., 2020).

For practice, this chapter demonstrates the critical importance of the social environment and the pivotal role that the network plays in determining significant outcomes in the lives of youth, such as life satisfaction. These findings point out to the fact that stakeholders responsible for the upbringing of children and youth have a role to play in social reforms that consider multiple social influences to improve life satisfaction of youth within the PYD perspective (Dimitrova & Wiium, *this volume*; Wiium & Dimitrova, 2019).

In conclusion, this chapter underscores the importance of critical elements of PYD such as parental and friends' social support, attitude towards school and constructive opportunities in the community in the form of sport participation when fostering life satisfaction among youth. It also highlights the specific importance of high self-esteem in understanding life satisfaction of youth facing negative experiences of family conflict/violence or sexual abuse. Self-esteem has been shown to be culturally sensitive construct more strongly related to life satisfaction in individualistic (e.g., Northern Europe) compared to collectivistic societies (i.e., prioritizing group over the self; Diener & Diener, 2009). By underlining the importance of self-esteem for life satisfaction, the current chapter may therefore be more relevant for youth in Nordic and Western countries compared to youth in other regions of the world.

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Parental Support, Peer Support and School Connectedness as Foundations for Student Engagement and Academic Achievement in Australian Youth

Graham L. Bradley, Samantha Ferguson, and Melanie J. Zimmer-Gembeck

Abstract

Positive youth development perspectives emphasize the importance of adolescents' relationships with others. Consistent with this, we argue that support from parents and peers promotes psychological connections to school, which is indirectly related to academic achievement via elevated levels of student engagement in learning. We tested these linkages in a sample of 754 Australian secondary school students (55% males, $M_{age} = 13.5$ years) who reported on the support they gain from parents and peers, and their psychological connection to school. Extending past research, both adolescents and teachers provided student engagement data, while academic achievement was measured using student grades obtained from school records. Structural equation modeling confirmed the hypothesized model, although, contrary to expectations, peer support had additional direct effects, being associated negatively with student engagement and positively with academic achievement. The findings provide

evidence of the positive impact, across developmental domains, of social connectedness, and confirm the importance of relationships with others, especially with peers, during adolescence.

Keywords

Positive youth development · Parental support · Peer support · School connectedness · Student engagement · Academic achievement · Australia

The academic achievement of adolescents is shaped by many factors including ability, motivation, strategy, opportunity, instructional, and other school and contextual factors (Winne & Nesbit, 2010). Positive Youth Development (PYD) (Burkhard, Robinson, Murray, & Lerner, 2019; Geldhof et al., 2015), social emotional learning (SEL) (Taylor, Oberle, Durlak, & Weissberg, 2017; van de Sande et al., 2019), and motivational theories (Skinner, Zimmer-Gembeck, & Connell, 1998) suggest that the quality of the relationships that students establish and maintain with others is another factor affecting academic achievement. For example, one of the Cs in Lerner et al.'s (2005) Five Cs of PYD is "connection", which is defined in terms of posi-

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tive reciprocal bonds with people and institutions including peers, family, school, and community. These connections, together with the other four Cs (competence, confidence, character and caring), provide the foundations for a positive life trajectory that includes success in school (for an expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). Similarly, the developmental assets model emphasizes the importance of positive relationships, opportunities, competencies, and values (Roehlkepartain & Blyth, 2020; Scales, Roehlkepartain, & Shramko, 2017). One external asset is the availability of support from close others (Kosic, Wiium, & Dimitrova, [this volume](#)). Common to these theories is the notion that young people who are supported and affirmed across a range of social settings are likely to thrive personally and academically (Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#); Kozina, Wiium, Gonzalez, & Dimitrova, 2019; Uka et al., [this volume](#)).

In this chapter, we review background literature and summarize new evidence on the effects of social relatedness, support, and connection on academic outcomes in an Australian context. We propose and test a model of academic achievement that illustrates the importance of being supported by parents and peers and connected to schools. Specifically, we propose and present new evidence for a three-step model in which (1) adolescents who feel supported by their parents and peers experience greater psychological connection to their school; (2) this connection to school facilitates students' behavioral and emotional engagement in learning and (3) such engagement, in turn, provides a foundation for students' academic achievement. While all bivariate relations that we propose have been supported in past studies, we build on these findings by testing a full three-step model. We draw on data collected from both students and teachers, and use latent variable Structural Equation Modeling (SEM), to test the links from parental and peer support to psychological connection with school, then to student engagement in learning, and finally to academic achievement (Fig. 1).

Social Connections and Academic Achievement in the Australian Context

This chapter presents a study conducted in Australia, a Western liberal democratic nation that, since colonization in the late eighteenth century, has had strong cultural and institutional links with Great Britain. In 2017, Australia had a population of 24.8 million people, 12% of whom were aged 10–19 years, 2.8% were indigenous Australians, and 33% were born outside of Australia (Australian Bureau of Statistics, 2018). Major sources of migration in recent decades include Great Britain, New Zealand, Vietnam, China, and India. Australia is a relatively secular society, with approximately 30% of the population self-reporting having no religion (Australian Bureau of Statistics, 2016). In terms of various social, economic, health, and educational indices, Australia compares favorably with most nations, ranking equal sixth on the United Nations Human Development Index (United Nations Development Program, 2019).

Education is compulsory for all Australian children aged 5–15 years, and is provided mainly in medium-sized, mixed-sex schools. Australian students transition from primary to secondary school around 11–12 years of age, that is, about the time of puberty for many young people. In 2017, 85% of all students completed a full secondary education (Australian Bureau of Statistics, 2017). Most of these secondary students (59%) attend government-funded (non-fee-paying) schools, with smaller percentages attending non-government (fee-paying) schools.

PYD perspectives do not feature prominently in the Australian national curriculum, although positive psychology policies, goals, and approaches are present to varying degrees across the states and in the schools of Australia (e.g., Norrish & Vella-Brodrick, 2009; Waters, 2011). In 2015, 79% of Australian students reported feeling a sense of belonging to their school compared to the OECD average of 78% (De Bortoli, 2018). In terms of Arnett's (1995) distinction between broad (liberal) and narrow (restrictive) patterns of adolescent socialization, Australian

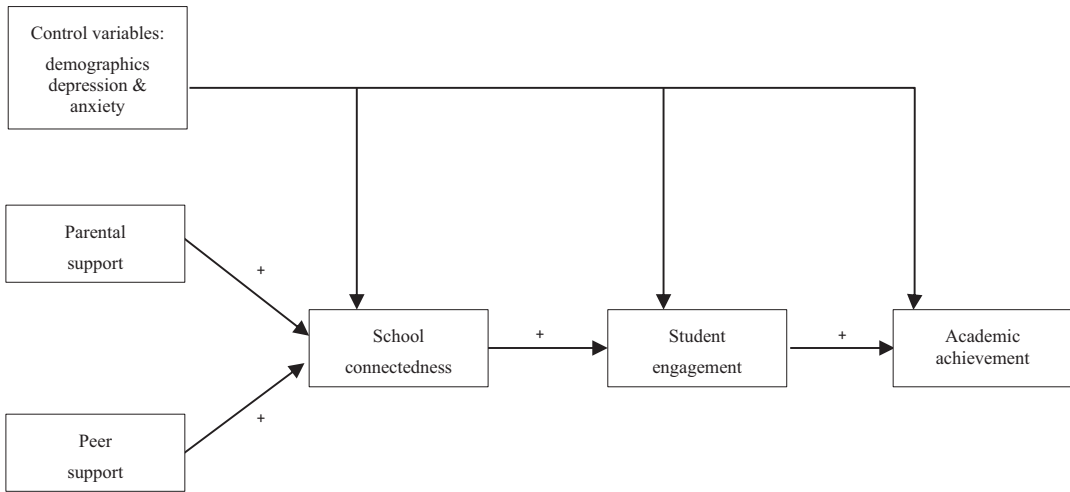


Fig. 1 Conceptual overview of the hypothesized model

youth experience broad socialization practices in which, compared with many non-Western nations, restrictions are relatively few, supervision is relatively loose, and peer groups and youth culture have pervasive influences. The setting for this chapter thus stands in contrast to settings in which education is less universally provided and completed, and obedience and social order are more unconditionally expected of young people.

Australian adolescents, like those living in other liberal societies, spend large portions of their time interacting in three social contexts: their family, their peer group, and their school. As elaborated below, connection to others in each of these social ecologies has been shown to facilitate student academic achievement. In this section, we review evidence for links between academic achievement and each of psychological connection to school, support from parents, and support from peers. Moreover, we advance the proposition that the effects of parental and peer support on academic achievement occur indirectly via psychological connection to school.

Psychological Connection to School

Many U.S. based scholars (e.g., Eccles & Roeser, 2011; Steinberg, 2017) have highlighted the importance of schools as a developmental context during adolescence, and this view resonates with youth and families in Australia. Consistent with PYD principles, Australian schools have the resources to provide the supports that promote students’ engagement and productive learning. However, for adolescents to commit to schooling, they need a personal sense of connection to their school (Osterman, 2000). This connection to school (also referred to as school bonding, involvement, belonging, commitment, affiliation, and identification) implies that students feel a part of the school, share its goals, and value its activities. Research has also demonstrated positive associations between psychological connection to school, or school connectedness (the two terms are hereinafter used interchangeably), academic achievement and school engagement (Abubakar & Dimitrova, 2016; Dimitrova, Sam, & Ferrer-Wreder, 2021; Juvonen, 2006).

Support from Parents

Parents play many roles in the development of their children, including the provision of material, emotional, and informational support that is vital for adolescents' social and educational development (Perkins et al., 2016; Steinberg, 2017). To varying degrees, parents model and encourage scholastic effort, contribute to their adolescent children's educational decision-making, help them to set and achieve educational goals, supervise and assist with their (home) work, and participate in school affairs. These indices of support from parents help to establish and maintain schools and schooling as central aspects of the lives of their adolescent children, and this provides the foundation for their children's psychological connection to school and subsequent academic achievement (Allen, Vella-Brodrick, & Waters, 2016; Perkins et al., 2016). We thus expected positive relations between parental support, school connectedness, and academic achievement.

Support from Peers

Although parents remain important influence during adolescence, this is a time of increased involvement with peers (Brown & Larson, 2009). For many Australian young people, peer group acceptance takes precedence over other goals (Duffy, Penn, Nesdale, & Zimmer-Gembeck, 2017), with peers becoming an increasingly vital source of support and self-belief. To the extent that students have rewarding and supportive relationships with their peers, they are likely to enjoy their time at school, regard it as a pleasant place to be, and thereby develop a sense of psychological connection to their school (Osterman, 2000).

During adolescence, evidence especially from developed Western nations shows that peers are also important influences on academic outcomes (Li, Lynch, Kalvin, Liu, & Lerner, 2016). In ideal circumstances, peers act as positive role models, assist with understanding and task completion (e.g., answering each other's questions, clarifying teacher expectations and explanations), pro-

vide emotional support, and reward academic outcomes. Particularly when teaching-learning processes involve collaborative, cooperative, and small group activities, students who are well accepted by their peers are likely to perform better than their more isolated classmates (Winne & Nesbit, 2010). The notion that close relations with peers facilitates academic achievement is generally supported by research conducted primarily in the USA (for a review see Furrer, Skinner, & Pitzer, 2014).

That said, studies also suggest that peers can have negative effects on academic achievement. To appreciate why this might be so, a distinction can be drawn between two kinds of peer variables: the first pertains to the strength of the adolescent's peer support, and the second relates to the nature of the group to which adolescents draw their support. Although their close bonding to school and to peers generally assists with academic achievement (Kindermann, 2016), these effects may be attenuated or even reversed, if students affiliate with a peer group that promotes anti-academic values and norms, and repudiates academic goals (Tetzner, Becker, & Maaz, 2017; Whitlock, 2006). Thus, the effects of peer relations on academic achievement are likely to be context-specific, usually affirming, but possibly undermining, academic endeavors.

One possible response to these countervailing forces and mixed research findings is to propose that the net effect of peer support may be unknown or neutral, neither facilitating nor harming academic achievement. However, as elaborated below, our resolution of this issue involves contrasting two different ways in which students relate to their school, namely, their sense of psychological connection to school and their behavioral and emotional engagement in learning. We expect that peer support would help promote a sense of school connectedness. Yet, we expect that peer support may not be simply or directly associated with engagement in learning, given that this association depends on their peers' attitudes to school and engagement in learning.

In summary, each of school connectedness, parental support, and peer support are expected to contribute to Australian adolescents' academic

achievement. The effects of parental and peer support on academic achievement would be expected to be indirect, via school connectedness, with the mechanism underlying these indirect effects likely to differ between the two types of support. In the case of parents, support is in the form of encouragement, example, assistance, and supervision that together provide structure for their children establishing connections with school and heighten their children's expectations of school connectedness. In the case of peers, support makes school an enjoyable and rewarding place, and thereby provides the motivation for close ties and growing identification with school (Allen et al., 2016).

Links from Support, and School Connectedness, to Student Engagement in Learning

Recognizing that a sense of psychological connection to school predicts academic achievement, we propose that this relation is also indirect, in this case working through the extent to which students are engaged in learning activities in and out of the classroom. The construct of student engagement encompasses a range of emotional, cognitive, motivational, and, most of all, behavioral, indices of participation in school. It is evidenced in students' orientation and commitment to school (work); the effort and persistence they display; their responses to rules and instructions; their patterns of attendance versus absenteeism, punctuality versus tardiness, on- versus off-task behaviors, pro- versus antisocial classroom conduct; completion of homework; participation in extracurricular activities, and so on (Furrer et al., 2014; Skinner et al., 1998). In the remainder of this chapter, we focus particularly on behavioral and emotional engagement in learning activities (rather than extra-curricular and non-academic pursuits), and we use the term *student engagement* to refer to involvement in these learning activities.

The distinction between psychological connection with school and student engagement in learning is important. As herein operationalized,

the former is a more internalized, "psychological" state, whereas student engagement is a more externalized, "behavioral" phenomenon. The Organization for Economic Co-operation and Development (OECD, 2003) labels these two constructs *belonging* and *participation*, respectively. Within a PYD framework, both are developmental assets. However, psychological connection to school can be viewed as logically preceding students' engagement in learning. Without a strong sense of school connectedness, engagement in classroom learning activities is difficult to sustain, and students may struggle to deal with the complex demands of school life (Larson & Tran, 2014). Supporting this logic, Lee (2014) found in a sample of over 3000 U.S. adolescents that the effect of school belonging on reading performance was mediated by student behavioral engagement.

Research also shows that relations with parents and peers are positively associated with student engagement (Furrer & Skinner, 2003; Osterman, 2000). What is lacking, however, is evidence pertaining to the proposed role of students' psychological connection to school in mediating the effects of parental and peer support on student engagement. In the current chapter, we argue that these associations will unfold and we present evidence to support this view from a large study of Australian secondary school students.

Links from Support, and School Connectedness, to Academic Achievement, via Students' Engagement in Learning

Just as a greater psychological connection to school leads to increased student engagement in learning, numerous studies have shown that student engagement has a strong, proximate, and direct influence on academic achievement, an effect that has been shown both in Australia (Hood, Bradley, & Ferguson, 2017; Tomaszewski, Xiang, & Western, 2020; Zimmer-Gembeck, Chipeur, Hanisch, Creed, & McGregor, 2006), and in the USA (Benner, Graham, & Mistry, 2008; Li, Lerner, & Lerner, 2010). These effects have been

Table 1 Sample characteristics

| Variable | Value | School A (<i>n</i> = 441) % | School B (<i>n</i> = 313) % | Full sample (<i>N</i> = 754) % |
|-------------------------------|-------------------------|------------------------------------|------------------------------------|---------------------------------------|
| Gender | Male | 51.5 | 60.4 | 55.2 |
| | Female | 48.5 | 39.6 | 44.8 |
| Year level | 7 | 28.3 | 21.4 | 25.5 |
| | 8 | 35.1 | 30.4 | 33.2 |
| | 9 | 23.1 | 24.0 | 23.5 |
| | 10 | 13.4 | 24.3 | 17.9 |
| Country of birth | Australia | 79.3 | 55.1 | 69.3 |
| | Other country | 20.6 | 44.9 | 30.7 |
| First/Main Language | English | 92.4 | 85.9 | 89.7 |
| | Other | 7.6 | 14.1 | 10.3 |
| Family structure | Both biological parents | 59.5 | 49.5 | 55.3 |
| | Mother only | 16.1 | 17.9 | 16.9 |
| | Step Family | 13.6 | 14.4 | 14.0 |
| | Other | 10.7 | 18.3 | 13.8 |
| Father's education | School only | 30.8 | 41.8 | 35.2 |
| | Post-school | 30.5 | 19.1 | 28.8 |
| | Unknown | 38.7 | 39.1 | 38.8 |
| Mother's education | School only | 31.5 | 42.0 | 35.9 |
| | Post-school | 39.7 | 28.6 | 35.0 |
| | Unknown | 28.8 | 29.5 | 29.1 |
| School grades (self-reported) | Mostly As | 7.5 | 3.9 | 6.0 |
| | Mix of As and Bs | 21.4 | 16.9 | 19.6 |
| | Mostly Bs | 18.0 | 15.6 | 17.0 |
| | Mix of Bs and Cs | 26.9 | 34.9 | 30.2 |
| | Mostly Cs | 14.1 | 15.0 | 14.5 |
| | Mix of Cs and Ds | 8.7 | 12.1 | 10.1 |
| | Ds or lower | 3.4 | 1.6 | 2.7 |

found longitudinally for various indices of student engagement including classroom conduct (Moore et al., 2016) and completion of homework (Moore et al., 2016; Winne & Nesbit, 2010).

Research has also supported the proposed role of student engagement in mediating the effects of parent or peer relational variables on academic achievement. For example, in a cross-sectional study of Australian adolescents, Zimmer-Gembeck et al. (2006) showed that students' level of engagement mediated the effect of peer relationships on achievement, whereas Buhs (2005), in a longitudinal study of German fifth-graders, found that classroom participation mediated the effects of peer relations on subsequent achievement test performance. In both these studies, the direct paths from peer relations to

achievement were not significant. Both cross-sectional (Zimmer-Gembeck et al., 2006) and longitudinal (Benner et al., 2008; Furrer & Skinner, 2003) research also shows that supportive relations with parents predict achievement indirectly by school and classroom engagement.

A Study of Australian Student Connectedness, Engagement, and Achievement

PYD and related theory and research lead to the conceptualization of a pathway model of the social-relational antecedents of academic achievement. We tested this model in a study that had several distinctive features. First, consistent

with conceptualizations of student engagement in learning as a multifaceted phenomenon, we operationalized this variable using five indices: behavioral engagement, emotional engagement, homework completed, classroom effort, and classroom behavior. Second, we obtained data from multiple sources, with student self-reports complemented by ratings of each student by several (between 6 and 8) teachers. Third, to protect against the possibility that low levels of parental and peer support, or connection to school, are spuriously related to poor academic outcomes by dint of their associations with emotional disturbance (Gaete, Rojas-Barahona, Olivares, & Araya, 2016), a unique feature of our research was the consideration and statistical control of the effects of students' anxiety and depressive symptoms. Fourth, we also controlled for gender, age, and other demographic variables, because past research (e.g., Chase, Hilliard, Geldhof, Warren, & Lerner, 2014; Eccles & Roeser, 2011; Whitlock, 2006) has found that academic outcomes vary with these demographic characteristics. Finally, we tested several alternative and reversed-order models. In particular, drawing on the proposition, based on attachment theory (Bowlby, 1969; Kobak & Madsen, 2011), that relationships with parents are foundational and highly influential in shaping subsequent extra-familial relationships, we proposed and tested an alternative model in which support from parents precedes and predicts, peer support.

For the purposes of this chapter, data from 754 Australian students enrolled in two government secondary schools were used. School A was larger and located in a predominantly middle-class urban area, whereas School B had mostly low SES students from a neighboring coastal city. Students' ages ranged from 11 to 16 years ($M_{\text{age}} = 13.53$, $SD = 1.11$). The sample comprised all students in the target grades at the two schools (a) whose parents provided passive consent, (b) who were present on the days of questionnaire administration, and (c) who gave verbal assent. The majority of participants (69%) were born in Australia, with 18% born in New Zealand, 2% in the United Kingdom, 2% in the Philippines, and the remaining 62 students born in 29 other coun-

tries around the world. Full details of the sample, by school, are given in Table 1. As shown, the sample drawn from School B was more diverse on most socio-demographic characteristics.

After ethics approval was obtained from relevant school and university bodies, information regarding the study was sent to parents, who were invited to opt out if desired. Following this, questionnaires were completed by the students in regular classes under the supervision of teachers and/or the researchers. Students recorded on their questionnaires a unique ID code that enabled matching of self-report data to teachers' data on student engagement and academic achievement, while ensuring students were anonymous to the researchers. The questionnaire contained items assessing all demographic variables reported in Table 1, plus the seven multi-item scales described below. All scales were scored by averaging responses, with high scores indicating high levels of the measured construct.

Parental and peer support were reported by adolescents completing the 10-item Parental Support, and the 10-item Classmate Support subscales of The Child and Adolescent Social Support Scale (Malecki & Demaray, 2002). Malecki and Demaray (2002) reported reliability coefficient of $\alpha = .89$ and $\alpha = .94$ for the parental and classmate scales, respectively. Sample items from the parental support scale referred to parents listening to and helping the adolescent making decisions. Sample items from the peer support scale referred to joining peer activities and peer respect. Response options for both scales ranged from 1 (*never*) to 6 (*almost always*).

Connection to school was measured by a 12-item version of The Psychological Sense of School Membership Scale (Goodenow, 1993). Sample items referred to feeling like a real part of the school and feeling proud of belonging to the school. Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Reliability coefficient values for the original 18-item scale range between $\alpha = .78$ and $\alpha = .95$.

Student engagement was measured with five variables, three of which were reported by adolescents and two by teachers. The first of these variables was adolescent reports of the minutes

they spend per week doing homework, which was assessed by two closed-ended items. In addition, students reported their behavioral and emotional engagement using the 5-item student report versions of The Behavioral Engagement and Emotional Engagement subscales of The Engagement versus Disaffection with Learning Scale (Skinner, Kindermann, & Furrer, 2009). Sample items referred to working hard in class (behavioral engagement), and enjoying learning new things in class (emotional engagement). Response options ranged from 1 (*not at all true*) to 4 (*very true*). As evidence of validity, the authors of the scale reported positive correlations with teacher ratings and with *in vivo* researcher observations of student on-task and off-task behavior. Reliability coefficients have ranged from $\alpha = .61$ to $\alpha = .82$ (Skinner et al., 2009).

For the final two student engagement variables, all teachers rated the behavior and scholastic effort of all students in their classes. Each student's behavior and effort was thus rated by six to eight teachers, depending on the number of subjects taken. Ratings ranged from 1 (*unsatisfactory*) to 4 (*excellent*). The most recent semester's average of these teacher ratings was used to measure student classroom behavior and student classroom effort.

Academic achievement being the criterion variable was assessed using the students' grades across all 6–8 subjects in which they were enrolled in their most recent semester. Grades were rated on a 5-point scale ranging from 5 (*highest grade A*) to 1 (*lowest grade E*), and were averaged to provide a measure of academic achievement.

Adolescents' symptoms of anxiety and depression were measured as control variables using the 6-item Generalized Anxiety subscale from The Spence Children's Anxiety Scale ([SCAS]; Spence, 1988) and The Depression Subscale of the Depression, Anxiety and Stress Scale-21 ([DASS_21]; Lovibond & Lovibond, 1995). For the SCAS, adolescents indicated the frequency with which they experience each symptom on a scale from 0 (*never*) to 3 (*always*). Spence (1988) reported high internal reliability for this scale and demonstrated con-

current validity with other measures of anxiety. For the DASS_21, responses were given on a 4-point scale from 0 (*Did not apply to me at all*) to 3 (*Applied to me very much or most of the time*). Lovibond and Lovibond (1995) report evidence of scale validity in adolescent samples, and reliability coefficient in their normative sample of $\alpha = .81$.

Model Testing

To test the proposed model, SEM was performed using maximum likelihood estimation procedures within LISREL 8.80. The model controlled for the effects of gender, age, school, family structure, anxiety, and depression. All these control variables were treated as observed variables. To partial out the effects of error in the measurement of the four core study variables (parental support, peer support, and school connectedness, and student engagement), these variables were treated as latent (Kline, 2005). Each of parental and peer support was represented by five manifest indicators, with each indicator comprising the mean of a pair of items from the relevant 10-item scale. Parceling decisions were based on Little, Cunningham, Shahar, and Widaman's (2002) approach which allocates items to parcels based on their sample-specific factor loadings, and thus seeks to ensure that the construct is equally represented in all parcels. Similar procedures were used to derive manifest indicators of school psychological connection, with each of the four indicators comprising the mean of three items from the 12-item scale. Finally, observed indicators for student engagement were the self-reported measures of time spent on homework, behavioral engagement and emotional engagement, plus teacher ratings of classroom behavior and effort.

The model fit was assessed using five fit indices: the Chi-square (χ^2 ; the value of which, ideally, should be non-significant), the change in Chi-square $\Delta\chi^2$, the Root Mean Square Error of Approximation (RMSEA; where values below .05 indicate a good fit and values

Table 2 Descriptive statistics and correlations

| Variable | Mean | SD | α | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. |
|--------------------------|-------|------|----------|--------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. Gender | - | - | - | | | | | | | | | | | | |
| 2. Age (years) | 13.53 | 1.11 | - | .02 | | | | | | | | | | | |
| 3. Anxiety | 2.15 | 0.64 | .81 | .32*** | .02 | | | | | | | | | | |
| 4. Depression | 0.82 | 0.74 | .90 | .11** | .09* | .41*** | | | | | | | | | |
| 5. Parental support | 4.33 | 1.17 | .93 | -.12** | -.12** | -.17*** | -.31*** | | | | | | | | |
| 6. Peer support | 3.68 | 1.17 | .94 | -.01 | -.07* | -.18*** | -.42*** | .34*** | | | | | | | |
| 7. School connectedness | 3.54 | 0.64 | .86 | -.01 | -.11** | -.16*** | -.48*** | .43*** | .66*** | | | | | | |
| 8. Homework ^a | 84.5 | 90.6 | - | .16*** | -.07* | .12** | -.06 | .13*** | .07* | .18*** | | | | | |
| 9. Behavioral engagement | 2.88 | 0.59 | .82 | .07* | -.15*** | .06 | -.20*** | .34*** | .29*** | .41*** | .37*** | | | | |
| 10. Emotional engagement | 2.45 | 0.62 | .83 | .04 | -.15*** | -.05 | -.30*** | .34*** | .41*** | .57*** | .30*** | .63*** | | | |
| 11. Classroom behavior | 3.47 | 0.92 | - | .33*** | -.14*** | .10** | -.06 | .11** | .11** | .20*** | .32*** | .37*** | .19*** | | |
| 12. Effort in class | 3.22 | 0.95 | - | .28*** | -.18*** | .07* | -.12** | .20*** | .22*** | .29*** | .34*** | .43*** | .27*** | .84*** | |
| 13. Grade Point Average | 3.49 | 0.70 | - | .23*** | -.04 | .06 | -.10** | .14*** | .24*** | .24*** | .33*** | .30*** | .18*** | .63*** | .74*** |

Note. α = Cronbach's alpha reliability coefficient. Gender coded as 0 = male; 1 = female

^aNumber of minutes per week spent doing homework

between .05 and .08 indicate a satisfactory fit), the Non-Normed Fit Index (NNFI; where values greater than .95 indicate a good fit), the Comparative Fit Index (CFI; where values greater than .95 indicate a good fit), and the Standardized Root Mean Square Residual (SRMR; where values below .08 indicate a good fit) (Hair, Black, Babin, & Anderson, 2010). Prior to SEM, descriptive statistics and correlations were examined, demographic characteristics were investigated to determine what should be accounted for in the SEM, and

the measurement portion of the SEM was confirmed.

Support for the Model

Descriptive statistics and correlations are given in Table 2. To identify demographic variables that should be controlled in the main analyses, six hierarchical regression analyses were conducted—one with each of the five student engagement variables, and one with academic achievement,

Table 3 Standardized parameter estimates in structural equation models

| Model and predictors | Direct effect on school connectedness | Effects on student engagement | | | Effects on academic achievement | | |
|---------------------------|---------------------------------------|-------------------------------|-----------------|--------------|---------------------------------|-----------------|--------------|
| | | Direct effect | Indirect effect | Total effect | Direct effect | Indirect effect | Total effect |
| Hypothesized model | | | | | | | |
| School | .14*** | -.49*** | .05*** | -.44*** | .16*** | -.38*** | -.22*** |
| Gender | .06* | .33*** | .02* | .35*** | -.03 | .31*** | .28*** |
| Age | -.04 | -.17*** | -.01 | -.19*** | .13*** | -.16*** | -.03 |
| Family structure | -.05 | -.14*** | -.02 | -.15*** | .02 | -.14*** | -.15*** |
| Anxiety | .03 | .08* | .01 | .09* | -.03 | .08* | .04 |
| Depression | -.16*** | -.09* | -.05*** | -.14*** | .04 | -.12*** | -.08* |
| Parental support | .23*** | – | .07*** | .07*** | – | .07*** | .07*** |
| Peer support | .55*** | – | .18*** | .18*** | – | .16*** | .16*** |
| School connectedness | – | .33*** | – | .33*** | – | .29*** | .29*** |
| Student engagement | – | – | – | – | .88*** | – | .88*** |
| Best-fitting model | | | | | | | |
| School | .14*** | -.50*** | .06*** | -.44*** | .21*** | -.43*** | -.22*** |
| Gender | .06* | .33*** | .03* | .36*** | -.05 | .32*** | .27*** |
| Age | -.04 | -.17*** | -.02 | -.19*** | .14*** | -.16*** | .03 |
| Family structure | -.05 | -.14*** | -.02 | -.16*** | -.01 | -.14*** | -.15*** |
| Anxiety | .03 | .07* | .01 | .09* | -.03 | .07* | .04 |
| Depression | -.16*** | -.09** | -.07*** | -.16*** | .05 | -.12*** | -.07 |
| Parental support | .23*** | – | .10*** | .10*** | – | .05** | .05** |
| Peer support | .55*** | -.12** | .24*** | .11** | .18*** | .01 | .19*** |
| School connectedness | – | .43*** | – | .43*** | -.17*** | .39*** | .22*** |
| Student engagement | – | – | – | – | .92*** | – | .92*** |

Note. School coded as A (the higher SES school) = 0; B (the lower SES school, with a more diverse student population) = 1; Gender coded as 0 = male; 1 = female; Family structure coded as both biological parents = 0; other = 1
 * $p < .05$; ** $p < .01$; *** $p < .001$

as the criterion variable. The results showed that gender, age, school, and family structure, but not country of birth, were associated with at least one of the academic variables, so the former four variables were controlled in the SEM.

Prior to testing the hypothesized model, a measurement model capturing the four latent variables (parental support, peer support, school connectedness, and student engagement) and the 19 observed indicators of these variables was evaluated. Each observed variable was specified as loading on its single intended construct. After freeing the error covariance between two of the observed indicators of student engagement, behavioral engagement and emotional engagement, the fit of this 4-factor model was satisfactory, $\chi^2(145,754) = 799.1$, $p < .001$, RMSEA = .075, 90% CIs [.070, .081], NNFI = .97, CFI = .97, and SRMR = .12. Loadings for all 19 indicators were significant at $p < .001$. The fit of this model was then compared with all plausible 3-, 2-, and 1-factor alternative models. Chi-square difference tests revealed that the fit of these alternative models was inferior to that of the 4-factor model. This support for the 4-factor measurement model confirmed that we had quality indicators of our core constructs to use in evaluating the hypothesized structural model.

In testing the hypothesized model, to control for the effects of school, gender, age, family structure, anxiety, and depression on both the direct and indirect effects within the model, paths were specified from each of these exogenous variables to each of the three endogenous variables (i.e., school connectedness, student engagement, and academic achievement). Covariances between the exogenous variables were freely estimated. The data fitted this model reasonably well, $\chi^2(255, 754) = 1376.3$, $p < .001$, RMSEA = .073, 90% CIs [.069, .077], CFI = .96, NNFI = .95, SRMR = .094. The upper portion of Table 3 presents the standardized parameter estimates. As shown, support from parents and peers had direct positive associations with school con-

nectedness, and school connectedness was positively related to student engagement. Importantly, controlling for the demographic and emotional adjustment variables, each of parental support and peer support was (indirectly) associated with greater student engagement. Finally, while student engagement was the strongest predictor of academic achievement, the total effects of each of parental support, peer support, and school connectedness on achievement were also significant.

Several alternatives to the hypothesized model were then evaluated. In the first of these alternative models, peer support was specified not as an exogenous variable, but as endogenous, as an outcome of parental support, and as the most proximate predictor of psychological connection to school. Examination of this model revealed a fit that was inferior to that of the hypothesized model, $\chi^2(256, 754) = 1428.6$, $p < .001$, $\Delta\chi^2(1) = 52.3$, $p < .001$, RMSEA = .076, 90% CIs [.072, .080], CFI = .96, NNFI = .95, SRMR = .100.

A second alternative model reversed the order of psychological connection to school and student engagement. This model yielded a less than adequate fit, $\chi^2(255) = 2051.5$ ($p < .0005$), RMSEA = .094, 90% CIs [.090, .098], CFI = .94, NNFI = .92, SRMR = .13. In this model, each of parental support and peer support was uniquely associated with student engagement ($ps < .001$). In a third model, the fit was not improved relative to the hypothesized model when the order of student engagement and academic achievement was reversed, $\chi^2(255, 754) = 1419.1$, $p < .001$, RMSEA = .075, 90% CIs [.071, .079], CFI = .96, NNFI = .95, SRMR = .100, although, in this model, the indirect effect of school connectedness on student engagement via academic achievement was significant ($p < .001$). In summary, these comparative SEM analyses provided support for the sequencing specified in the hypothesized model.

Additional analyses were conducted to determine whether the fit of the hypothesized model could be improved by freeing all direct

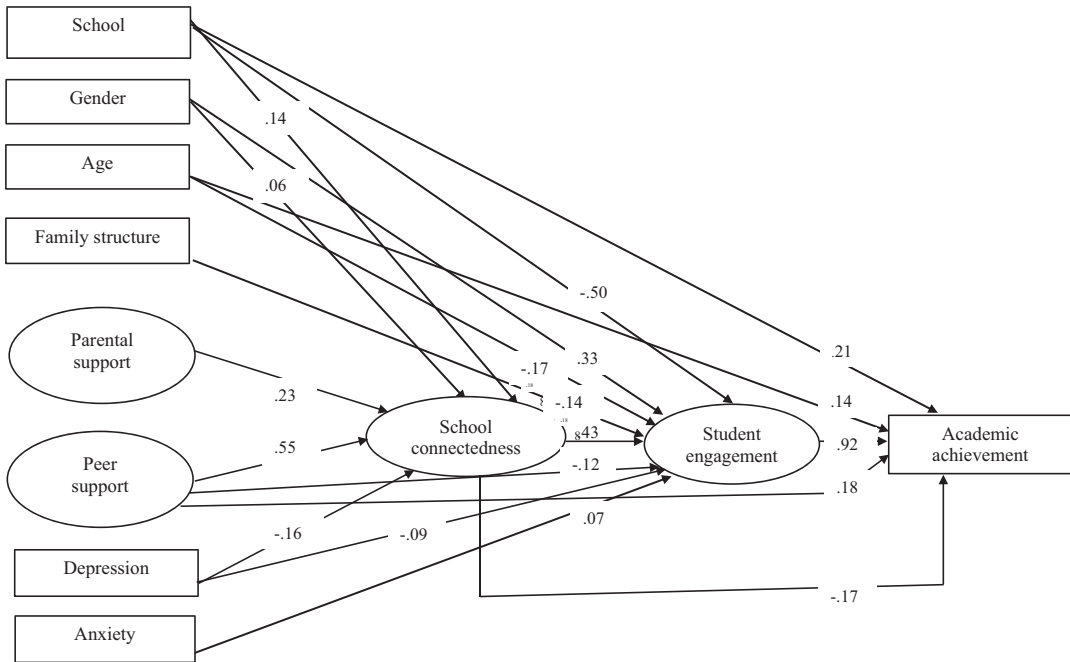


Fig. 2 Significant standardized direct effects of the best-fitting model (Note. School coded as A = 0; B = 1; Gender coded as 0 = male; 1 = female; Family structure coded as both biological parents = 0; other = 1 All coefficients are significant at $p < .001$, except gender \rightarrow school connectedness, and anxiety \rightarrow student engagement (both $p < .05$), and peer support \rightarrow student engagement, and depression \rightarrow student engagement (both $p < .01$). Standardized factor

loadings associated with the observed indicators of the latent variables were as follows: the five item parcels for parental support loaded between .84 and .89; the five parcels for peer support loaded between .82 and .90; the four parcels for school connectedness loaded between .76 and .86. For the latent student engagement variable, the loadings were emotional engagement (.29), behavioral engagement (.45), homework (.45), classroom behavior (.87), and classroom effort (.96)

paths from each of the support and connectedness variables to the two academic variables. The fit was not improved by adding paths directly from parental support to either student engagement or academic achievement. However, gains in model fit were achieved in successive steps through the addition of a path from peer support to student engagement, $\Delta\chi^2(1) = 4.34, p < .05$, from peer support to academic achievement, $\Delta\chi^2(1) = 7.46, p < .001$, and from school connectedness to academic achievement, $\Delta\chi^2(1) = 12.22, p < .001$. Interestingly, the first and third of these direct effects were negative. The extended model with these three paths added provided a good fit,

$\chi^2(252, 754) = 1352.3, p < .001, RMSEA = .073, 90\% CIs [.069, .077], CFI = .96, NNFI = .95, SRMR = .094$, and was accepted as the best-fitting model. Parameter estimates from this model are presented in the lower half of Table 3. All significant standardized direct effects are given in Fig. 2. As shown, the direct path from peer support to student engagement was negative, while the direct path of peer support on academic achievement was positive. Of particular note are the significant total effects of peer support and school connectedness on higher academic achievement, and the weaker, but still significant, indirect (and total) effect of parental support on higher academic achievement. In

contrast, neither anxiety nor symptoms of depression was significantly associated with academic achievement.

Findings on the Links Between Social Connectedness and Academic Achievement

In this chapter, we briefly described PYD theories that highlight the role of connections to parents, peers, and schools in adolescents' development and achievement. To test these effects in the academic domain, we drew on PYD theory, and related theories linking social connections (specifically, parental support, peer support, and school connectedness) to academic achievement in Australian youth, to propose a novel three-step model of the social-relational antecedents of student engagement and academic achievement. Rather than relying exclusively on self-reports, we tested this pathway model using data obtained from multiple sources, including 6–8 teachers per student. Latent variable structural equation modeling enabled measurement error in key variables to be modelled. Total effects were disaggregated into direct and indirect components, and a particularly rich set of observed variables captured the construct of student engagement. Further, other influences, including demographic factors and self-reported emotional adjustment, were controlled.

This chapter makes two major contributions to the PYD field with its focus on the importance of quality relationships and connections for promoting youth development. First, the findings directly underscore the importance of social “connection”, particularly peer support, in academic achievement. Second, a quite robust sequence was identified from parental and peer support, through a psychological connection to school and student engagement in learning, to academic achievement. As Larson and Tran (2014) have observed, the identification of such indirect pathways lies at the heart of PYD.

Although our findings regarding the positive effect of parental support on students' connection to school and academic achievement are note-

worthy, some of the most interesting findings pertain to peer support. The findings are particularly noteworthy given the Australian context in which adolescents are granted considerable autonomy and extended opportunities for in-person and online interaction with peers. Positive correlations were found between peer support and each of school connectedness, the five observed indices of student engagement, and academic achievement. However, the best-fitting model revealed that, while peer support had an overall favorable association with academic achievement and higher levels of school connectedness, it was associated with *lower levels* of student engagement. This apparent paradox can be understood by reference to the distinction drawn earlier between the strength of adolescents' peer support, and the nature of the peers from which they get support. In the study presented here, only the former was measured. The findings suggest that when peer support was high, students felt a greater sense of school connectedness, presumably in part because they enjoyed the opportunity to interact with their peers at school. However, the negative relation between peer support and student engagement suggests that, net of all other variables in the model, peer influences were not predominantly in a pro-academic direction. Thus, peer support may have acted as a “double-edged sword”, promoting higher psychological connection to school while detracting from students' engagement in learning.

Covariates in the Connectedness-Engagement-Achievement Model

Students' mental health has been described as interfering with learning and academic achievement, but support for this proposition has been intermittent once attention problems, delinquency, and behavior problems have been considered (e.g., McLeod, Uemura, & Rohrman, 2012). Generally consistent with this, in the current best-fitting model, neither depression nor anxiety was directly related to academic achievement, and these two emotional adjustment variables had relatively weak, and opposing, effects

on student engagement. Thus, as vital as school-based mental health services are (Becker & Luthar, 2002), the present findings suggest that interventions aimed at increasing support from others and psychological connection to school may have a greater positive impact on adolescents' academic achievement than focusing directly on mental health.

The effects of gender are also interesting. Consistent with most past research, girls had higher grades at school, on average, than did boys. However, in the best-fitting model, the direct effect of gender on academic achievement was non-significant, with most of the superiority of females over males carried through student engagement. These results demonstrate that girls' strong academic achievement can be attributed to the variables captured in our measure of student engagement, that is, compared to their male classmates, girls worked harder, behaved better, and invested more of their selves into school work.

Implications for Research, Policy, and Practice

The PYD approach to understanding academic achievement presented in this chapter warrants extension in future research. Identifying other mediating variables that operate to link adolescents' social and academic worlds should be a priority (Larson & Tran, 2014). For example, researchers could investigate the possible mediating effects on academic achievement of social connectedness variables such as classroom climate and teacher-student relationships (Furrer et al., 2014; Ginner Hau, Ferrer-Wreder, & Westling Allodi, [this volume](#)). These variables can then be targeted in future interventions, and such interventions can be the subject of systematic evaluation research.

As the current study was conducted in a liberal Western nation in which educational choice, standards, and rates of school attendance and completion are relatively high, replication of the study, especially in non-Western contexts, is to be encouraged. Perhaps in nations with fewer

educational options and completions, less liberal socialization practices, and less prominent adolescent peer group influences, some of the unexpected findings would not be observed. For example, whereas the best-fitting current model showed a *negative* direct effect of peer support on student engagement and a *negative* direct effect of school connectedness on academic achievement, in contrasting national contexts both peer support and school connectedness may have more straightforward and universally favorable effects on academic outcomes. Indeed, recent high levels of migration to Australia from diverse nations may serve to weaken the paradoxical effects observed in the current sample.

In this chapter, we argued for, and presented data suggesting that, support from others and a sense of school connectedness promote students' engagement in learning and academic achievement. Such a finding has seldom been demonstrated in the Australian context. Just as leading scholars (Furrer et al., 2014; Furrer & Skinner, 2003; Skinner et al., 1998) have argued, feeling connected (i.e., having a sense of relatedness to others) is not just a by-product of doing well in school; it is a source of motivation for student engagement and achievement. From a policy perspective, therefore, the study findings provide further broad support for youth policies that shift the balance from a "deficit" to a "strengths-based" approach to promoting academic achievement. Accordingly, and in line with PYD and stage-environment fit principles, rather than focusing on barriers to success in either the cognitive (e.g., literacy), emotional (e.g., anxiety and depression), or even social (e.g., bullying) domains, PYD theory and evidence presented here suggest that additional resources should be invested into building young people's resources and tailoring their contexts to meet their relational needs. In particular, policy support could be given to programs, such as My Teaching Partner –Secondary (Allen, Pianta, Gregory, Mikami, & Lun, 2011), which aim to build the kind of positive emotional classroom climate that meets adolescents' needs for autonomy, agency and relevance, and promotes their sense of belonging. While critics may view social con-

nectedness as peripheral or even irrelevant to academic achievement, the current chapter highlights the inter-relatedness of the social and academic domains (at least during the adolescence years), and the need to encourage connectedness, especially support from peers, given the likelihood that this will enhance school belonging and, ultimately, academic achievement.

In terms of practice, PYD theory and the evidence presented in this chapter point to the need for connection-building interventions at the individual, family, classroom, and/or school level. For example, individual students could be trained in skills for initiating and sustaining peer relations, parents could be encouraged to increase their involvement with their child and his/her school(ing), and schools could make greater use of cooperative learning tasks, peer tutoring, and activities that require students working together (Allen et al., 2016; Benner et al., 2008). Mentoring programs (Karcher, 2005), reading-writing exercises (Goyer et al., 2019), and adventure camps (Hattie, Marsh, Neill, & Richards, 1997) are additional strategies that can help build a sense of connectedness to peers and school. Both types of programs are popular in the Australian context.

Universal school-based social emotional learning interventions documented in meta-analyses have been shown to produce substantial long-term positive effects not only on social behavior but also on academic achievement (Taylor et al., 2017; van de Sande et al., 2019). The evidence reported in this chapter regarding parental and peer support as foundations of academic achievement suggest that adolescents with greater support do better in school because such support increases their psychological connection to school and, in turn, this school connectedness promotes student engagement in learning and more optimal achievement. Such evidence provides further justification for the implementation of SEL interventions in secondary school classrooms (Kozina, *this volume*).

In conclusion, this chapter proposed and generated support for a three-step model of the social-relational antecedents of academic achievement. In so doing, we have confirmed the

importance of one of the Five Cs of PYD, “connection” (Lerner et al., 2005), and suggested that education and other authorities should be encouraged to invest resources in initiatives that build connections between young people and their schools, families, and communities. Further research is needed, however, to test our model in diverse cultural settings, and particularly examine whether the current findings regarding the complex effects associated with peer support generalize to contexts in which educational opportunities are more limited, and peer influences more constrained, than in the present Australian sample (Dimitrova & Wiium, *this volume*; Wiium & Dimitrova, 2019). Research should also investigate the possible exponentially beneficial effects on academic achievement when student connection is combined with the other Cs of competence, confidence, character and caring of PYD.

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The 5Cs of Positive Youth Development in New Zealand: Relations with Hopeful Expectations for the Future and Life Satisfaction Among Emerging Adults

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Abstract

This chapter applies the 5Cs of PYD model to a sample of 302 emerging adults in New Zealand. Emerging adulthood represents a critical developmental context spanning the ages of 18–29 years to make positive changes and increase the likelihood of young people succeeding in their lives. To this end, the 5Cs model provides an ideal strength-based framework to assess optimal functioning of young people. The model postulates that the 5Cs (e.g., confidence, competence, character, con-

nection, caring) mediate the relation between emerging adults' strengths (e.g., hopeful expectations for the future) and optimal well-being (e.g., life satisfaction). The results of the Structural Equation Modeling (SEM) showed that hopeful expectations for the future were linked to life satisfaction via the mediating role of the 5Cs. The chapter confirms the cross-cultural extension of the 5Cs of PYD model and outlines relevant research, policy and practice directions for young people in New Zealand.

Keywords

5Cs · New Zealand · Hope · Life satisfaction · Emerging adults

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This chapter applies the 5Cs model of the Positive Youth Development (PYD) represented by confidence, competence, character, connection, and caring to emerging adults in New Zealand (Burkhard, Robinson, Murray, & Lerner, 2019; Geldhof, Bowers, Boyd, et al., 2014; Geldhof, Bowers, Mueller, et al., 2015). In doing so, we test a model on the relations of the 5Cs, hopeful expectations for the future and life satisfaction.

Specifically, we test the assumption that the 5Cs mediate the relation between emerging adults' strengths (e.g., hopeful expectations for the future) and optimal well-being (e.g., life satisfaction). To that end, we believe the findings can make important scholarly as well as practical contributions to the growing field of positive youth development globally (Wiiium & Dimitrova, 2019) and in New Zealand.

In addition, this chapter focuses on emerging adulthood as a specific and developmentally intriguing stage since global related research has primarily addressed adolescence and childhood (Arnett, 2018). Nowadays, the transition into adulthood has become more varied and fraught with complications; young people take longer to achieve economic autonomy compared to previous generations, face psychological burdens, social isolation and prolonged identity conflicts. Emerging adulthood represents a critical developmental context for young people spanning the ages of 18–29 years and like all developmental transitions, this one represents a period of concentrated change in individuals, their contexts, and their relationships (Dvorsky et al., 2019). Emerging adulthood is an opportunity for young people to make positive changes and growth and increase the likelihood of success in their lives. Therefore, it is important to understand how successful or positive development occurs in this context and to examine correlates of positive development (Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Dimitrova & Wiiium, [this volume](#); Dost-Gözkán & Wiiium, [this volume](#); Kabir & Wiiium, [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#); Wiiium & Kozina, [this volume](#)). To this end, the 5Cs of PYD model provides an ideal framework for addressing the need for strength-based approach to promote optimal functioning of young people. This chapter addresses such need in a holistic developmental approach by applying the PYD to emerging adulthood and indicating avenues for healthy, productive and engaged young people.

The 5Cs of PYD, hope and life satisfaction and how these constructs contribute to optimal

human development is a topic of increasing interest to positive psychology scholars, and this chapter reveals under what circumstances the 5Cs act as indicators of and contributors to human thriving. Further, the chapter sheds light on the nature of hope, a construct that has garnered increasing attention from positive youth development researchers (Catalano et al., 2019; Tirrell et al., 2019). From a practical perspective, the chapter provides information about how and when to effectively foster the 5Cs. Specifically, the chapter aims to reveal much about the subjective experience of hope for one's life, which shall have important implications for fostering and supporting the development of the 5Cs and optimal well-being in youth and adults alike.

The 5Cs, Hopeful Expectations for the Future and Life Satisfaction

The PYD conceives development with a special focus on strengths of youth and their positive qualities and outcomes (Shek, Dou, Zhu, & Chai, 2019). We apply the 5Cs model of PYD, aiming to identify the individual and ecological relations that promote thriving and prevent problem behaviors in young people. Within the model, thriving is seen as the growth of attributes that mark a flourishing young person in terms of the 5Cs of PYD – competence, confidence, character, connection, and caring. Competence refers to success in specific areas, such as social and academic; confidence represents an overall positive self-perception (e.g., self-worth); character refers to respect for societal and cultural rules; connection foresees positive relationships with people and institutions; and caring represents a sense of social concern and empathy for others.

In line with the 5Cs PYD model, research in the field of positive psychology has increasingly focused on the role that hope plays in human thriving. This work has defined hope as the perception we attain from our own goals (Lopez, Pedrotti, & Snyder, 2018) as well as the belief that we have the knowledge and motivation to reach these goals (Snyder, Rand, & Sigmon, 2005). Hope represents a cognitive, emotional

and motivational attitude including thinking positively about the future, expecting that desired outcomes will occur and increasing their likelihood through one's actions. Such an attitude helps individuals to sustain the subjective sense of well-being or life satisfaction despite challenges (Karaman, Vela, & Garcia, 2020; Van den Heuvel, 2020). In fact, hope and beliefs in the future include a series of goal-directed thoughts and motivation, such as setting up goals, planning pathways, and maintaining self-confidence and mastery that keep adolescents engaged in the pursuit of goals. Such personal mastery and self-confidence are related to well-being and positive development among young people. Therefore, the study and promotion of hope and beliefs in the future in relation to PYD requires much attention given the growing research evidence on its positive effects on well-being (Sun & Shek, 2012).

Based on these notions, a growing body of theoretical and empirical literature suggests that having hopeful expectations for the future contributes to optimal human development in a variety of ways. For example, research identifies hope as a developmental asset (Carney, Kim, Duquette, Guo, & Hazler, 2019; Toomey, Syvertsen, & Flores, 2019) and an important component of human flourishing (Munoz, Hanks, & Hellman, 2020; Munoz, Walker, Bynum, & Brown, 2020) that it is associated with greater levels of happiness (Rand, Shanahan, Fischer, & Fortney, 2020) and resiliency (Murrugh & Russo, 2019). Hope has been identified as character strength (Leontopoulou, 2020; Peterson & Seligman, 2004) and a cognitive-focused concept of the positive psychology field (Duncan, Jaini, & Hellman, 2020; Wang et al., 2020). Hope has been shown to relate to and predict life satisfaction (i.e., the cognitive evaluation of one's life with conscious experiences, which motivate people to pursue goals) (Huebner, 2019; Raats, Adams, Savahl, Isaacs, & Tiliouine, 2019). In addition, hopeful individuals with positive expectations regarding future goals tend to attain higher levels of satisfaction. Such evidence is supported by wide amount of cross-cultural research across different age groups and nations (Cabras &

Mondo, 2018; Chang et al., 2019; Dwivedi & Rastogi, 2016; Long et al., 2020).

Like the 5Cs, both hope and life satisfaction focus on purposeful aims and future goals, and yet both constructs have been scarcely investigated in relation to the PYD framework. A hope for one's future plays an important role in the development of positive characteristics manifested across adolescence. Support for the structural relations of hope and PYD has been provided by extensive datasets with American youth, suggesting that hope is a strong predictor for positive developmental outcomes, including the 5Cs (Schmid et al., 2011). Hope has been shown to portray relevant relations with the 7Cs model of PYD (competence, confidence, character, caring, connection and contribution and *creativity* conceived as a novel and adaptive, problem-solving ability meaningful within social and cultural contexts). In a large sample of young people from three Asian LAMICs (Low-And Middle-income Countries) such as India, Indonesia and Pakistan, Dimitrova and colleagues ([this volume](#)) further extend our understanding of how PYD models work in tandem to impact an additional component of thriving measured by hope. The chapter demonstrates for the first time the existence of strong structural relations between the 7Cs and the assets models of PYD both positively related to hope among young people across culturally diverse contexts.

In this chapter, we link the 5Cs model of PYD to hopeful expectations for the future and life satisfaction as a major component of subjective well-being. We apply the 5Cs model to emerging adults in New Zealand to explore ways in which the 5Cs (confidence, competence, character, connection, caring) mediate the relation between emerging adults' strengths (e.g., hopeful expectations for the future) and optimal well-being (e.g., life satisfaction). The focus on emerging adults is of particular relevance since this developmental stage shares similar demographic trends occurring worldwide in the 18–29 age group denoted by longer education, later entry into stable work, later marriage, and later parenthood (Arnett, 2018). In the presence of these conditions, there is a gap between the end of adolescence and a

stable young adulthood, where adult roles arise in domains of love and work. Emerging adulthood is collocated within this gap as a new life stage characterized by identity exploration as young people are deciding who they are and what they want out of work, school and love. Emerging adulthood is particularly relevant for the scope of this chapter as an age of instability and self-focus when young people try to decide what they want to do, and who they want to be while also denoting possibilities, hope and optimism for the future. All these features are closely related to positive development and consequently hopeful expectations for the future and life satisfaction.

The New Zealand Context

The context of New Zealand and its young segment of the population present a complex and variegated situation. New Zealand is a multicultural society, where 74% of the population identifies as New Zealand Europeans, 15% as Māori, 12% as Asian, and 7% as Pacific; 11% of the total population, and over 15% of those under 24 years of age, identify with more than one ethnic group (Statistics New Zealand, 2017). New Zealand is a bicultural nation founded in 1840 on The Treaty of Waitangi/Te Tiriti o Waitangi, granting special rights to the indigenous people of Māori (Orange, 2013). Yet, the processes of colonization and lack of adherence to these rights have had numerous negative impacts on health, well-being and development of Māori (Came, 2014). Alongside its biculturalism, New Zealand is the fifth most ethnically diverse nation among those of the Organization for Economic Co-operation and Development (OECD; Office of Ethnic Communities, 2016).

The general population and adolescents specifically, score high on psychological well-being (OECD, 2020; Statistics New Zealand, 2017). The population older than 15 years has registered a national score of 7.3 on life satisfaction slightly above the global median of 6.9 (OECD, 2020). Yet, a recent report indicated that young adults report lower life satisfaction than older adults, as compared to other nations (OECD, 2020), possi-

bly reflecting poor mental health outcomes among emerging adults, with rates of youth suicide in New Zealand ranking as one of the highest in the world (Clark et al., 2013; Glenn et al., 2020).

Another report by the Health Promotion Agency on well-being of young people (aged 15–25 years) revealed high levels of social isolation, mental distress and symptoms of depression. This report further measured life satisfaction showing that the experience of mental distress and feelings of isolation were predictive of low satisfaction with life (Kvalsvig, 2018). Relatedly, youth in New Zealand have relatively poor health outcomes in some specific areas such as suicide rates, unintended pregnancy, and obesity when compared to other countries (OECD, 2020). Factors such as participation in community-based activities (O'Connor & Jose, 2012), family connectedness (Stuart & Jose, 2014) and the pursuit of intrinsic goals (Yamaguchi & Halberstadt, 2012) have been linked to well-being among young people in New Zealand.

However, less attention has been paid to the aspects represented in the 5Cs model, calling for validation of this model in this context despite the growing interest in PYD within New Zealand. In fact, in terms of PYD, the importance of whānau and whanaungatanga becomes even more salient because they are central concepts in Māori views of human development (Macfarlane, Glynn, Grace, Penetito, & Bateman, 2008). This is because whānau and whanaungatanga indicate both a sense of belonging to and a sense of relating to others, within a context of collective identity, commitment and responsibility (Arahanga-Doyle et al., 2019).

In New Zealand, PYD informs the Ministry of Youth Development by guiding strategic approaches for young people (Ministry of Youth Development, 2009). These approaches translate in collaboration of government, business, and youth organizations to deliver funds, programs and supports for youth involvement in decision making. Despite valid concerns of adopting Western-based models in a bicultural nation with an ethnically diverse population (Beals, 2015; Keelan, 2014), the 5Cs of PYD model are seen as

complemental with Māori approaches in their holistic and strengths-based philosophies (Arahanga-Doyle et al., 2019). Yet, some differences have been outlined in that the 5Cs model sees confidence as key to identity, whereas indigenous approaches see connection as key (Arahanga-Doyle et al., 2019). By building on differences and similarities, local conceptualizations of PYD programs draw on the international literature to encompass a broad range of activities such as mentoring, volunteering, adventure programs, arts and culture (Ministry of Youth Development, 2009). The implementation of such PYD programs has been repeatedly documented as effective (Arahanga-Doyle et al., 2019; Bullen, Noonan, & Farruggia, 2012; Deane & Harré, 2014; Deane, Harré, Moore, & Courtney, 2017; Farruggia et al., 2011; Grocott & Hunter, 2009; Hayhurst, Hunter, Kafka, & Boyes, 2015; Hunter et al., 2013) and particularly for outdoor education-based programs. Two types of these programs have been well researched in New Zealand. The first is the school-based Project K program, including a wilderness experience, community contribution and mentoring for high-school students showing low self-efficacy. The second type are sailing voyage programs, where young people spend up to 10 days onboard a sailing ship learning to sail, live and work together. Project K has been evaluated qualitatively and quantitatively through a number of studies, documenting increase in self-efficacy, resilience and well-being (Furness, Williams, Veale, & Gardner, 2017).

A recent study employed sail training as an adventure-based educational intervention to promote PYD among Māori and New Zealand European adolescents (Arahanga-Doyle et al., 2019). After the 7-day program, the participants ($N = 91$) showed increased psychological resilience, self-esteem, and positive outlook on life. This PYD-based outdoor education program in schools using the 5Cs model showed that all 5Cs were present in the program and the 6th C of contribution was also observed. The 5Cs model of PYD was also explored qualitatively through interviews with adolescents participating in a PYD intervention program as well as their par-

ents and teachers (Mercier et al., 2019). All 5Cs were described by participants as an inherent part of the intervention with competence, confidence and connection featuring strongly, and connection being important to young people's experience of the program. Given the growing interest in PYD in such a unique context, there is a need to study and apply this strength-based model in relation to hope and life satisfaction among young people to promote their social and personal thriving.

This Chapter

The purpose of this chapter is to apply the 5Cs model of PYD (confidence, competence, character, connection, and caring) in relation to hope and life satisfaction among emerging adults in New Zealand. Such a scope aligns with the increasing interest in PYD in this context and in positive psychology research to investigate ways in which the 5Cs and the search for hope contribute to satisfaction in life. In fact, much work has been done to determine the effects of hope and the 5C model as independent constructs on life satisfaction. However, there is a lack of research on the relation between the 5Cs and hope, leading to satisfaction with life. Furthermore, there is scarce research investigating the experiences of emerging adults in New Zealand. To that aim, we sought to address two primary questions around the 5Cs, hope, and life satisfaction.

First, what is the subjective experience of the 5Cs associated with hope? Second, do the 5Cs influence the relation between hope and life satisfaction, and if so how? Based on knowledge of the research conducted on the 5Cs, hope, and life satisfaction as well as a broad understanding of human development, the following assumptions were formulated. First, it was assumed that hope would be positively associated with the 5Cs. Since empirical research establishing a direct relation between hope and the 5Cs has been conducted mainly in the United States, this assumption was based on these related findings. For example, empirical evidence suggested that the construct of hope was a strong predictor of PYD

establishing a positive relation between hope and the 5Cs (Dimitrova et al., [this volume](#); Schmid et al., 2011). Relatedly, it was assumed that life satisfaction and hope work in tandem as by definition both constructs reflect a goal orientation. Life satisfaction represents the perception of the process of achieving one's goals while hope represents a belief that one has the ability to make progress toward that goal (Diener, Lucas, & Oishi, 2002; Sun & Shek, 2012).

Second, hope plays a critical role in keeping purposeful individuals committed to their aims over time and fosters the emergence of the 5Cs. Experiencing satisfaction in life as well as developing the 5Cs of the PYD model, despite setbacks and challenges would likely be facilitated by a sense of hope. In support of this assumption, Schmid et al. (2011) found that the construct of PYD was positively related to hope, and that hope was a defining characteristic of youth with intense commitments to the 5Cs. Therefore, it was assumed that the 5Cs play an important mediating role between hope and life satisfaction.

The Emerging Adults from New Zealand

This chapter presents data from 302 emerging adults ($M = 18.73$ years, $SD = 1.39$, 74% female) as part of a larger international PYD study (Dimitrova & Wiium, [this volume](#); Wiium & Dimitrova, 2019). Sixty-seven percent did not indicate any religious affiliation, 14% were Christian Catholic, 2% Christian Orthodox, 7% Protestant, and 1% Muslim. Seventy-nine percent was born in New Zealand. The majority, 76% were from European descent, 7% Māori, 3% Pacific Islander, 2% Chinese, and 0.7% Indian (Table 1). Participants were drawn from an academic setting at Victoria University of Wellington, New Zealand. Prior to data collection, university authorities were informed about the purpose and method of the data collection to acquire their consent. The project and data collection were approved by the Research and Ethics Board at Victoria University of Wellington. Upon

Table 1 Sample descriptives

| | Total sample $N = 302$ |
|-------------------|------------------------|
| Age, Mean (SD) | 18.73 (1.39) |
| Gender % | |
| Female | 74 |
| Male | 26 |
| Mean (SD) | |
| Competence | 3.26 (.64) |
| Confidence | 3.35 (.81) |
| Character | 3.84 (.55) |
| Connection | 3.65 (.63) |
| Caring | 4.36 (.60) |
| Hope | 2.67 (.75) |
| Life satisfaction | 6.34 (1.71) |

Note. SD = Standard Deviation

institutional agreement, student consent was obtained and students filled out the questionnaires (with approximate duration of 30 min) in their own time for course credits.

The 5Cs of PYD were measures with The Very Short Measures of the Five Cs of Positive Youth Development (Geldhof et al., 2014), consisting of 17 items related to confidence, competence, character, connection and caring. The responses were rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) with high scores indicating strongly experienced 5C of PYD and overall internal consistency of $\alpha = .81$.

Hope was measured with four items drawn from a set of questions used in prior PYD work (Geldhof, Bowers, Boyd, et al., 2014; Geldhof, Bowers, Mueller, et al., 2015) that assessed participants' expectations that they will experience certain situations later in life. The items were rated on a 5-point Likert scale from 1 (*not at all*) to 5 (*extremely*) with high scores indicating strongly experienced hope and overall internal consistency of $\alpha = .90$.

Life satisfaction was measured with The Satisfaction with Life Scale ([SWLS]; Diener, Emmons, Larsen, & Griffin, 1985) designed to measure global cognitive judgments of satisfaction with one's life. The scale consists of five items answered on a 5-point Likert scale rated from 1 (*strongly disagree*) to 5 (*strongly agree*). An average score for SWLS was computed with high scores indicating high life satisfaction and overall internal consistency of $\alpha = .70$.

Data Analyses and Main Findings

As a preliminary step, a set of factor analyses models were analyzed to establish whether the factor structure of the measures fit the data well in the sample. In order to reach this purpose, we conducted Confirmatory Factor Analyses (CFA) and used model fit indicators of the Root-Mean-Square Error of Approximation (RMSEA; recommended < .08) and the Comparative Fit Index (CFI; recommended > .95) (Meade, Johnson, & Braddy, 2008; Rutkowski & Svetina, 2017). The relation of hope and the 5Cs as well as life satisfaction was tested by bivariate Pearson correlations, followed by path model among main constructs (i.e., whether the 5Cs mediate the relation between emerging adults' hope and life satisfaction).

Confirmatory Factor Analyses Models

The results of the factor models indicated that the fit of the 5Cs factor model was very good $\chi^2(302) = 46.14$, CFI = .978, RMSEA = .059. For the hope model, we tested a solution with one hope factor and four item variables. The model fit was very good, $\chi^2(302) = 16.22$, CFI = .986, RMSEA = .076. For life satisfaction, we implemented a one-factor life satisfaction model with five observed item variables, which showed a satisfactorily fit, $\chi^2(302) = 204.13$, CFI = .929, RMSEA = .079; Table 2).

Table 2 Goodness-of-fit indexes of path analyses models for main constructs

| | χ^2 | df | CFI | RMSEA |
|-------------------|-----------|----|------|-------|
| The 5Cs of PYD | 46.14*** | 26 | .978 | .059 |
| Hope | 16.22* | 7 | .986 | .076 |
| Life satisfaction | 204.13*** | 85 | .929 | .079 |

Note. χ^2 = Chi square test; *df* = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root-Mean-Square Error of Approximation

p* < .05; *p* < .01; ****p* < .001

Model Test of the 5Cs of PYD, Hope and Life Satisfaction

Preliminary analyses tested the relations of hope and the 5Cs as well as life satisfaction by bivariate Pearson correlations. Table 3 presents the bivariate correlations among all study variables. Hope was positively and significantly related to life satisfaction, confidence, competence, character, connection and caring (Table 3). Next, we tested a path model among main constructs (i.e., the 5Cs mediate the relation between emerging adults' hopeful expectations for the future and life satisfaction). The results revealed a good model fit, $\chi^2(302) = 31.00$, CFI = .969, RMSEA = .068. The standardized path model of the relations between hopeful expectations for the future, life satisfaction and the 5Cs is presented in Fig. 1. Hope was significantly related to one latent factor represented by the 5Cs of confidence, competence, character, connection and caring that mediated the link between hope and life satisfaction. These findings indicate that young people with strong hope for the future are more likely to experience the 5Cs and be happy with their life.

Conclusions

This chapter examined associations between the 5Cs, hopeful expectations for the future and life satisfaction in emerging adults in New Zealand. PYD related research in this context is growing, especially work with hope and life satisfaction in emerging adulthood. To our knowledge, this is the first evidence on these constructs among emerging adults in New Zealand. This country provides a unique combination of multicultural and Western context influenced by the geographic isolation of the islands, the indigenous Māori and the various waves of multi-ethnic migration following the British colonization. We were particularly interested in how young people living in such context derive and experience the 5Cs as to identify resources and promote PYD intervention programs (Eichas, Ferrer-Wreder, & Olsson, 2019). Therefore,

Table 3 Pearson correlations among study variables

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----------------------|--------|--------|--------|--------|--------|-----|----|
| 1. Hope | – | | | | | | |
| 2. Competence | .48*** | | | | | | |
| 3. Confidence | .66*** | .42*** | | | | | |
| 4. Character | .35*** | .19** | .33*** | | | | |
| 5. Connection | .60*** | .50*** | .50*** | .39*** | | | |
| 6. Caring | .30*** | .08 | .00 | .32*** | .12** | | |
| 7. Life satisfaction | .39*** | .28*** | .37*** | .13** | .32*** | .07 | – |

Note. ** $p < .01$; *** $p < .001$

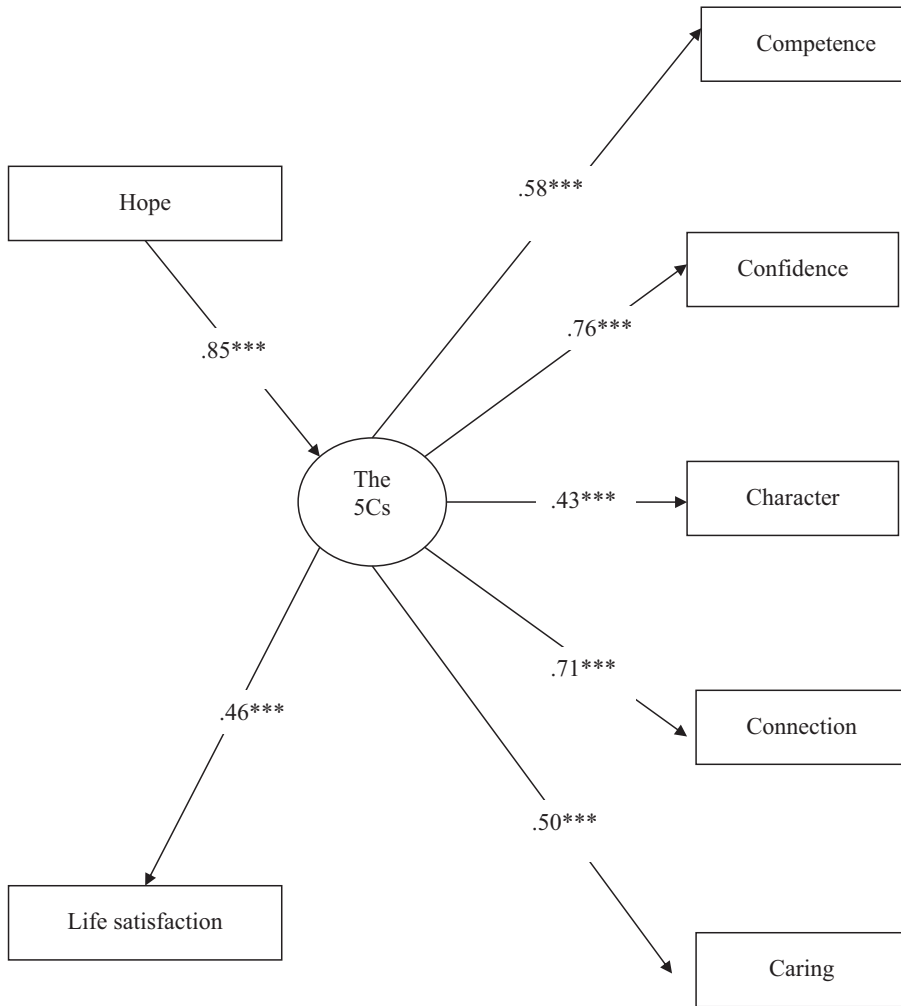


Fig. 1 The 5Cs of PYD, hope and life satisfaction. (Note. *** $p < .001$)

we investigated the interplay of confidence, competence, character, connection and caring and their relation to hopeful expectations for the future and life satisfaction among emerging adults.

Concerning the first assumption, the findings confirmed that hope was positively associated with one PYD factor represented by the 5Cs as was also shown by empirical research conducted

in the United States and Asia. Accordingly, hope had a strong association with PYD (Dimitrova et al., [this volume](#); Schmid et al., 2011). In addition, life satisfaction and hope, both future oriented constructs, were strongly related and hope fostered the experience of life satisfaction and the emergence of thriving. Such evidence confirms prior work documenting that hope was relevant for youth who develop the 5Cs (Schmid et al., 2011). This was closely related and in line with the second assumption in that the 5Cs played an important mediating role between hope and life satisfaction. Consistent with studies conducted in Western Europe and North America, hope acts as a powerful construct fostering youths' thriving. This finding is particularly relevant to enable the investigation of hope and the 5Cs across the population investigated here as well as to promote intervention and prevention.

Although this chapter adds to previous literature that is based on predominantly Western European and North American populations, the study reported in this chapter should be considered in light of some limitations. New investigations need to test the generalizability of findings in other samples with respect to wider variations in culture and age, for instance employing larger samples of ethnic minorities (e.g., Māori in New Zealand) or adolescents. An extension to middle and late adolescence groups may shed further light on relevant developmental stages in addition to emerging adulthood. Relatedly, this study was cross-sectional, leaving unaddressed the test of longitudinal equivalence to examine if the model structure in different time measurements remains the same.

Implications for Research, Policy and Practice

This chapter applies for the first time the 5Cs model of PYD among emerging adults in New Zealand widening the model's research scope and applications. Testing and establishing the factorial structure of the measures applied in this chapter provides a sound psychometric basis for meaningful future investigations of the constructs

of hope, life satisfaction and the 5Cs. Further, the chapter indicates that hope relates to the 5Cs and life satisfaction in emerging adults strengthening the need to study these constructs in one model and expand research in other populations and ethnic groups. This carries out relevant implications for research models applicable to wide and culturally diverse samples of young people to promote their well-being and thriving (Abdul Kadir et al., [this volume](#); Dimitrova, Buzea, et al., [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Manrique-Millones et al., [this volume](#)).

With regards to policy, the beneficial effects of hope and the 5Cs point to the importance of well-being resources for young people, which can be useful to promote policies towards positive development of these groups in New Zealand. Identifying such resources that promote confidence, competence, character, connection and caring may provide important information for developing targeted policy programs (Kaniūšonytė & Truskauskaitė-Kunevičienė, [this volume](#); Larsen & Holsen, [this volume](#); Li, He, & Chen, [this volume](#); Wiium & Dimitrova, 2019). This is particularly relevant for the context of emerging adults in New Zealand given the adversity and vulnerability of this age group in terms of mental health and distress (Kvalsvig, 2018).

As to practice, the findings from the present chapter have important implications for the type of support that is likely to be most effective for emerging adults. This chapter suggests that interventions are likely to be effective at this developmental stage. Supports designed to help young people discover inspiring hope and the 5Cs to determine how to work toward them should be offered throughout emerging adulthood. During late adolescence and emerging adulthood, young people need to be encouraged to engage in a broad and varied search for hope. They should also be encouraged to focus on how they plan to make progress toward their purposes in life and build the 5Cs. Exploring both hope and life satisfaction to effectively pursue the 5Cs would increase the likelihood of thriving and well-being. Again, these young people should be encouraged and supported by community-based programs that seek to promote PYD, health and

wellness (Catalano et al., 2019; Eichas et al., 2019; Roth & Brooks-Gunn, 2003; Schwartz, Pantin, Coatsworth, & Szapocznik, 2007) and active and engaged citizenship (Zaff, Kawashima-Ginsberg, & Lin, 2011).

In conclusion, the present chapter is a first step toward understanding of the culturally embedded nature of the 5Cs model of PYD in under-researched emerging adult samples by demonstrating that the model is a good representation of thriving and optimal well-being that appears to be suitable for use in New Zealand. This echoes the positive role hope plays in healthy development and the increasing call for fostering hope among young people (Damon, 2008; Karaman et al., 2020; Van den Heuvel, 2020). Since hope facilitates psychosocial functioning in areas such as social and academic success, self-worth, positive relationships with others and a sense of social concern and empathy for others, there is a great need to understand the expression of hope and the 5Cs in a variety of cultural contexts. The evaluation of the psychometric properties and the mediational model investigated in this chapter provides researchers, clinicians and psychologists with useful insights and prospects for testing the 5Cs model of PYD in emerging adult samples.

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Country and Gender Differences in Developmental Assets Among Youth and Emerging Adults in Ghana and Norway

Nora Wiium and Ana Kozina

Abstract

In a non-Western African society, like Ghana, the resources and opportunities available to facilitate optimal youth development do not only fall short but also appear to be unevenly distributed across gender, with females at a disadvantage. In a Western society like Norway, such gender inequality is addressed with political initiatives. The present chapter reviews cultural, economic, and political structures of the two countries and explores how these structures may reflect country and gender differences in the experience of developmental assets among youth and emerging adults in Ghana ($n = 483$) and Norway ($n = 625$). The chapter suggests that relative to Ghana, young people in Norway experience more optimal environment for development, largely present among females who reported

most of the assets. The anticipated gender inequality in Ghana was not confirmed as females reported equal and in some cases, even more assets relative to their male counterparts. While the gender equality policy in Norway aims to promote equity in the accessibility of resources and opportunities, females in Norway reported more developmental assets than males. The emerged country and gender differences suggest promoting national research, policy and practice to enhance developmental assets and subsequently thriving among youth and emerging adults in both Ghana and Norway.

Keywords

Developmental assets · Country and gender differences · Youth · Emerging adults · Ghana · Norway

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In many Western and non-Western countries, national youth policies have been formulated to nurture resources and opportunities that can facilitate Positive Youth Development (PYD). This is true for Ghana, a non-Western, and Norway, a Western country, which constitute two unique understudied contexts represented in the current chapter that explores country and gender differences in the experience of developmental assets among youth and emerging adults.

In so doing, the chapter provides, first, a brief summary of the opportunities and resources that facilitate youth development, referred to as developmental assets within the PYD framework (for new PYD conceptualizations see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). Second, a review of cultural, economic and political systems in Ghana and Norway and how these can heighten or hinder resources and opportunities for young people is offered. Third, findings from an empirical study of youth and emerging adults in both countries regarding their experiences of developmental assets are presented. Finally, the chapter discusses how these experiences can be a reflection of cultural, economic and political structures of the respective countries, as well as implications for research, policy and practice.

Several factors make the comparison between Ghana and Norway unique and novel. Gender issues and their promotion differ in these countries. While Norway has been at the forefront for several decades fighting gender inequality, social and cultural norms in Ghana tend to perpetuate inequality. Further, the novel comparison among these countries provides the opportunity to assess the generalizability of PYD beyond heavily represented U.S. context, as well as the unique possibility to compare youth and emerging adults' experiences of developmental assets in a Western and a non-Western society. With this comparison, the chapter provides solid incremental contribution to the PYD field on a number of grounds. First, the chapter investigates the developmental assets model in emerging adulthood other than the often used adolescent samples. Emerging adulthood (the period spanning from ages 18 to 30), represents a relatively new and developmentally intriguing stage that is increasingly attracting attention adjacent to the primarily research focus on childhood and adolescence (Arnett, 2018; Dimitrova, 2018; Dimitrova, Sam, & Ferrer-Wreder, 2021). Second, this chapter advances further understanding on PYD and the assets model that are especially important for diverse and understudied contexts (i.e., Ghana

and Norway) to promote avenues for optimal development among young people. Third, the chapter provides evidence for the reliability and validity of the assets model in terms of measurement invariance referring to psychometrically reliable measurement across different groups (i.e., Ghana and Norway, females and males). Next, the chapter furthers evidence on the conceptual relations between the assets model, country and gender to highlight the important components of healthy development among diverse samples of young people (Dimitrova et al., [this volume](#); Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#); Kozina, Wiium, Gonzalez, & Dimitrova, 2019). The promotion of the assets model as an assessment tool beyond heavily advanced U.S. scholarship has the potential to enhance PYD research, policy and practice among culturally diverse contexts, such as those in Ghana and Norway. This further informs actions to facilitate the developmental assets needed to promote thriving and contribution among young people in these two specific countries as well as in other related contexts (Dimitrova & Wiium, [this volume](#)).

Developmental Assets and Nurturing Context

The developmental assets model is one of the most influential PYD frameworks (Roehlkepartain & Blyth, 2020; Scales, 2011; Scales, Roehlkepartain, & Shramko, 2017) represented by 40 assets grouped into two categories of internal and external assets (Benson, 2007). Internal assets, which reflect individual and psychological characteristics, comprise four sub-categories of *commitment to learning* (achievement motivation, and school engagement), *positive values* (integrity and responsibility), *social competencies* (planning and decision-making, and resistance skills) and *positive identity* (self-esteem and sense of purpose). Similarly, there are four sub-categories of external assets, which together represent contextual and relational features of a socializing system. These are *support* (family sup-

port and caring school climate), *empowerment* (how the community values youth and community's perception of youth as resources), *boundaries and expectations* (family boundaries and significant others' expectations of young people), and *constructive use of time* (creative activities and youth programs) (Benson, 2007). Collectively, internal and external assets signify developmental assets in five different contexts of young people referring to personal, social, family, school, and community. The psychometric properties of the assets have been established globally across diverse ethnic groups and countries (Scales, 2011; Scales et al., 2017). Further, the assets model has been applied in countries across Africa, Asia, Latin/North America and Europe (Adams, Wiium, & Abubakar, 2019; Chen, Wiium, & Dimitrova, 2018; Desie, 2020; Drescher, Johnson, Kurz, Scales, & Kiliho, 2018; Kaur et al., 2019; Pashak, Handal, & Scales, 2018; Soares, Pais-Ribeiro, & Silva, 2019; Uka et al., [this volume](#); Vera-Bachmann, Gálvez-Nieto, Trizano-Hermosilla, Salvo-Garrido, & Polanco, 2020; Wiium, Dost-Gözkán, & Kosic, 2019). Yet, relatively little work has examined the model in a cross-cultural comparison perspective across diverse samples and demographic contexts as those presented in this chapter.

The accessibility of developmental assets in contexts, such as those in Ghana and Norway, entails having an asset-building community and an asset-building society (Benson, 2007). Asset-building community describes the nature and dynamics of youth contexts in their ability to provide the necessary developmental resources to all adolescents not only incessantly, but impartial as well. Thus, an asset-building community in Ghana and Norway should reflect multiple arenas of asset-building capacity, where community members or groups provide individual level services, such as informal relationships with adolescents and socializing system actions that dynamically involve families, neighborhoods, schools, congregations and youth organizations. The asset-building community should involve community-building actions that are prompted

directly or indirectly by the economic and governmental infrastructures of a community (Benson, 2007).

An asset-building society also reflects the role that social norms, public policy, formalities and media play in improving and strengthening the asset-building capacity or developmental infrastructure of individuals, systems, and communities (Benson, 2007). Thus, asset-building communities and societies in Ghana and Norway will have relevant implications for healthy development as they signify behaviors, norms, structures and policies that can determine the accessibility of developmental assets in youth contexts.

Country and Gender Influences on Developmental Assets

The empirical evidence of the developmental assets has been assessed in several countries, although comparative studies or those that address the influence of cultural, economic, and political structures of countries have been very limited. An international study of the developmental assets compared American youth scores on the assets to those in Albania, Bangladesh, Japan, Lebanon, and the Philippines. While the majority of youth from developed countries, such as the United States (49%) and Japan (65%), reported good or excellent levels of the assets, the majority of those living in developing countries, such as Bangladesh (58%) and the Philippines (61%), reported fair or poor level of assets. Good or excellent level of assets meant that youth had experienced most of the assets often or always, while poor and fair meant that they had not experienced most of the assets at all or only sometimes. However, youth scores in Bangladesh and the Philippines got better and were comparable to the American sample following their participation in asset-building programs (Scales, 2011).

Another international study that involved secondary school students in Italy, Norway and Turkey, found that most youth living in these countries had experienced several of the assets although youth in Norway and Turkey reported

more assets compared to their Italian counterparts. The country differences appeared to be a reflection of youth policies and initiatives that were more comprehensive and formal, especially in Norway (Wiium et al., 2019). Furthermore, in a study with young people from three sub-Saharan African countries, participants in Ghana reported fewer assets relative to those in Kenya and South Africa (Adams et al., 2019), despite that Ghana ranks higher on Youth Development Index (117 of 183 countries) compared to Kenya (125) and South Africa (126) (Commonwealth Secretariat, 2016).

In addition to country, gender has been found to play a role in the experience of developmental assets. For instance, females have consistently reported higher level of assets compared to males (Scales & Leffert, 2004). More specifically, findings from the North American context report that females score high on commitment to learning (Fornieris, Camiré, & Williamson, 2015; Scales, Benson, Leffert, & Blyth, 2000), and positive values (Benson, Scales, Leffert, & Roehlkepartain, 1999). However in India, males have been shown to report higher scores than females on internal assets, such as commitment to learning, social competencies and positive identity as well as on external assets, such as support, empowerment and boundaries and expectations (Satheesan & Hameed, 2018). Nonetheless, in a study of the developmental assets among youth in Uganda, females scored higher on overall assets compared to males (Drescher, Chin, Johnson, & Johnson-Pynn, 2012).

The reasons behind country and gender differences have not always been empirically clear. However, theoretically, this could be linked to the extent to which youth contexts nurture what has been referred to as asset-building community and asset-building society. It has been further argued that the availability of developmental assets is predicated on several aspects of asset-building community and asset-building society, such as behaviors, norms, programs and policies in youth contexts (Benson, 2007). The present chapter examines these aspects by reviewing the cultural, economic and political systems in Ghana and Norway and discussing their potential in fostering developmental assets.

The Context in Ghana and Norway

With the growing elderly population in Europe in general, and Norway in particular, youth constitute an immense source of human resources that can be utilized in community and national development. Similarly, in many African countries, including Ghana, young people represent an important target for economic development considering the early retirement age and the relatively lower life expectancy rates (Stewart & Yermo, 2009; United Nations, 2012). However, as PYD suggests, youth participation and contribution can only occur when youth have access to developmental assets in their contexts. Drawing on the concepts of asset-building community and asset-building society (Benson, 2007), the cultural, economic and political structures of Ghana and Norway may indicate, directly or indirectly, the variety and breadth of developmental assets available to youth in their respective countries. The subsequent paragraphs explore these structures by considering how they may reflect country and gender differences in young people's experience of developmental assets.

Ghana

Since its transition to multi-party democracy in 1992, Ghana has been recognized as one of the most politically stable countries in West Africa. As a lower middle-income country, Ghana has gold, cocoa and more recently, oil, as the main economy cornerstone. According to recent reports, the provisional Real Gross Domestic Product (GDP) for the 4th quarter of 2017 grew by 8% compared with 4% registered for the 4th quarter of 2016 (Ghana Statistical Service, 2018). The last population census revealed that 60% of the country's total population of 25 million were under age 30 (Ghana Statistical Service, 2018). With such population statistics, Ghana has often been referred to as a youthful population. English is the official language, although major local languages, such as Akan, Ewe, Dagbani and Ga-Adangbe are promoted in both formal and informal educational systems. The current liter-

acy rate among youth is 71%, while Christianity is the main religion (Ghana Statistical Service, 2018; UNESCO Institute of Statistics, 2018).

Ghana has been described as a collectivistic society, where individuals define themselves based on social and collective aspects of the self (Akoto, 2020; Hofstede, 2011). Accordingly, the family represents a significant prototypical relationship, where family members care for each other, unite and work towards common goals (Kim-Prieto & Eid, 2004; LeFebvre & Franke, 2013). Thus, like in many African cultures, collective responsibilities are placed above individual initiatives and self-sufficiency.

In 2010, Ghana adopted a National Youth Policy with priority areas that included education and skills training, youth and employment, mentoring, sports and recreation along with youth patriotism and volunteerism. These areas were targeted as strategies and programs to enable youth to actively contribute to the economic, social, and cultural development of themselves, their families, and the nation (Ghana Ministry of Youth and Sports, 2010). In the recent Youth Development Index (YDI), reflecting five areas of youth development (political participation, health and well-being, employment and opportunity, education, and civic participation), Ghana ranked 117 out of 183 countries with an YDI overall score of 0.58 (YDI score ranges from 0 to 1). Political participation was the strongest YDI, while health and well-being together with employment and opportunity were the weakest (Commonwealth Secretariat, 2016). In addition, the Global Gender Gap Index (GGGI) (reflecting female prospects relative to males in economic participation and opportunity, educational attainment, health and survival, and political empowerment) showed that Ghana ranked 89 out of 149 countries with an overall GGGI score of 0.68 and a score as low as 0.09 on political empowerment (score ranges from 0 to 1) (World Economic Forum, 2018). These global indices suggest that conditions that promote youth development are not optimal and perhaps, even more so for females.

While governmental initiatives outlined above represent a positive step forward, there is a pos-

sibility that only a portion of the youth population is benefiting from different youth strategies due to gender discrimination. Discrimination against women in Ghana is common and oddly perpetuated by systems, such as the educational sector that are supposed to address it (Ayentimi, Abadi, Adjei, & Burgess, 2020; The Women's Manifesto for Ghana, 2004). With the pervasive gender inequalities in the culture, systems and practices of state, private and civil societies, the opportunities for women in Ghana are often limited. For example, the Ghanaian culture generally prescribes empowerment and leadership roles for males, while imposing caring roles on females (Dako-Gyeke & Owusu, 2013). Thus, while a combination of Ghana's economic status, governmental initiatives and the collective cultural perspective can ensure that developmental assets are nurtured to some extent, gender discrimination is likely to lead to gender differences in the experience of the assets, where males would experience more assets than females.

Norway

As one of the world's largest producers of oil and gas, Norway is one of the richest countries and most stable economies in the world. Norway has a current population of 5.3 million with about 37% under the age of 30 years (Statistics Norway, 2019). The country is predominantly Christian with 77% of the population reporting an Evangelical Lutheran affiliation. Nynorsk and Bokmål are two official forms of the Norwegian language, but there is also Sami, spoken by the Sami minority group in Northern Norway.

Many Western societies, including Norway are appraised as individualistic, counter to the African collectivistic culture (Hofstede, 2011; Ravn, 2020). Accordingly, such societies' beliefs are based on the concept of humanity, which is intellectualized and individualized. Although religious influences prescribe care and concern for other members of society, most efforts are self-serving. Norway's high score on individualism therefore reflects a culture that values and expresses personal opinions. With its low score

on masculinity, the country is also perceived as a feminine society with strong gender equality (Hofstede, 2011; Nygren, Walsh, Ellingson, & Alastair, 2020).

In 2002, the Norwegian National Youth Policy outlined six areas to facilitate youth development represented by (1) comprehensive preventative work; (2) education and schools; (3) efforts aimed at leisure and community; (4) support for children and adolescents with serious behavioral problems; (5) follow-up of young offenders and criminal youth gangs and (6) knowledge and research (Youth Policy Norway, 2014). Norway has an overall score of 0.80 on the Youth Development Index with high scores on all youth development indicators and the highest for education. With a rank of 16 out of 183 countries, Norway has one of the highest youth development index globally (Commonwealth Secretariat, 2016).

Youth initiatives in Norway are described as traditionally “grass-roots” and “decentralized” to local municipalities with a high degree of autonomy in the practical implementation of child and youth policy (Bergan, 2017). There is also a massive support of youth activities by generous organizations and groups in the Norwegian society. In addition, Norway has been involved in the European Union (EU) youth programs since 1994 and has implemented a Youth in Action program that builds on the EU youth program for non-formal learning with the aim to support active citizenship, participation and civic engagement (Bergan, 2017). All these initiatives suggest that Norway has an asset-building community and society that can nurture the developmental assets needed for optimal youth development. Moreover, the issue of gender inequality that has been a major societal concern for Ghana has been addressed in several political initiatives in Norway. Accordingly, women rights and gender equality have been addressed extensively to ensure increased opportunities in education and employment among girls and women (Equality, 2014). Indeed, the Global Gender Gap Index ranks Norway second out of 149 countries with an overall score of 0.83 (World Economic Forum, 2018).

The Present Chapter

The nurturing of developmental assets is contingent on asset-building community and asset-building society reflecting attitudes, behaviors, programs and policies of the immediate and extended community of young people (Benson, 2007). The cultural, economic and political appraisals of the contexts in Ghana and Norway suggest that although to varying degree, both countries have the structures needed to nurture developmental assets for their youth. The assumption is that young people from Norway will show more experiences on the assets because of the country’s higher scores on YDI and GGGI together with its local and national initiatives on gender equality and youth development compared to Ghana. Furthermore, it is reasonable to assume that males compared to females in Ghana will report more assets, while the reverse will be true in Norway. That is, females in Norway will report more developmental assets relative to males and in an interaction between country and gender, females in Norway will report more assets relative to their male counterparts and peers in Ghana. The present chapter examines all these assumptions in an understudied sample of young people in Ghana and Norway.

An Empirical Study of Young People in Ghana and Norway

The current chapter is based on a larger international study on PYD (Dimitrova & Wiium, [this volume](#); Wiium & Dimitrova, 2019). The data presented draw on a cross-sectional study of first year university students in Ghana ($n = 483$, 62% females) and Norway ($n = 625$, 74% females) comprising youth and emerging adults aged 16–28 years old. Participants provided information on the educational level of their father and mother (5 levels from no education to university degree). Sixty-six percent of the participants in Ghana reported that the highest educational level of their father was vocational, technical, polytechnic or university, while the corresponding percentage for mothers was 44%. In Norway,

the percentages for highest parental education level were 79% (father) and 82% (mother). Since age and parental education have been found to influence the experience of developmental assets, they were treated as control variables in further analyses (Wium et al., 2019).

The developmental assets were measured with The Developmental Assets Profile ([DAP]; Benson, 2007; Search Institute, 2020) using four internal asset categories (commitment to learning, positive values, social competencies and positive identity) and four external asset categories (support, empowerment, boundaries and expectations and constructive use of time). Assets addressing multiple contexts (e.g., home and school) have been reformulated such that each context was addressed separately. Therefore, a total of 51 items reflecting the 40 assets in these contexts were examined. Internal assets items were related to learning new things, helping other people, planning ahead and making good choices, as well as feeling good about the future. External assets items referred to asking parents for advice, being given useful roles and responsibilities, having friends who serve as good role models and being involved in creative activities, such as music and theatre. Response options ranged from 1 (*not at all or rarely*) to 4 (*extremely or almost always*) with high scores indicating more experiences of the assets. Cronbach's reliability coefficients for external and internal asset ranged from $\alpha = .60$ to $\alpha = .80$ for Ghana and from $\alpha = .66$ to $\alpha = .88$ for Norway, with low values for constructive use of time ($\alpha \leq .47$ for Ghana and $\alpha \leq .40$ for Norway). These coefficients were similar to those observed by Scales et al. (2000) in a study on youth from diverse ethnic groups in the United States ($\alpha = .60$ to $\alpha = .80$).

In Ghana, participants were recruited at the Departments of Psychology, Political Science, Geography and Social Work at the School of Social Sciences, University of Ghana. Trained research assistants and the first author native from Ghana, administered the original questionnaire in English as the official language of instruction. The study was approved by the Ethics Committee for Humanities at the University of Ghana. In Norway, participants were recruited at

the Faculties of Mathematics and Natural Sciences, Psychology, Law, Social Sciences and Medicine at the University of Bergen. A specialized company in interpretation services (Semantik Translations Norway AS) translated the original English questionnaire to Norwegian. The study was approved by the Regional Committee for Medical and Health Research Ethics (REK) in Norway.

Analytical Procedure and Main Findings

Participants who had at least 50% missing responses on the developmental asset items were excluded from the data analysis (i.e., 8% of the total sample with 3 participants from Ghana and 89 from Norway). Pairwise deletion was used to handle the remaining missing data. Descriptive analyses were conducted on demographic variables and reliability tests were undertaken to assess the internal consistency of the assets. Composite variables of the assets for each category were created by recoding the 4-point Likert into a binary scale (i.e., responses 1 and 2 (*asset absent*), 3 and 4 (*asset present*)).

Table 1 presents the frequency distribution of the demographic variables and Cronbach's reliability coefficients of the developmental assets. The majority of participants in both Ghana and Norway were females (62% and 74%, respectively). For both genders, the percentage of parents with post-secondary or higher education was relatively similar for fathers and mothers in Norway ($\geq 75\%$ and $\geq 81\%$, respectively), while the percentage for Ghana, indicated differences in parental educational background in favor of fathers ($\geq 62\%$ vs. $\geq 44\%$). Although the reliability coefficients of the assets for both countries were similar to earlier studies, those in the sample from Norway were slightly higher than in Ghana (Table 1).

Before comparing the number of assets experienced by young people across country and gender, measurement invariance (i.e., the degree of psychometrically reliable measurement across different groups) was assessed by running a set of

Table 1 Sample descriptives in Ghana and Norway

| Variable | Ghana | | Norway | | Total |
|---|-------------------------|---------------------------|-------------------------|---------------------------|--------------|
| | Males <i>n</i> = 185 | Females <i>n</i> = 295 | Males <i>n</i> = 142 | Females <i>n</i> = 394 | |
| Mean age (SD) | 19.94 (1.87) | 19.34 (1.45) | 20.51 (1.66) | 20.01 (1.42) | 19.85 (1.60) |
| Gender % | | | | | |
| Male | – | – | – | – | 32.20 |
| Female | – | – | – | – | 67.80 |
| Father education % | | | | | |
| Vocational, technical, polytechnic or university | 61.60 | 68.40 | 74.50 | 80.40 | 72.50 |
| Secondary school or lower | 38.40 | 31.60 | 25.50 | 19.60 | 27.50 |
| Mother education % | | | | | |
| Vocational, technical, polytechnic or university | 43.80 | 44.10 | 85.00 | 81.20 | 63.70 |
| Secondary school or lower | 56.20 | 55.90 | 15.00 | 18.80 | 36.30 |
| Cronbach's reliability coefficient α | | | | | |
| Internal assets | | | | | |
| Commitment to learning | .76 | .60 | .84 | .82 | .76 |
| Positive values | .75 | .71 | .67 | .66 | .70 |
| Social competencies | .80 | .70 | .71 | .71 | .73 |
| Positive identity | .88 | .73 | .87 | .88 | .87 |
| External assets | | | | | |
| Support | .68 | .64 | .82 | .79 | .72 |
| Empowerment | .76 | .69 | .79 | .71 | .74 |
| Boundaries and expectations | .80 | .72 | .78 | .78 | .76 |
| Constructive use of time | .47 | .46 | .22 | .40 | .19 |

Note. *SD* = Standard Deviation

Multi-group Confirmatory Factor Analyses (MGCFAs) for configural, metric and scalar invariance levels. Configural invariance was tested in a model with the assets loading on one latent factor (internal or external assets) in the same manner across groups (i.e., country and gender). For metric invariance (allowing the comparison of relations among the assets to be examined), the factor loadings on internal and external assets were assumed to be the same across groups. For scalar invariance (allowing to compare mean differences on the assets measured), factor loadings and intercepts were constrained to be equal among groups. In the MGCFAs, the asset categories were treated as observed variables to determine how they load onto one underlying latent factor. To evaluate model fit, the Chi square test, the Tucker Lewis Index (TLI; acceptable > .90), the Root Mean Square Error of Approximation (RMSEA; acceptable < .08), and the Comparative Fit Index

(CFI; acceptable > .90) (Rutkowski & Svetina, 2017) were used.

Table 2 shows the results of measurement invariance for all developmental assets, suggesting similar patterns of observed (i.e., the four categories of internal assets and the four categories of external assets) and latent constructs (i.e., configural invariance) across country and gender. In the measurement weights model, where factor loadings on the latent variable were constrained to be equal across country and gender, the fit indices suggested configural and metric invariance. In the intercept invariance model, where variables were constrained to have the same intercept (latent mean) across country and gender, the fit indices did not suggest scalar invariance for both country and gender.

As the invariance testing did not show scalar invariance on the assets for the comparison of their means by country and gender, a partial scalar invariance was tested following the recom-

Table 2 Measurement invariance models for developmental assets by country and gender

| Model | Model fit indices | | | |
|----------------------------------|--------------------|-------------|-------------------|------------------|
| | $\chi^2(df)$ | RMSEA | 90% CIs RMSEA | CFI/TLI |
| Country | | | | |
| Configural invariance | 60.40 (26) | .051 | .034, .068 | .982/.961 |
| Metric invariance | 108.60 (32) | .069 | .055, .083 | .959/.929 |
| Scalar invariance | 515.45 (38) | .157 | .145, .169 | .747/.627 |
| <i>Partial scalar invariance</i> | <i>138.25(35)</i> | <i>.076</i> | <i>.063, .090</i> | <i>.945/.913</i> |
| Gender | | | | |
| Configural invariance | 60.62 (26) | .051 | .034, .068 | .979/.955 |
| Metric invariance | 68.97 (32) | .048 | .032, .063 | .978/.961 |
| <i>Scalar invariance</i> | <i>122.22 (38)</i> | <i>.066</i> | <i>.053, .079</i> | <i>.949/.925</i> |
| <i>Partial scalar invariance</i> | <i>77.32(35)</i> | <i>.049</i> | <i>.034, .064</i> | <i>.975/.959</i> |

Note. χ^2 = Chi square; *df* = degrees of freedom; *CFI* = Comparative Fit Index; *TLI* = Tucker Lewis Index; *RMSEA* = Root Mean Square Error of Approximation; *CIs* = Confidence Intervals; *Configural invariance* = invariance of model form; *Metric invariance* = invariance of factor loadings; *Scalar invariance* = invariance of item intercepts or thresholds. The best fitting selected models are represented in italics

mended procedure (i.e., examining the size of the loadings and intercepts of the assets; constraining all loadings and intercepts and releasing those with the largest unstandardized difference; comparing this new model with the old model and obtaining a non-significant Chi square test; van de Schoot, Lugtig, & Hox, 2012). Partial scalar invariance was achieved allowing the intercepts for the internal asset categories to vary by gender and country. Thus, a partial scalar invariance allowed means comparison of the assets in Ghana and Norway, as well as between males and females (Table 2).

With a partial scalar invariance established for country and gender, a series of factorial ANCOVA analyses with Bonferroni correction were carried out to investigate country and gender differences and their interaction term. Factorial ANCOVA allows comparing means across independent variables that divide the study sample into groups. The factorial ANCOVA also assumes a cause-effect relation in that independent variables (country and gender) cause the significant differences in the dependent variables (the asset categories) (Statistic Solutions, 2018). Age and parental education were treated as control variables.

For country effects on internal assets, young people in Norway reported more assets on commitment to learning and social competencies than those in Ghana. Young people in Ghana reported

more assets on positive values and positive identity than their peers in Norway. For external assets, young people in Norway reported more assets on empowerment than their peers in Ghana (Table 3).

For gender effects on internal assets, females in Ghana and Norway reported more assets on commitment to learning, positive values and social competencies than their male counterparts. For external assets, females in Ghana and Norway reported more assets on empowerment than their male counterparts, while females in Norway reported more assets on support than their Norwegian male counterparts (Table 3). Moreover, the interaction terms suggested that females in Norway reported more assets on social competencies, support and boundaries and expectations, relative to their Norwegian male and Ghanaian counterparts.

Conclusions

The present chapter advances PYD scholarship in two unique and understudied contexts by investigating country and gender effects in the experience of developmental assets among youth and emerging adults in Ghana and Norway. Such comparison expands PYD work beyond traditionally researched American context by facilitating the generalizability of a major PYD model on

Table 3 Factorial analyses on developmental asset by country and gender

| Variable (score range) | Country | | Factorial ANCOVA | | | | |
|--|--------------|---------------|------------------|-------|----|-------|---------|
| | Ghana M (SE) | Norway M (SE) | Source | SS | df | MS | F |
| Commitment to learning ^a (1–7) | | | Gender | 32.60 | 1 | 32.60 | 24.49** |
| Males | 5.80 (.09) | 6.06 (.11) | Country | 17.48 | 1 | 17.48 | 13.13** |
| Females | 6.14 (.07) | 6.57 (.07) | Gender x Country | 1.35 | 1 | 1.35 | 1.01 |
| Positive values ^a (1–7) | | | Gender | 15.51 | 1 | 15.51 | 10.20** |
| Males | 6.11 (.09) | 5.39 (.12) | Country | 43.68 | 1 | 43.68 | 28.74** |
| Females | 6.23 (.08) | 5.58 (.07) | Gender x Country | 5.69 | 1 | 5.69 | 3.74 |
| Social competencies ^a (1–7) | | | Gender | 35.20 | 1 | 35.20 | 18.78** |
| Males | 5.69 (.11) | 5.73 (.13) | Country | 14.13 | 1 | 14.13 | 7.54** |
| Females | 5.86 (.09) | 6.43 (.08) | Gender x Country | 12.92 | 1 | 12.92 | 6.89** |
| Positive identity ^a (1–4) | | | Gender | .32 | 1 | .32 | .22 |
| Males | 3.57 (.09) | 2.82 (.12) | Country | 88.75 | 1 | 88.75 | 60.19** |
| Females | 3.55 (.08) | 2.76 (.07) | Gender x Country | .08 | 1 | .08 | .06 |
| Support ^b (1–7) | | | Gender | 21.17 | 1 | 21.17 | 7.93** |
| Males | 4.50 (.13) | 4.23 (.16) | Country | 1.30 | 1 | 1.30 | .49 |
| Females | 4.48 (.10) | 4.93 (.10) | Gender x Country | 24.50 | 1 | 24.50 | 9.18** |
| Empowerment ^b (1–6) | | | Gender | 10.97 | 1 | 10.97 | 5.44* |
| Males | 4.31 (.11) | 4.91 (.14) | Country | 47.59 | 1 | 47.59 | 23.63** |
| Females | 4.58 (.09) | 5.12 (.09) | Gender x Country | .19 | 1 | .19 | .10 |
| Boundaries and expectations ^b (1–9) | | | Gender | 12.45 | 1 | 12.45 | 3.29 |
| Males | 6.75 (.15) | 6.44 (.19) | Country | .05 | 1 | .05 | .01 |
| Females | 6.72 (.12) | 6.99 (.12) | Gender x Country | 15.64 | 1 | 15.64 | 4.14* |
| Constructive use of time ^b (1–4) | | | Gender | .77 | 1 | .77 | .70 |
| Males | 1.74 (.08) | 1.57 (.10) | Country | .48 | 1 | .48 | .44 |
| Females | 1.56 (.07) | 1.61 (.06) | Gender x Country | 2.18 | 1 | 2.18 | 1.99 |

Note. Age and parental educational background were controlled for; *M* (SE) = Mean (standard error); *SS* = Sum of Squares; *MS* = Mean Square; ^a Internal assets; ^b External assets
 p* < .05; *p* < .01

ways in which young people experience the developmental assets in a Western and a non-Western society with different gender opportunities, equality, social and cultural norms.

A major finding was that young people in Ghana and Norway differ in their experiences of the assets. Country differences emerged for two out of four internal assets (i.e., commitment to learning and social competencies) and one out of four external assets (i.e., empowerment). Young people in Ghana reported more assets on positive values and positive identity (i.e., the remaining two internal asset categories) compared to their Norwegian counterparts. Norway higher scores on the three asset categories may reflect the asset-building community and asset-building society (Benson, 2007) in the form of grass-roots youth initiatives, massive support of the initiatives alongside national and international focus on youth development (Bergan, 2017; Youth Policy Norway, 2014). All these initiatives at different societal levels appear to create an optimal environment for positive youth development. Moreover, the assets that young people in Norway scored high on were mostly personal skills, possibly reflecting the nation individualistic cultural perspective (Hofstede, 2011; Ravn, 2020).

Although positive values were relatively high for young people in both countries, those in Ghana reported more assets, probably reflecting the nation initiatives on character formation and moral education that have been at the forefront in education and religion since pre-colonial days (Asare-Danso, 2018). Indeed, Ghana's focus on character development and positive values is a strategy that has been used to educate young people in both formal and informal settings to enable them to become responsible adults in the society. Moreover, young people in Ghana reported more assets on positive identity compared to their Norwegian counterparts. Items used to measure the asset category signified how youth felt about themselves, their future and purposeful life. These appraisals are usually influenced by experiences and relationships in youth contexts as well as the wider social environment (Howard, Heron, MacIntyre, Myers, & Everhart, 2017). Young people in Norway scored quite low on

positive identity, suggesting that they might have been influenced more by the experiences and relationships in their culturally individualistic Western context.

Another relevant finding was that females and males in Ghana and Norway differed in their experiences of the assets. Gender differences emerged for five out of the eight asset categories. Further, females in Norway reported more developmental assets relative to their male counterparts as well as their peers in Ghana. These findings could be a reflection of Norway initiatives on gender equality and the enforcement of women rights (Equality, 2014). In a related study on high school students in Norway, females in Norway scored consistently higher on several of the developmental assets than males (Beck & Wiium, 2019). Thus, it can be worth looking into gender equality policies and initiatives to ensure that these are indeed facilitating equal resources for females and males.

As for Ghana, gender discrimination appears to be a real phenomenon in the social and educational system (Boateng, 2020; The Women's Manifesto for Ghana, 2004), although our findings do not readily reveal this form of discrimination. In fact, females had similar scores on four out of the eight developmental asset categories and even higher scores on the remaining four when compared to males. Within the PYD perspective, the more assets youth have, the more they should thrive and contribute to their settings. Based on the evidence reported in this chapter, one would therefore expect thriving and contribution scores to be at least similar between males and females. However, in an earlier study on a similar sample, the patterns of thriving and contribution differed for males and females in Ghana. Specifically, while males were more likely to have opportunities for leadership and contribute to self-development, females scored lower on opportunity for leadership and tended to contribute more to the family (Wiium, 2018). Such gender differences may be due to methodological issues or it may also be a reflection of cultural norms and gender inequality possibly affecting access to resources and opportunities to thrive in Ghana.

On a methodological note, more caution is needed in the application of the assets model and its measurement beyond the American context where the model has been originally developed and examined. Based on the study reported in the present chapter, some asset items, for example those measuring constructive use of time showed low reliability values in both samples. Thus, there is a possibility that items developed in their original context are not capturing effectively developmental assets, such as constructive use of time in both Ghana and Norway. While young people from these countries experienced most of the assets, future studies can look more into country or culture-specific assets that can facilitate positive youth development in non U.S. contexts. In addition, the convenience sample of first year university students does not sufficiently represent the population of youth and emerging adults in both countries. A more representative sample with a longitudinal design is needed to better capture the developmental assets in Ghana and Norway.

Implications for Research, Policy and Practice

The current chapter has relevant implications for research, policy and practice. For research, adequate psychometric properties of measurement invariance suggest that the developmental assets can be reliably used to evaluate the opportunities and resources of young people in Ghana and Norway as well as compare these assets by country and gender. Thus, the findings pave way for future comparative research in these countries, regarding skills, resources and opportunities that youth and emerging adults need to thrive. In such comparative studies, the asset items can also be used to investigate gender effects on personal strengths and contextual resources of young people.

Concerning policy, high scores on developmental assets reported among youth and emerg-

ing adults, especially females in Norway appear to be a reflection of a proactive focus on youth initiatives in local, national and international policies of the Norwegian government. While political efforts should be made to enhance this proactive focus on youth initiatives in Norway, efforts that use both bottom-up and top-down strategies (i.e., grassroots-led or government-led) in nurturing developmental assets can also be adopted in youth policies in Ghana. This will ensure that young people get to experience developmental assets in multiple youth contexts, including home, school and their local community.

As for practice, the developmental assets model can be used as an intervention tool in educational programs and local communities to ensure that youth and emerging adults in Ghana and Norway are maintaining the assets they already have, while also being exposed to assets they lack. This can prompt youth programs to reflect on how their asset-building communities and asset-building societies are nurturing developmental assets and making them accessible to all young people.

In conclusion, this chapter suggests that the developmental assets model developed and primarily tested in American samples is also applicable and experienced by youth and emerging adults in Ghana and Norway. These assets were largely able to capture the skills, opportunities and resources of young people in both countries, although there is a need to explore assets uniquely applicable and present in Ghana and Norway. While Norway appears to provide more optimal context because of its proactive focus on gender and youth initiatives, the cultural, economic and political structures in both countries reflected asset-building communities and asset-building societies that could nurture developmental assets. Good policies and initiatives dealing with gender equality and a positive perspective are necessary to ensure access to resources and opportunities that promote thriving and contribution among all young people.

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Positive Youth Development in Bulgaria, Italy, Norway and Romania: Testing the Factorial Structure and Measurement Invariance of the 5Cs Model

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Abstract

This chapter applies the 5Cs model of PYD comprising competence, confidence, character, connection and caring among 1403 youth ($M = 18.91$ years) in Bulgaria ($n = 196$), Italy ($n = 354$), Norway ($n = 564$) and Romania ($n = 289$). These countries

offer a novel and unique context to apply PYD as related comparative work with youth samples is rare across Eastern (Bulgaria and Romania), Southern (Italy) and Northern Europe (Norway). Further, Bulgaria and Romania are emerging nations following the collapse of the communism in late 1980s in contrast to Italy being a traditionally patriarchal country and social equity driven Norway. The chapter presents an empirical example that evaluates the factorial structure and measurement invariance (i.e., the degree to which the scale measurements conducted across different populations exhibit similar psychometric properties) of the 5Cs model. The results of confirmatory factor analysis (CFA) supported the 5Cs as well as a second-order 5Cs of PYD factors, suggesting that the 5Cs model is a reliable and valid measurement tool in the four European countries investigated. The chapter concludes with an exploration of relevant implications for research, policy, and practice.

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Keywords

Measurement invariance · Confirmatory factor analysis · Positive youth development · 5Cs · Bulgaria · Italy · Norway · Romania

This chapter adds novel insights to the increasing interest in the field of Positive Youth Development (PYD) – a fresh and increasingly growing line of research, mainly U.S. based that focuses on the strengths of young people with the aim of better equipping them for a successful transition to adulthood. Essential to PYD are the 5Cs of competence (academic, social, vocational skills), confidence (sense of mastery, positive identity, and self-worth), character (integrity, moral commitment, and personal values), connection (healthy relation to community, friends, family, and school) and caring (empathy and sympathy) conceived as internal characteristics of youth that help them to grow into healthy adults (Burkhard, Robinson, Murray, & Lerner, 2019; Geldhof et al., 2015).

Relevant conceptualizations of PYD have suggested that the 5Cs model is one of the more empirically supported frameworks to date (Heck & Subramaniam, 2009; Tolan, Ross, Arkin, Godine, & Clark, 2016). Indeed, the 5Cs model has attracted a great deal of attention from researchers and practitioners working with culturally diverse youth (see Dominguez, Wium, Jackman, & Ferrer-Wreder, [this volume](#); Ferrer-Wreder et al., [this volume](#); Hull, Ferguson, Fagan, & Brown, [this volume](#); Kabir & Wium, [this volume](#); Kaniušonytė & Truskauskaitė-Kunevičienė, [this volume](#); Li, He, & Chen, [this volume](#)). The reason lies in the fact that adolescent development happens through reciprocal interactions between the individual and their developmental contexts of family, community, schools and the broader society and culture (Shek, Dou, Zhu, & Chai, 2019). Thus, the model promotes positive and desirable qualities for healthy adolescent development. This is essential to advancing adolescent research, policy, and practice as well as to support parents, teachers, practitioners, and the society in the aim of ensuring the success of the next generation of young people. In following this reasoning, this chapter provides novel data from understudied contexts in Europe as a basis to further facilitate research, policy and practice with youth populations.

A major scope of the chapter is to evaluate the factorial structure and measurement invariance

(i.e., the degree to which the scale measurements conducted across different populations exhibit similar psychometric properties) of the 5Cs (van de Vijver, 2019). This goal reflects a number of concerns regarding the 5Cs model of PYD in terms of its manifestation across different cultural and national groups as well as the model's generalizability outside of Western European and North American samples (Conway, Heary, & Hogan, 2015). Therefore, we apply the model across four youth samples (some of which have hardly been investigated) in Eastern (Bulgaria and Romania), Southern (Italy) and Northern Europe (Norway). Bulgaria and Romania are emerging nations following the collapse of the communism in late 1980s (Lacatus & Sedelmeier, 2020). Italy is a traditionally patriarchal country (Belluati, Piccio, & Sampugnaro, 2020) as opposed to the social equity driven Norway (Mehrra, 2020). All these features offer a novel and unique context to study PYD. Therefore, we set out to examine the measurement invariance and factor structure of the 5Cs model in these culturally diverse samples that allow for broadening and qualifications to the cross-cultural applicability of PYD.

Psychometric Evidence of the 5Cs Model of PYD

A set of empirical studies, mainly Western European and Northern American based, has been performed in response to the increasing concerns regarding the operationalization and generalizability of the 5Cs model of PYD. The U.S. based literature has documented good psychometric properties of the model including validity, reliability, and measurement invariance (Bowers et al., 2010; Dvorsky et al., 2019; Geldhof et al., 2014; Phelps et al., 2009). In addition, the 5Cs model has been increasingly applied in samples of young people in Europe (Conway et al., 2015; Dimitrova, Sam, & Ferrer-Wreder, 2021; Erentaitė & Raižienė, 2015; Kaniušonytė & Truskauskaitė-Kunevičienė, [this volume](#)), Africa (Kabir & Wium, [this volume](#); Wium, Ferrer-Wreder, Chen, & Dimitrova, 2019), Asia

(Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Li et al., [this volume](#)), Latin America (Dominguez et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)), New Zealand (Fernandes, Fetvadjev, Wium, & Dimitrova, [this volume](#)) and the Caribbean (Hull et al., [this volume](#)).

A large scale longitudinal study assessed the 5Cs model in the U.S. during early and middle adolescence (Bowers et al., 2010). The results of the confirmatory factor analysis models showed good measurement invariance across three measurement waves, suggesting that the 5Cs of PYD can be measured equivalently across measurement occasions during adolescence. Another U.S. study assessed the structure of the 5Cs model using eight waves of longitudinal data and documenting different PYD structure for younger and older adolescents. The authors posed the question of whether differences in structure between younger and older adolescents are due to changes in the conceptualization of positive development, or age-related measurement bias (Geldhof et al., 2014).

A Canadian based study examined the latent dimensionality of the 5Cs model in sport using a sample of 258 youth attending summer sport camps (Jones, Dunn, Holt, Sullivan, & Bloom, 2011). Confirmatory factor analysis failed to provide support for the 5Cs model identified in previous research. Yet, exploratory factor analysis indicated that PYD might reflect two factors of pro-social values and confidence/competence. Jones et al. (2011) suggested that each C may not be uniquely identifiable in this sample and that some of the Cs were highly correlated with one another. Thus, while there is a substantial support for the construct validity of the 5Cs model, the factor structure has varied in some studies, noting that the aforementioned study was conducted in a sports context, rather than in a school based context.

A relatively recent study in Europe tested the 5Cs model in a sample of 672 youth in the Republic of Ireland (Conway et al., 2015). The results showed that the 5-factor model (i.e., competence, confidence, connection, character, and

caring) was a good fitting model for Irish youth, exhibiting an equally good fit across gender and age (i.e., early adolescence vs. late adolescence). In another European study, the 5Cs model of PYD was tested in a sample of 1686 youth in Lithuania (Erentaitė & Raižienė, 2015). The results showed that the 5Cs model was invariant across gender, grade levels, and socio-economic statuses. The authors concluded that the 5Cs model can be reliably used with late adolescents for assessment of PYD in Lithuania.

In addition to the above cited work, the 5Cs model of PYD has been tested in a study among 302 emerging adults in New Zealand, presented in a chapter of the current *Handbook*. The findings showed good psychometric properties of the model and that the 5Cs (e.g., confidence, competence, character, connection, caring) mediated the relation between emerging adults' hopeful expectations for the future and life satisfaction (Fernandes et al., [this volume](#)). This study also adds a relevant contribution to the growing interest to apply PYD models in emerging adulthood (Wium & Dimitrova, 2019). In fact, emerging adulthood represents a critical developmental context spanning the ages of 18–29 years to make positive changes and increase the likelihood of young people succeeding in their lives; thus the 5Cs model was proved to be a meaningful strength-based framework to assess optimal functioning in this context (Dimitrova, 2018).

Further support for the tests of the cross-cultural relevance of the 5Cs model of PYD derives from another contribution in the present volume. The second chapter of this *Handbook* advances the 5Cs of PYD by introducing a newly developed 7Cs model among youth and emerging adults in three Asian LAMICs (Low-And Middle-income Countries) namely India ($n = 218$), Indonesia ($n = 234$), and Pakistan ($n = 400$). The 7Cs model expands on the 5C indicators of PYD (competence, confidence, character, connection and caring), and the 6th C of contribution to include *creativity* conceived as a novel and adaptive, problem-solving ability meaningful within social and cultural contexts. The chapter provides evidence for the reliability and effectiveness of the 7Cs model in terms of measurement invari-

ance (psychometrically reliable measurement across different populations), utility (appropriate use of measures), and generalizability (applicability to various populations) among culturally diverse samples of young people (Dimitrova et al., [this volume](#)). Such evidence has been further confirmed in samples from Malaysia, Colombia, and Peru (see Abdul Kadir et al., [this volume](#); Manrique-Millones et al., [this volume](#)).

The brief summary of prior work on the psychometric properties of the 5Cs model presents a variety of cultural groups, age, gender, socio-economic status differences, diverse cohorts and settings of measurement. Inevitably, there may be many PYD commonalities across cultures, developmental periods and samples as well as differences due to cultural and societal factors. Studies of the 5Cs model in contexts other than Western Europe and North America are of utmost need in order to further examine the development and emergence of PYD. An important, yet unaddressed issue that this chapter approaches regards the invariance of the 5Cs model of PYD and its psychometric properties in culturally diverse youth samples in Europe.

Youth in Context: Bulgaria, Italy, Norway, and Romania

The current chapter is based on youth living in four European countries, with important differences regarding the economic development and public policies on youth development. The two ex-communist South Eastern European countries, Bulgaria and Romania, joined the European Union (EU) in 2007 and are still facing the transition from a centrally planned economy to a free-market economy. In both countries, national strategies on youth focus on narrowing the gap and disparities related to the EU average in terms of social inclusion, education and training, youth engagement and well-being (Bademci et al., [2020](#)). Youth aged 15–24 years represent 9% in Bulgaria (out of the total 7 million people) and 10% in Romania (out of the total 19 million people) (Central Intelligence Agency, [2020](#)).

Italy is one of the founding members of the European Union. The country is still recovering from the financial crisis in 2008, but remains the world's ninth biggest economy (International Monetary Fund, [2017](#)). The Italian national strategy on youth is focused on cross-sector approaches to enhance youth development and mobility, international exchange and employment (Council of Europe, [2015](#)). The percentage of young population aged 15–24 in Italy is 10% out of the nearly 60 million people (Central Intelligence Agency, [2020](#)).

Norway has a competitive economy, successfully sustaining an economic model focused on comprehensive social programs (Organization for Economic Cooperation and Development, [2017](#)). The Norwegian policy on youth is globally perceived in positive terms with enormous commitment to young people supported by generous resources (Council of Europe, [2017](#)). The country was the first to make a national priority regarding children rights, introducing the Ombudsman for children in 1981 (i.e., a commissioner empowered by law to protect and promote the interests of the young generations and conditions for optimal childhood development). Norway has an integrated strategy on youth development, promoting and financing youth organizations, initiatives and measures directed at youth as a part of the overall national policy (Council of Europe, [2017](#)). Youth aged 15–24 years in Norway represent 12% of the total population of nearly 5 million people (Central Intelligence Agency, [2020](#)).

Research conducted in the four European countries on the 5Cs or under the umbrella of PYD conceptual framework is rather scarce. In a study with Romanian youth, Negru and Baban ([2009](#)) proposed directions for applied interventions programs to stimulating positive youth development. Other studies with youth living in Bulgaria, Italy and Romania have used the PYD theoretical background to investigate various factors related to thriving and well-being (Dimitrova et al., [2017](#); Dimitrova, Ferrer-Wreder, & Ahlen [2018](#); Dimitrova, Musso, et al. [2018](#); Dimitrova, Johnson, & van de Vijver, [2018](#); Dimitrova, Sam, & Ferrer-Wreder, [2021](#); Dimitrova & Ferrer-Wreder, [2016](#);

Kosic, Wiium, & Dimitrova, [this volume](#); Titzmann, Ferrer-Wreder, & Dimitrova, 2018).

A recent special issue on positive youth development across cultures, explored the generalizability of the PYD models in large samples of youth and emerging adults ($N = 6,820$) in ten countries across four continents including Italy and Norway (Wiium & Dimitrova, 2019). The various contributions composing the issue confirmed the generalizability of the PYD models including the 5Cs as well as positive relations between the 5Cs and optimal development among culturally diverse samples of young people. A related study conducted with Norwegian and American youth, investigated the measurement invariance of the 5Cs model (Holsen, Geldhof, Larsen, & Aardal, 2017). The authors found good measurement invariance of an overall PYD factor as well as the 5Cs between Norwegian and American youth samples. They also argued strongly for additional cross-cultural research on PYD (Holsen et al., 2017). This chapter builds on the available comparative prior work on PYD measurement to test the 5Cs model simultaneously across four European countries. Evidence on how the model is represented in such diverse youth sample provides relevant evidence for researchers, policy makers and practitioners to further develop, test, and promote PYD in their work with youth.

This Chapter

The aim of the present chapter is to test for cross-cultural invariance of the 5Cs model of PYD across four countries in Europe. Meaningful (cultural) group comparisons assume invariance of the elements of the measurement structure of a measure (i.e., 5Cs factor loadings and intercepts) (van de Vijver, 2019). Measurement invariance refers to the degree to which a scale administered in different groups exhibits identical psychometric properties (Meade, Johnson, & Braddy, 2008; Rutkowski & Svetina, 2017). There are three levels of invariance referred to configural invariance (all items/factors are associated with the 5Cs), metric invariance (all items/factors are associated

with the 5Cs in the same way), and scalar invariance (the regression function linking scores to the 5Cs has the same intercept in all groups) (van de Vijver, 2019). Configural invariance allows the same set of subscales/items to form a factor in each group and all model parameters to be freely estimated. If the configural invariance shows a good fit, subsequent tests may be conducted. Metric invariance assesses the factor loadings across groups and allows the comparison of relations among the measured constructs. Scalar invariance constrains factor loadings and intercepts to be equal between groups. When both factor loadings and intercepts are invariant (i.e., scalar invariance), mean differences on the second order latent factor (i.e., the 5Cs of PYD) can be tested. Invariance testing across groups is usually performed by Multi-group Confirmatory Factor Analysis (MGCFA) (André et al., 2020). Based on the above cited theory and research, this chapter presents an empirical example that evaluates the 5Cs model factorial structure and invariance across youth samples from four European countries.

Youth Samples in the Four European Countries

This chapter presents data collected as part of a larger international study on PYD (Dimitrova & Wiium, [this volume](#); Wiium & Dimitrova, 2019). Participants were 1403 youth (mean age = 18.91 years, $SD = 2.71$) with Bulgarian ($n = 196$), Italian ($n = 354$), Norwegian ($n = 564$) and Romanian ($n = 289$) background. All participants provided data on socio-demographic variables of ethnic background, gender, and age and filled out a scale on the 5Cs (Geldhof et al., 2015). The 5Cs scale consisted of 78 items covering competence, confidence, character, connection and caring and provided a possibility to assess a more general construct of PYD. The scoring of the items differed across the subscales, but for data analyses all items were transformed to uniformly range from 0 to 12 based on the scoring protocol (Geldhof et al., 2015). An average score for each of the 5Cs was computed with

high scores indicating high competence, confidence, character, connection and caring.

Competence was measured with The Search Institute Profiles of Student Life: Attitudes and Behavior survey ([PSL-AB]; Benson, Leffert, Scales, & Blyth, 2012) and one academic performance item. Participants were asked to rate their academic performance on 5-point Likert scale ranging from 1 (*poor*) to 5 (*excellent*). An average score was computed with high scores indicating better academic performance (Dimitrova, Ferrer-Wreder, et al. 2018). Competence items rated on a 4-point Likert scale from 1 (*not at all or really*) to 4 (*extremely or almost always*) referred to plan ahead and make good choices, building friendships with other people, accepting different people. The PSL-AB measure was preferred instead of the Competence Scale of the Self-Perception Profile for Children ([SPPC]; Harter, 1988) used in prior work (Geldhof et al., 2015) because in the pilot study, the scale presented difficulties for the participants due to its complicated response format. The SPPC scale asked participants to choose between two types of teenagers. Once they selected which person they were most like, they were asked to decide if it is “*really true for me*” or “*sort of true for me.*” For example, an academic competence item referred to some teenagers feeling pretty intelligent, BUT other teenagers questioning if they are intelligent. This was not the case for other subscales of the measure where the response format ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The choice to substitute the SPPC competence scale was also supported by indications in the test manual that it may not be applicable for use with non-U.S. samples (Harter, 2012).

Confidence was measured by a composite of three subscales of positive identity (6 items), physical appearance (5 items) and self-worth (5 items). The positive identity items were derived from the PSL-AB (Benson et al., 2012), while physical appearance and self-worth were from the subscale of the SPPC (Harter, 1988). Sample items referred to being happy with oneself most of the time, feeling to have control of life and future with response categories from 1 (*strongly disagree*) to 5 (*strongly agree*). These confidence items were also internal

developmental assets (Benson, 2007). Internal assets referred to positive psychological characteristics at the individual level, such as academic engagement, positive values and identity, and mature social skills essential for PYD (Roehlkepartain & Blyth, 2020; Scales, Roehlkepartain, & Shramko, 2017). Therefore, internal developmental assets were conceptually similar to the established definition and applications of the concept of confidence applied in the 5Cs model of PYD (e.g., a positive view of self, perception of good physical appearance, and self-worth).

Character was measured by subscales of the PSL-AB (Benson et al., 2012) that assessed social conscience (6 items), valuing of diversity (4 items) and personal values (5 items) and a subscale on conduct morality (5 items) from the SPPC (Harter, 1988). Participants were asked to rate how important each item was in their lives from 1 (*not important*) to 5 (*extremely important*). Sample items referred to telling the truth, helping other people or making the world a better place to live in rated such that high scores indicated more character.

Connection was measured with three subscales of the PSL-AB (Benson et al., 2012) that reflected connection to family (6 items), school (7 items), and community (5 items), and a subscale of The Teen Assessment Project Survey Question Bank ([TAP]; Small & Rodgers, 1995) to assess peer connection (4 items). Sample items referred to having lots of caring people in own neighborhood and caring friends rated such that high scores were indicative of high perceived connection.

Caring was measured by five modified items from The Eisenberg Sympathy Scale ([ESS]; Eisenberg et al., 1996) and four items adapted from The Empathic Concern Subscale of the Interpersonal Reactivity Index ([IRI]; Davis, 1980). Sample items referred to helping someone being taken advantage of, being bothered when bad things happen to good people or when bad things happen to any person with a response format ranging from 1 (*not at all like me*) to 5 (*very much like me*) and high scores indicating high levels of caring.

The 5Cs measure was translated from English into each national language to assure adherence to standard guidelines for linguistic equivalence

Table 1 Youth samples across four European countries

| | Bulgaria | Italy | Norway | Romania |
|---------------------|----------------|----------------|----------------|----------------|
| | <i>n</i> = 196 | <i>n</i> = 354 | <i>n</i> = 564 | <i>n</i> = 289 |
| Age, Mean (SD) | 16.65 (1.04) | 16.27 (1.91) | 20.35 (2.24) | 18.09 (2.57) |
| Gender % | | | | |
| Female | 44 | 40 | 73 | 58 |
| Male | 56 | 60 | 30 | 42 |
| The 5Cs α | | | | |
| Competence | .87 | .82 | .87 | .88 |
| Confidence | .74 | .78 | .90 | .70 |
| Positive identity | .75 | .74 | .82 | .75 |
| Physical appearance | .72 | .80 | .84 | .86 |
| Character | .83 | .73 | .80 | .71 |
| Social conscience | .91 | .87 | .91 | .88 |
| Value diversity | .83 | .76 | .72 | .77 |
| Personal values | .92 | .73 | .80 | .77 |
| Connection | .89 | .84 | .87 | .83 |
| Family | .83 | .87 | .84 | .83 |
| Neighborhood | .88 | .80 | .77 | .79 |
| School | .87 | .80 | .83 | .76 |
| Peers | .89 | .87 | .92 | .89 |
| Caring | .80 | .77 | .82 | .71 |

SD = Standard Deviation; α = Cronbach’s alpha reliability coefficient

(International Test Commission, 2017; van de Vijver, 2019). The internal consistency coefficients of the 5Cs across groups were satisfactory except for conduct morality and self-worth that were excluded from the current analyses. All measures had satisfactory reliability across youth samples (see Table 1).

Recruitment occurred in public schools with the help of local research assistants in major towns in Bulgaria (Sofia, Simeonovgrad and Varshez), Italy (Triest, Gorizia), Norway (Bergen), and Romania (Sibiu, Hunedoara and Prahova). Participants were approached via their teachers and informed about the purpose and methods of the study. Upon consent, the participants completed the 5Cs measure during regular teaching hours for approximately 30 to 50 minutes.

Analytic Plan and Main Findings

Preliminary analyses explored normality and missing data patterns across samples. Kurtosis and skewness values at the scale level did not exceed an absolute value of two (Raykov &

Marcoulides, 2008). Missing values analysis (i.e., Little’s MCAR test) showed non-significant results, suggesting that these data were missing completely at random (Bhave, Ranganath, & Perotte, 2020). Therefore, we proceed with testing the main goals of this chapter with supporting conceptual and methodological considerations.

Prior work has suggested and tested a number of CFA models based on previous conceptualizations of the 5Cs model (Bowers et al., 2010; Phelps et al., 2009). A test of the 5-factor model with no correlations between indicators failed to meet the recommended criteria for adequate model fit. Prior studies in Europe also tested a bi-factor and a second-order model suggesting that the latter was most appropriate for testing the 5Cs of PYD structure (Conway et al., 2015; Erentaitė & Raižienė, 2015). Such a theoretical model implies a second-order factor structure, where the 5Cs are latent constructs loading onto a higher-order latent construct of PYD. This second-order PYD factor structure was confirmed with early and middle adolescent samples in previous U.S. studies (Bowers et al., 2010; Phelps et al., 2009). Thus, the 5-factor model

with second-order PYD factor was applied in the current chapter.

The model was tested by means of Structural Equation Modeling (SEM) and Confirmatory Factor Analysis (CFA). The goodness of fit for the models was assessed with the most widely applied Alternative Fit Indices (AFIs) such as the Root-Mean-Square Error of Approximation (RMSEA; recommended < .08) and the Comparative Fit Index (CFI; recommended > .95) (Meade et al., 2008; Rutkowski & Svetina, 2017).

In line with the aim and the purpose of the invariance analyses, the model was tested with a Multi-group Confirmatory Factor Analysis (MG-CFA). First, the 5Cs were treated as latent variables following prior work on the 5Cs model (Erentaitė & Raižienė, 2015). Therefore, a model was specified with five latent variables of the 5Cs represented by each of the domains pertaining to each C. An established procedure was followed by testing the model via CFA (van de Schoot, Lugtig, & Hox, 2012). The confirmatory factor analyses conducted for all cultural groups (i.e., the participating countries) provided support for the factorial structure of the 5Cs of PYD (see Table 2). Inter-factor correlational analyses were also performed. Correlations for the total sample were significant and positive (see Table 3).

The multi-group model across all four cultural groups showed that the 5Cs were significantly and positively related, $\chi^2(193, 1403) = 515.24, p < .001, RMSEA = .035, CFI = .939$. The model was represented by the 5Cs factors as latent variables associated with the respective domains for

each C as observed variables (Fig. 1). The results showed the establishment of good configural invariance (i.e., all items were associated with the 5Cs) and metric invariance (i.e., all items were associated with the 5Cs in the same way) rather than scalar invariance (i.e., the regression function linking item scores to the 5Cs has the same intercept in all groups).

Next, the 5Cs second-order factor model was tested based on relevant indications in prior research (Conway et al., 2015; Erentaitė & Raižienė, 2015). The second-order factor model was given by one 5Cs of PYD factor associated with five lower-order factors defined by the separate 5Cs as latent variables represented by observed variables composing each of the 5Cs. The second-order factor was explicitly related to and defined by the lower-order factors. Consequently, the lower-order factors (e.g., the 5Cs) were subcomponents or facets of the second-order factor (e.g., PYD) (Brown, 2015). The results for the second-order factor model showed a good fit, $\chi^2(194, 1403) = 454.26, p < .001, RMSEA = .031, CFI = .932$. Again, a good configural and metric invariance models were achieved. As shown in Table 2, the fit indices suggested that the measurement weights model indicating metric invariance was the most restrictive model with a good fit. Standardized factor loadings for each sample are reported in Figs. 1 and 2. It can be concluded that the 5Cs model is a reliable and valid representation of PYD among youth samples in the four European countries under investigation.

Table 2 Invariance models and goodness of fit indexes of the multi-group analyses

| | Model fit | | | |
|--------------------------|---------------------|-------------|-------------------|-------------|
| | $\chi^2(df)$ | RMSEA | 95% CIs RMSEA | CFI |
| The 5Cs model | | | | |
| Configural invariance | 410.39 (172) | .031 | .028, .035 | .939 |
| <i>Metric invariance</i> | <i>515.24 (193)</i> | <i>.035</i> | <i>.031, .038</i> | <i>.918</i> |
| Scalar invariance | 1742.06 (216) | .069 | .066, .072 | .613 |
| Second-order model | | | | |
| Configural invariance | 385.51 (173) | .030 | .026, .034 | .942 |
| <i>Metric invariance</i> | <i>454.27 (194)</i> | <i>.031</i> | <i>.027-.035</i> | <i>.932</i> |
| Scalar invariance | 1739.32 (230) | .068 | .065, .072 | .615 |

Note. χ^2 = Chi-square; *df* = degrees of freedom; *CFI* = Comparative Fit Index; *RMSEA* = Root Mean Square Error of Approximation; *95% CIs* = 95% confidence intervals. The selected models are represented in italics

Table 3 The 5Cs of PYD Correlations for the overall sample

| The 5Cs | 1. | 2. | 3. | 4. | 5. |
|---------------|--------|--------|--------|--------|------|
| 1. Competence | – | | | | |
| 2. Confidence | .20** | | | | |
| 3. Character | .56*** | .20** | | | |
| 4. Connection | .52*** | .39*** | .47*** | | |
| 5. Caring | .42*** | .002 | .48*** | .30*** | – |
| Mean | 3.03 | 6.79 | 8.19 | 7.56 | 9.06 |
| SD | .55 | 1.94 | 1.64 | 1.76 | 2.09 |

SD = Standard Deviation

** $p < .01$; *** $p < .001$

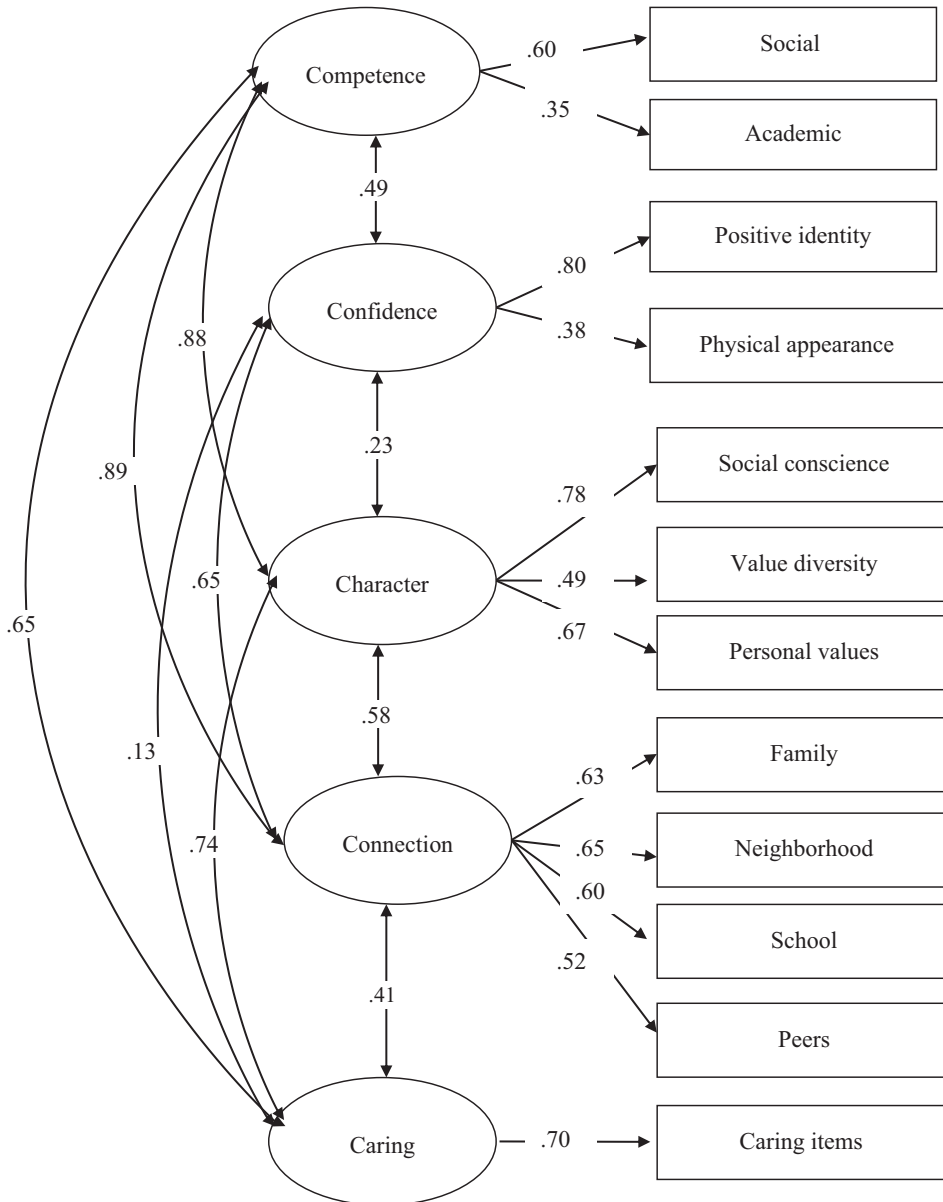


Fig. 1 Standardized solution of the 5Cs of PYD model (Note. All factor loadings represent standardized coefficients for the measurement weights model and are significant at $p < .001$. Coefficients refer to the mean of all samples)

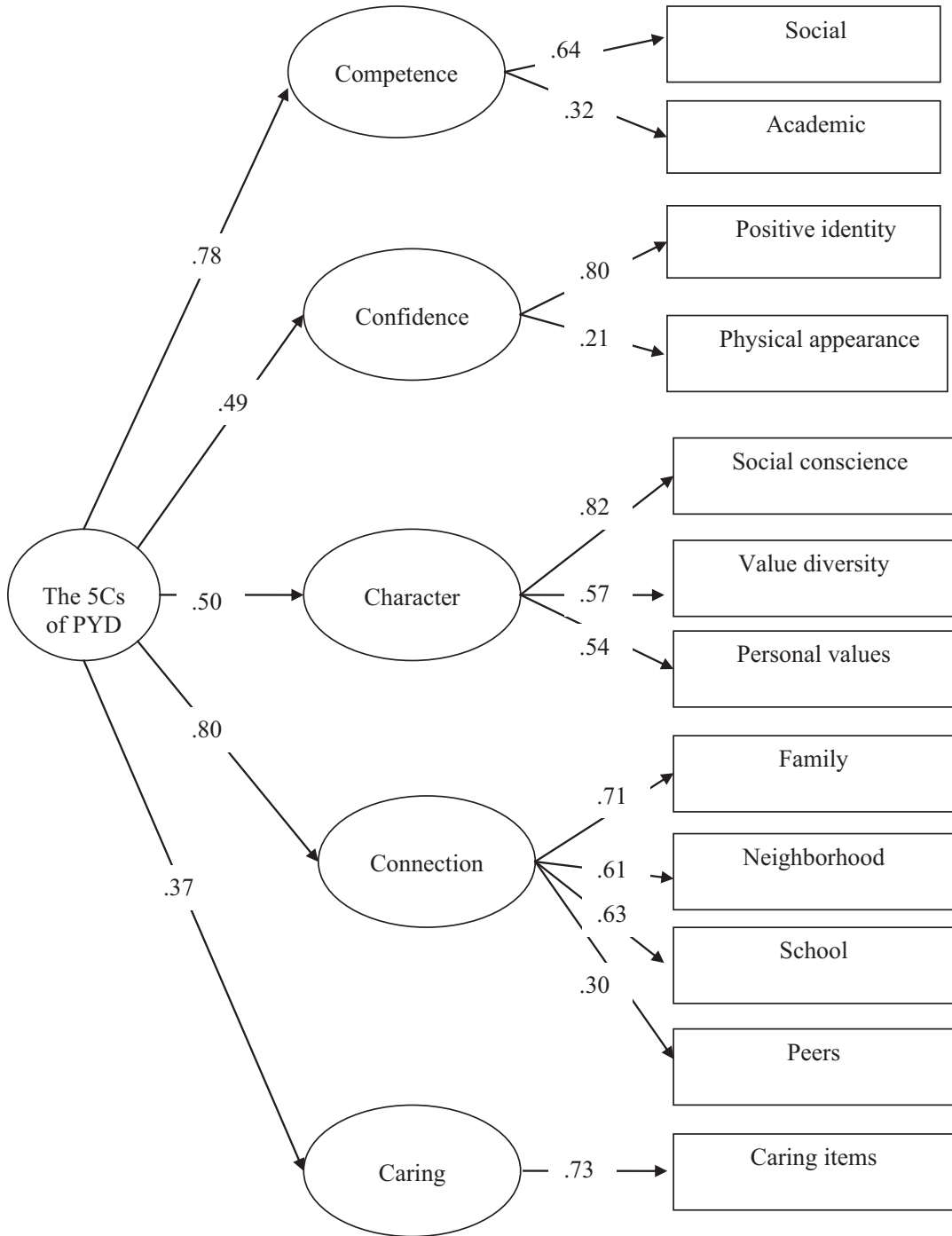


Fig. 2 Standardized solution of the second-order factor 5Cs of PYD model (*Note.* All factor loadings represent standardized coefficients for the measurement weights model and are significant at $p < .001$. Coefficients refer to the mean of all samples)

Conclusions

The current chapter set out to investigate the 5Cs model of PYD in four youth samples in Europe, many of which are under-researched. Measurement invariance, referring to the establishment of psychometrically reliable measurement across different groups was achieved, suggesting that the 5Cs model worked well across the samples under investigation in line with previous research (Bowers et al., 2010; Geldhof et al., 2015; Phelps et al., 2009). Further, the establishment of configural and metric invariance indicated that the 5Cs is a useful model for these youth samples, although further research is needed to confirm these initial findings.

The presence of configural and metric invariance indicated that the 5Cs model can be employed in cross-national studies aimed at unravelling associations between the 5Cs and relevant correlates across youth samples from the countries under investigation here. The lack of scalar invariance suggested that mean comparisons of the 5Cs may not be conducted when using the latent mean scores for the current cultural group comparisons. Yet, the findings supported previous research on measurement invariance of the 5Cs model (Conway et al., 2015; Erentaitė & Raižienė, 2015; Geldhof et al., 2014), and illustrated that the 5Cs model is a conceptually valid framework of positive functioning across youth samples in Bulgaria, Italy, Norway and Romania. These results join prior investigations on PYD in an international context by testing measurement invariance in European countries and adolescent groups, some of them, hardly considered in the empirical literature.

Although the current chapter adds to prior research on PYD among youth in Europe, a relevant issue concerns the model structure. The modifications of the 5Cs model suggested that some of the Cs may represent different latent constructs. The lack of good internal reliability for self-worth and conduct morality suggested that the subscale indicators displayed inconsistent inter-item scoring patterns. However, low internal reliability is often found in scales with a low number of items (Fong, Ho, & Lam, 2010)

and a high value is not expected when measuring diverse aspects of an overarching construct (Sijtsma, 2016). Therefore, further research should be conducted to take a closer look at the measurement properties of the 5Cs measures used in different samples and countries.

Relatedly, the 5Cs were conceptualized as a mixture of the 5Cs measures and developmental assets. As already indicated in the exposition of the measures, some of the scales had a problematic response format making them of difficult use in youth samples and particularly in non-U.S. populations (Harter, 2012). The confidence measure was also represented by a composite of three subscales of positive identity, physical appearance and self-worth taken by previously adapted subscales to measure PYD (Benson et al., 2012; Harter, 1988). Yet, prior conceptualizations (Benson, 2007) and applications (Geldhof et al., 2015) were followed in that confidence refers to positive psychological characteristics such as academic engagement, positive values, and identity, and mature social skills that promote PYD and youth thriving (Benson et al., 2012).

It is important to acknowledge the potential bias in exporting measures and testing constructs to other cultures different from the ones where such measures have been originally created and applied. In absence of prior qualitative and ethnographic field work in the countries not reported on here, there is a risk of having scales that do not work well in these countries. As cross-cultural psychologists have indicated, it is problematic to take theories and measures developed in one culture and transport them uncritically to other cultures, because of the underlying cultural assumptions that may not apply widely (Dimitrova & Wiium, *this volume*). Nevertheless, an effort was made to maintain the conceptualization of the 5Cs constructs as congruent as possible with established PYD theory and research.

This chapter promotes relevant comparative work showing that the 5Cs model applies to youth with diverse cultural background in Europe and that the 5Cs of PYD scale is a good measure for use in these samples. The chapter contributes to the increasing need to understand PYD domains in a variety of contexts by providing

empirical evidence for the usefulness of the 5Cs model for studying adolescent development in Bulgaria, Italy, Norway, and Romania. Based on the current findings, it remains extremely important to pay close attention to perceptions and attitudes in educational settings that are relevant for the emergence of the 5Cs in youth populations. This chapter supports the relevance and salience of the 5Cs in relation to PYD of youth by portraying important implications for the study of adolescence across Europe. Understanding the implications of these factors in the context of interventions will enable schools to successfully develop and adapt these interventions to promote positive outcomes among students.

Implications for Research, Policy and Practice

In light of the increasing interest in PYD, further research on relevant models and measurement in a global international context becomes paramount. This chapter helps researchers of adolescent development to profit from culturally appropriate, valid, and reliable indices of youth thriving and development. In so doing, the chapter provides international researchers with good measures of PYD by facilitating their work in the use of PYD measurements for a variety of purposes (e.g., cross-cultural comparative research, intervention outcome measurement, descriptive studies, and needs assessments).

As to policy, this chapter equips policy makers with a good measure to plan, implement and evaluate the impact of their programs. Policy makers can also benefit from the 5Cs measure in the four countries investigated here to implement PYD focused strategic plans. Additional applications may include the measurement of the 5Cs in policy implementation as to facilitate youth thriving in Bulgaria, Italy, Norway, and Romania.

As to practice, the 5Cs of PYD measure can provide teachers and youth practitioners with a tool to index positive development among young people. Consistent with the growing evidence base on PYD interventions (Eichas, Ferrer-Wreder, & Olsson, 2019; Eichas, Montgomery,

Meca, Garcia, & Garcia, [this volume](#); Ferrer-Wreder et al., [this volume](#); Kaniušonytė & Truskauskaitė-Kunevičienė; Kozina, [this volume](#)), PYD work is an important developmental process to enhance systematically through planned interventions. Further, although we add to prior examinations of the structure and psychometric properties of PYD measures in a European sample of adolescents, extending such measurement to other international samples is important in terms of youth program evaluation (Eichas et al., [this volume](#); Ferrer-Wreder et al., [this volume](#); Kozina, [this volume](#)). Finally, not every youngster is expected to follow the same path in building competencies as there are many paths toward PYD. Further work may benefit from identifying unique configurations of strengths and areas for growth in the 5Cs to tailor applied programs and engage youth in activities that foster PYD.

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Part II

**Positive Youth Development Applications
and Interventions**



International Collaboration in the Study of Positive Youth Development

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Abstract

The goal of this chapter is to describe how international collaborative research can contribute to understanding of Positive Youth Development (PYD). Throughout the chapter, we draw on examples from the Parenting Across Cultures project, a collaboration among investigators from nine countries (China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, and the United States) in which we have collected longitudi-

nal data annually for 10 years on youth development and parenting, as well as examples from other research groups' international collaborations. The chapter begins by defining PYD, drawing from emic and etic perspectives to understand how cultural insiders and outsiders may regard positive youth development. The chapter then describes examples from international collaborative research on within- and between-group differences in PYD as well as predictors of PYD in a cultural perspective. Next, the chapter highlights mea-

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surement and methodological issues that are salient in international collaborative research on PYD, such as how to handle invariance of instruments and whether to create new measures for new cultural contexts or to adapt existing measures for new contexts. The chapter concludes with implications for future research, policy, and practice, including the potential for researchers in one country to learn from researchers in other countries about strategies, policies, and programs that have worked well in one locale and might be worth adapting in others.

Keywords

Culture · International · Intervention · Parenting · Policy · Positive youth development

This chapter describes how international collaborative research can be used to advance the study of Positive Youth Development (PYD), using illustrative examples from our work on the nine-country Parenting Across Cultures project as well as examples from other research groups that have used international collaborative research to understand positive youth development. The chapter begins by defining positive youth devel-

opment, drawing from emic and etic perspectives to understand how cultural insiders and outsiders may regard positive youth development. The chapter then describes examples from international collaborative research on within- and between-group differences in positive youth development as well as predictors of positive youth development in cultural perspective. Next, the chapter highlights measurement and methodological issues that are salient in international collaborative research on positive youth development and concludes with implications for future research, policy, and practice.

Emic and Etic Perspectives on Positive Youth Development

Positive youth development has been defined in a variety of ways. For example, the 5Cs of PYD (competence, confidence, character, connection, and caring or compassion) have been influential in conceptualizing positive youth development not just as the absence of problems but as the presence of thriving (Burkhard, Robinson, Murray, & Lerner, 2019; Geldhof et al., 2015) (for an expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova

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et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). Positive youth development is related to experiences, such as being part of a team, and attributes, such as kindness, that build connections to other people and that engender love and meaning that contribute to a sense of purpose beyond the self (Gillham et al., 2011). The precise forms that these experiences and attributes take, may differ across countries, but regardless of what form they take, contributions to one's society and relationships with other people are important in defining positive youth development across cultures. Positive youth development involves not just the absence of problems but also the presence of positive attributes and thriving.

Characterizing optimal youth development is dependent on both contextual and universal perspectives that account for cultural values regarding particular aspects of youth adjustment as well as core features that generalize across cultural groups (Kagitcibasi, 2013). For example, some cultural groups value the importance of academic achievement more than other groups do. In Africa, 73% of survey respondents in Botswana chose education as the most important factor for success in life compared to 13% in Ivory Coast (Crabtree, 2014). However, academic achievement is a marker of adaptation in a life domain that has long-term implications for future occupational, financial, and health outcomes across countries (Robert Wood Johnson Foundation, 2013). Likewise, interpersonal connections are important for positive youth development across countries, although specific features of these connections may differ; for example, adolescents in South Korea expect friendships to involve a degree of intimacy and exclusivity that is not expected in Indonesia (French, 2015). Thus, the form that interpersonal connections take may vary across cultures, although the function of these connections as an aspect of positive youth development may generalize across cultures.

Studying positive youth development can either take an emic or etic approach, drawing from the understanding of cultural insiders and outsiders, respectively (Lansford et al., 2017). Each approach has both advantages and disadvantages.

In an emic approach, positive youth development is locally defined and operationalized in a way that captures how a particular cultural group defines competence, connection, caring, and so forth. By contrast, in an etic approach, a definition of positive youth development derived elsewhere is applied to understanding PYD in new cultural groups (Lansford et al., 2017).

A main advantage of emic approaches is that they are more open to novel aspects of positive development that may not be apparent if methods and assessments developed elsewhere are applied in a new setting (McWayne, Mattis, Green Wright, Limlingan, & Harris, 2017). As an example of the value of an emic approach, consider that among the Masai in Kenya, high jumping is a valued competency that confers high status in the social group (Sobania, 2003). Measures of competence developed elsewhere would be unlikely to have questionnaire items about high jumping or observational protocols calling for rating height of jumps and would therefore miss this aspect of positive youth development among the Masai. However, a cultural insider would know that high jumping is valued in the social group and would therefore include it in a description of Masai males' positive youth development. The advantage of cultural specificity in emic approaches can also be a disadvantage, however, if the goal is comparisons across different cultural groups.

A main advantage of an etic approach in which one set of measures or assessment approaches is used in different cultural contexts is that an etic approach facilitates comparisons that can be useful for basic understanding as well as mobilizing resources in settings in which youth fare more poorly than in other settings (Bornstein & Lansford, 2013). For example, using internationally comparable data from the Multiple Indicator Cluster Survey led by UNICEF and government partners in over 100 low- and middle-income countries, ministries of health and education in particular countries have been able to advocate for more resources to devote to promoting initiatives that support health and education when the data demonstrate that children and adolescents in their country

are disadvantaged compared to their counterparts in other countries (Bornstein & Lansford, 2013). Thus, both emic and etic approaches are important in the study of positive youth development and can serve different, yet complementary, purposes.

Within- and Between-Group Differences in Positive Youth Development

Our research group conducts the Parenting Across Cultures project, which combines emic and etic perspectives to understand youth development. Through schools in China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, and the United States, we recruited a sample of 1417 children who were 8 years old, on average, and their mothers and fathers. For 9 years we have conducted annual interviews separately with each family member; data collection is ongoing (see www.parentingacrosscultures.org). We draw on our experiences as an international team of researchers at universities in nine countries and present selected findings from the Parenting Across Cultures project as well as from other research groups.

The nine countries involved in the Parenting Across Cultures project were selected because of their diversity on several socio-demographic dimensions, including predominant ethnicity, religion, economic indicators, and indices of child well-being. For example, on the Human Development Index, a composite indicator of a country's status with respect to health, education, and income, participating countries ranked from 8 to 145 out of 188 countries with available data (Human Development Report, 2015). To provide a sense of what this range entails, the infant mortality rate in Kenya, for example, is 40 times higher than the infant mortality rate in Sweden (UNICEF, 2009). In the Philippines, 19% of the population falls below the international poverty line of less than USD 1.25 per day, whereas the percentage of the population that falls below this poverty line in Italy,

Sweden, or the United States is negligible (UNICEF, 2009).

The participating countries vary widely not only on socio-demographic indicators, but also on psychological constructs such as individualism versus collectivism. Using Hofstede's (2001) rankings, the participating countries ranged from the United States, with the highest individualism score in the world to China, Colombia, and Thailand, countries that are among the least individualistic countries in the world. The countries also vary on a looseness-tightness continuum in which loose countries are characterized by weak social norms and high tolerance for deviant behavior, whereas tight countries are characterized by strong social norms and little tolerance for deviant behavior (Gelfand et al., 2011; tightness scores = 5.1, 6.8, and 7.9 in the U.S., Italy, and China, respectively). The purpose of recruiting families from these diverse countries was to create an international sample that would vary with respect to a number of socio-demographic and psychological characteristics. Ultimately, this diversity provides us with an opportunity to examine our research questions in a sample that is more generalizable to a wider range of the world's population than is typical in most research to date (Henrich, Heine, & Norenzayan, 2010; Muthukrishna et al., 2020).

One novel feature of the Parenting Across Cultures project is its multilevel design with multiple time points nested within individuals, nested within families, nested within cultural groups. This design enables us to address sources of variance in PYD that differentiate individuals within a given cultural group as well as those that differentiate among cultural groups. In a comparison of sources of variance in a large number of parenting and youth adjustment variables in China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, and the United States, such as parental warmth and control and child behavior problems, we find in the Parenting Across Cultures project that most of the variance is attributable to within-culture rather than between-culture effects (Deater-Deckard et al., 2018). Nevertheless, between 4% and 30% of the variance was at the level of the cultural group,

suggesting the importance of examining both within- and between-group sources of variability in positive youth development.

One source of within-group differences is development itself. The longitudinal design of the Parenting Across Cultures project is well-suited to addressing questions regarding developmental trajectories over time and bidirectional relations between parenting and positive youth development (Di Giunta et al., 2020; Pastorelli et al., 2016). For example, in the nine Parenting Across Cultures countries (China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, and the United States), parental warmth and acceptance predicted increases in children's prosocial behavior, controlling for stability over time in both parental acceptance and child prosocial behavior (Putnick et al., 2018). Parental rejection, by contrast, predicted an increase in behavior problems and a decrease in school performance and prosocial behavior in these nine countries, again controlling for stability over time in parenting and child outcomes (Putnick et al., 2015). Children's prosocial behavior at age 9 also predicted an increase in parental acceptance from age 9 to 10, but subsequent child prosocial behavior did not predict an increase in parental acceptance during the transition to adolescence.

Another source of within-group differences lies in resources or experiences of some but not other members of a given group, which might stem from socioeconomic, interpersonal, and intrapersonal factors, such as poverty, family and peer relationships, and personality. For example, in the United States, adolescents who are more religious have been found to have more social capital (including social ties, shared vision, and trust), which in turn is related to indicators of positive youth development, such as moral behavior (King & Furrow, 2004). In Parenting Across Cultures, we found that in the nine participating countries (which vary in predominant religious affiliations, including Buddhist, Catholic, Muslim, and Protestant) parents' religiousness predicted subsequently higher parental efficacy and children's better school performance and social competence (Bornstein et al., 2017).

Despite evidence for within-group differences over time and between individuals within a particular culture, international comparisons also show between-group differences in a number of indicators of positive youth development. For example, in a comparison of individuals' offering to help a stranger (a form of prosocial behavior indicative of positive youth development) in an experimental paradigm in 23 countries, greater cultural embeddedness (holding values embracing social order, obedience, security, and tradition) was related to fewer offers to help the stranger in both high- and low-income countries (Knafo, Schwartz, & Levine, 2009). It appears that between-country differences in prosocial behavior are dependent on a variety of factors including the type of prosocial behavior (sharing, helping, being cooperative), the beneficiary of the prosocial behavior (family, peers, in- or out-group members), and features of the situation (costs, spontaneity; Eisenberg, Spinrad, & Knafo-Noam, 2015). Between-country differences have also been reported in other indicators of positive youth development, such as subjective well-being (Standish & Witters, 2014), civic engagement (Torney-Purta, 2002), and volunteering (Grönlund et al., 2011). International research contributes to understanding different sources of variability over time as well as within and between cultural groups.

Predictors of Positive Youth Development in Cultural Perspective

Many predictors of positive youth development are consistent across diverse cultural contexts. For example, positive youth development is compromised by material deprivation, living in a dangerous neighborhood, and interpersonal violence, whereas positive youth development is enhanced by supportive family relationships and friendships (Currie et al., 2012; Siedlecki, Salthouse, Oishi, & Jeswani, 2014). In part, positive development is promoted by living in higher-income and safer neighborhoods because such neighborhoods provide more opportunities to spend time

outside (Carver, Timperio, & Crawford, 2008), positive adult role models (Galster, 2014), and freedom from chronic stressors of crime and violence (Finkelhor, Turner, Shattuck, Hamby, & Kracke, 2015). Well-being in early adulthood is predicted by being treated with respect, by having positive social relationships, and by a sense of purpose in life in representative samples from 166 countries (Jebb, Morrison, Tay, & Diener, 2020). Caregivers who are warm, sensitive, and responsive build secure attachment relationships with their children that have long-lasting effects on positive youth development (Schoenmaker et al., 2015). Compared to academic performance, social relationships during adolescence better predict well-being in adulthood (Olsson, McGee, Nada-Raja, & Williams, 2013). Meta-analyses with samples from large numbers of countries demonstrate that interpersonal acceptance is a strong predictor of positive development across countries (Khaleque & Rohner, 2012). When comparing predictors of positive youth development across countries, some more “universal” aspects of parenting may emerge because these are aspects of parenting that can be measured across cultures.

Despite cross-cultural consistency in many predictors of positive youth development (Chen, Wium, & Dimitrova, 2018; Dimitrova, Buzea et al., *this volume*; Dimitrova, Fernandes et al., *this volume*; Dimitrova, Sam, & Ferrer-Wreder, 2021; Fernandes, Fetvadjev, Wium, & Dimitrova, *this volume*; Kozina, Wium, Gonzalez, & Dimitrova, 2019; Wium & Dimitrova, 2019), some predictors may be more salient in some cultural contexts than others. For example, Sweden has a long history and strong commitment to promoting children’s rights (Sorbring & Gurdal, 2011). In this cultural context, parental warmth is predictive of the development of children’s agency, which involves self-esteem, self-efficacy, an internal locus of control, and a sense of purpose in life, all of which promote better adjustment in Swedish children (Gurdal, Lansford, & Sorbring, 2016). In cultural contexts with less emphasis on children’s rights, other factors may be better predictors of positive youth development than individual agency. For example, par-

ents’ and adolescents’ familism values have been related to Mexican American adolescents’ prosocial behavior (Calderón-Tena, Knight, & Carlo, 2011), and values related to family obligations have been related to Asian American adolescents’ academic aspirations (Kiang, Andrews, Stein, Supple, & Gonzalez, 2013).

In the Parenting Across Cultures project, we examined whether links between particular parenting beliefs and behaviors (including expectations regarding family obligations, monitoring, psychological control, behavioral control, and warmth/affection) and positive and negative aspects of youth adjustment (including social competence, prosocial behavior, academic achievement, externalizing behavior, and internalizing behavior) were moderated by the cultural normativeness of parenting beliefs and behaviors (Lansford et al., 2018). Parenting predictors of youth adjustment varied more within cultures than between cultures. However, when cultural normativeness of particular parenting beliefs and behaviors did moderate links between parenting and youth adjustment, the associations were stronger in cultures in which the parenting beliefs or behaviors were more normative. When parents share beliefs and engage in behaviors that are consistent with the norms of their cultural group, children are more likely to regard their parents’ behavior as justified, and parents themselves are more likely to be supported by others around them, contributing to parents’ confidence and youths’ adjustment.

Measurement and Methodological Issues

Conducting international comparative research offers benefits as well as challenges compared to research conducted in a single locale (Lansford et al., 2016). Benefits include expanding theoretical perspectives that often have been constructed from Western ideas and being able to test replicability and generalizability of findings across diverse samples. Challenges include a number of measurement and methodological issues, such as whether to create new measures for new cultural

contexts or to adapt existing measures for new contexts and, if so, how.

Even when the same measures are used in different cultural contexts, they may not assess constructs that share the same meaning, either for conceptual or methodological reasons. Conceptually, a given behavior or attribute may be indicative of positive youth development in one context but negative youth development in another. For example, in early comparative research on children's shyness in China and Canada, shyness was perceived by teachers, peers, and parents in China as being indicative of children's social competence, and shy children were well-liked by their peers (Chen, 2011). In Canada, however, shyness was perceived by teachers, peers, and parents as indicating a lack of social competence, and shy children were more likely to be socially rejected by their peers (Chen, 2011). More recent research suggests that with rapid internationalization and other historical changes experienced in China, particularly in urban areas, children's shyness is now perceived negatively in China, as it is in Canada (Liu et al., 2015). Thus, positive youth development may be conceptualized differently in different places as well as in a given place at different historical times. If measures of shyness are taken at face value without understanding their local cultural meanings, misunderstanding may result. Other constructs also may not have the same meaning in all contexts and across time (Bornstein, 2012).

Methodologically, a great deal of attention has been paid to ensuring the measurement equivalence or invariance of instruments that are used with more than one cultural group (Putnick & Bornstein, 2016). To try to ensure the equivalence of measures before any data are collected, recommendations for creating comparable measures to use across cultures go beyond simple translation and back-translation (Erkut, 2010; Hambleton & Zenisky, 2010). After collecting data, current recommendations involve conducting a series of statistical analyses to determine whether different sets of invariance criteria are met (Vandenberg & Lance, 2000; van de Vijver, 2019). When the number of cultural groups being compared is large, these invariance tests can be

unwieldy and perhaps overly restrictive. Alternate methods of testing for measurement equivalence have been proposed to help address some of the difficulties in applying traditional invariance tests with large numbers of groups. For example, the alignment technique (Asparouhov & Muthén, 2014) and meta-analytic techniques that provide an overall estimate without assuming identical measurement (Lansford et al., 2014) are approaches of handling concerns about measurement equivalence across several cultural groups.

When assessing positive youth development (or other constructs), it is important to bear in mind that rating scales themselves also may hold different meanings in different cultural groups. For example, in the Parenting Across Cultures project, Swedish mothers and fathers were more likely than parents in the other eight countries to indicate that their children's school performance is average than either above average or below average compared to other children. In the other countries, mothers and fathers were more likely to indicate that their child is performing above average compared to his or her classmates. We attribute the difference in how parents in Sweden appear to be using the rating scale and to strong cultural values attached to equality. Swedish parents would be reluctant to say that their child is doing better than others because this would violate the expectation that everyone is equal. In contexts in which subjective comparisons violate local norms, more objective measures such as standardized tests would be especially important if the goal is an international comparison. For example, data from the Trends in International Mathematics and Science Study (TIMSS) have been collected from students in grades 4 and 8 (and sometimes older students) in a large number of countries since 1995 (Provasnik et al., 2016). The results are used by education systems in different countries to assess how their students are faring in math and science compared to other students around the world.

International collaboration sometimes highlights limitations of taking results at face value rather than understanding meaning in local terms. Qualitative and ethnographic research has the potential to provide rich, in-depth, culture-

specific insights into positive youth development. Qualitative methods are particularly well suited for incorporating youth voices in the research endeavor, avoiding deficit approaches, understanding how individuals interact with contexts, and delving into how and why individuals develop in a particular way (Dimitrova et al., 2021; Futch Ehrlich, 2016).

In a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of the field of positive youth development, van de Vijver (2017) outlined several important measurement and methodological issues. One critical issue involves developing models of how and why context matters and then measuring and testing contextual moderators of links between environmental factors and positive youth development. Another methodological challenge involves delving deeply enough into a particular cultural context to understand positive youth development within that context fully so as not to be “under inclusive” of the construct by measuring aspects of PYD derived elsewhere but missing more indigenous aspects of positive youth development (van de Vijver, 2017). For example, Chen, Li, and Chen (2017) suggested that 10 constructs best characterize positive youth development in China, rather than the five constructs in the frequently used 5Cs model (Geldhof et al., 2015) (for a model based on 15 PYD constructs in China see Li, He, & Chen, [this volume](#)).

In the Parenting Across Cultures project, the investigators from all nine countries meet annually (rotating among the countries) to make decisions about measures and methodological issues. Investigators from all countries suggest measures to incorporate in the next wave of data collection, and we discuss the possibilities as a group. Some measures are rejected because they are deemed inappropriate in one or more sites; other measures are adapted to make them culturally relevant and meaningful. If there are important constructs in one culture that are not relevant in the other cultures, site-specific measures are sometimes added that are administered just to the cultural group for which they are relevant. For example, following a contested political election in Kenya, the Kenyan participants completed a measure of exposure to

post-election violence (Skinner, Oburu, Lansford, & Bacchini, 2014). We attempt to balance standardization with flexibility in procedures to maintain comparability across the cultures, yet enable investigators in each site to collect data in ways that are best suited to the site (e.g., administering paper and pencil measures versus recording responses on laptop computers).

Implications for Research, Policy, and Practice

In 2015, the United Nations General Assembly adopted the 17 Sustainable Development Goals to guide the international agenda through 2030. All of these goals are relevant to promoting positive youth development in one way or another, such as by eliminating poverty (Goal 1), promoting good health and well-being (Goal 3), and fostering peace, justice, and strong institutions (Goal 16). To elaborate using one example, Goal 4 is to ensure inclusive and quality education for all and promote lifelong learning. Globally, 103 million youth do not have basic literacy skills and more than 60% are girls (United Nations, 2017). Instantiating the goal for inclusive and quality education in the Sustainable Development Goals commits governments around the world to work on meeting internationally monitored targets such as equal access for boys and girls to free, quality primary and secondary education. As government ministries, nongovernment organizations, and others work toward the Sustainable Development Goals, international collaborative research on positive youth development offers several important lessons.

First, with respect to future research, international collaborations provide a way for researchers in one country to learn from researchers in other countries about ways in which PYD unfolds in different cultural contexts and ways in which to promote positive youth development using strategies, policies, and programs that have worked well in one locale and might be worth adapting to try in others. This idea is at the heart of the Human Development Intervention Network, which is supported by an on-line platform that (1) connects

individuals conducting research and human development interventions in different countries to researchers with related interests; (2) indexes measures that can be used in evaluations of interventions and methods that can promote rigorous evaluations; and (3) facilitates exchanges of ideas among a network of scholars and action partners who implement interventions to promote human development around the world. Using this global network, a researcher or interventionist is able to create a member profile on the network and then use searchable databases to connect with other individuals conducting similar work and to access resources that can be used in designing human development research, interventions, and evaluations.

Second, with respect to policy, international research documents the importance of investing in positive youth development. In both financial and human terms, investing in adolescents has been found to yield a “triple dividend” through immediate benefits for adolescents, future benefits as adolescents mature into adulthood, and benefits for the next generation as individuals who themselves benefited as adolescents go on to become better parents (Camilletti & Banati, 2018). A number of cost-benefit analyses have estimated considerable returns on investments in education, health, and other programs for children and adolescents. For example, a return of USD 9.9 and USD 3.7 has been estimated for every dollar invested in girls’ education in low- and lower-middle-income countries, respectively, taking into account both future earnings and mortality (Schäferhoff et al., 2015). Similarly, physical, mental, and sexual health interventions yield benefits that average 10.2 times the costs across low-, lower-middle-, and upper-middle-income countries (Sheehan et al., 2017). Research that empirically demonstrates the importance of investing in positive youth development is a powerful tool for garnering policy support for youth-benefiting programs.

Third, with respect to practice, because positive youth development may be defined in different ways in different cultural contexts, international research also introduces ethical considerations that are important when considering whether a program or intervention to promote

PYD is advisable with a given cultural group. At times, programs are developed by well-meaning cultural outsiders and implemented in low-resource settings without understanding what the local implications may be (Gopichandran et al., 2016). Tailoring programs to make them sensitive to cultural beliefs and norms in the contexts in which they will be applied contributes to their effectiveness. For example, in many countries, children with disabilities are stigmatized and treated more poorly than children without disabilities (Hendricks, Lansford, Deater-Deckard, & Bornstein, 2014). However, in some countries, cultural beliefs may be protective for children with disabilities, as in the case of children with cognitive disabilities in parts of India and Nepal (Edgerton, 1981) or of disabilities being perceived as temporary, with change possible in this or a future life (Reiter, Mar’i, & Rosenberg, 1986). Without understanding cultural meaning attached to disabilities in a particular group, any program to promote positive adjustment in that context may be ill-matched to the local context.

Fourth, with respect to both policy and practice, despite the need for caution to avoid culturally inappropriate interventions, it is also important to recognize that efforts to promote positive youth development sometimes by necessity conflict with local norms and conventions. International efforts to end child marriage provide a good case study. Although child marriage is common in many parts of the world, with 25% of girls married before the age of 18 globally and as many as 45% in South Asia (UNICEF, 2016), child marriage is widely regarded as detrimental to girls’ positive development. Girls who are married before age 18 are less likely to finish school, more likely to live in poverty, and are more vulnerable to domestic violence and reproductive health problems (Sundaram, Travers, & Branson, 2018). Therefore, ending child marriage in an effort to promote positive youth development is a worthy goal, even in contexts in which child marriage is culturally accepted. Efforts to eradicate child marriage benefit from a holistic approach that involves changes in policies (i.e., outlawing child marriage) but also seek to change local norms about the desirability of child marriage and

make child marriage less of an economic necessity (e.g., through programs such as conditional cash transfers that are contingent on keeping girls unmarried and in school). Researchers and advocates working in one country can learn from researchers and advocates working in other countries about promising approaches to try in their own contexts (Dimitrova & Wiium, [this volume](#)).

In conclusion, this chapter provided an overview of how international collaborative research contributes to understanding positive youth development. Questions about whether to adopt an emic or etic perspective or, preferably, a combination of the two are related to whether conceptualizations and measures are developed from an insider's perspective within a particular cultural group or applied by cultural outsiders to understanding positive youth development in a new context. An international perspective helps researchers understand both within- and between-culture differences in positive youth development and the extent to which predictors of positive youth development are the same or different across countries (Dimitrova, 2018; Wiium & Dimitrova, 2019). Measures and methodology must be carefully tailored so that constructs are being assessed in meaningful ways across groups. Finally, international collaborative research offers several implications for policy and practice, particularly with respect to advocating for the importance of investing in positive youth development, learning from what works and what does not in different cultural contexts, adapting interventions to meet the needs of particular cultural groups, and aiming to meet development goals set by the international community.

Along with advantages of international collaborative research come potential risks and biases. For instance, when methodological and measurement issues are not properly addressed, there is a risk of misrepresenting particular cultural groups or making unfounded comparisons or claims. Thus, it is important in international collaborative research to report in detail methodological choices made, as well as to discuss findings by taking into consideration the limitations of the emic or etic approach used. Researchers should take into account potential biases and the importance of

considering both within- and between-group differences when conceptualizing international studies as well as when interpreting results.

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Positive Youth Development in Jamaica: Latent Growth of Self-Efficacy and Youth Assets

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Abstract

International contexts for Positive Youth Development (PYD) programs are often aimed at youth who face economic disadvantages, especially in developing countries. Little is known about the developmental trajectories of youth referred to as NEET (Not active in Education, Employment, or Training opportunities). In the present chapter, we examine latent growth trajectories of career decision self-efficacy and youth assets among

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NEET youth in Jamaica from a longitudinal field trial ($N = 1069$) with a treatment group that participated in the National Youth Service Corps program, a randomly assigned control group, and a non-equivalent comparison group representing the lower stratum of NEET youth in Jamaica. The latent growth models examined suggested that PYD programs produced improved change over time on career decision self-efficacy and youth assets relative to a matched comparison group. However, the trajectory of NEET youth possessing few basic skills represents a challenge for future conceptualizations of PYD programs in developing nations.

Keywords

Randomized trial · Latent growth · Jamaica ·
Positive youth development · NEET youth ·
The National Youth Service Corps Program

Throughout the world, access to quality education, employment training, and work experience are stepping stones to social and economic progress (Koller & Verma, 2017). However, in many developing countries, large portions of the population, especially young and economically disadvantaged, are not active in education, employment, or training (referred to as NEET youth; see

Furlong, 2006 on the evolution of this term). In fact, more than 38 million people under the age of 30, stretching across 35 countries, are not active in education, employment, or training opportunities (Carcillo, Fernandez, Königs, & Minea, 2015; García-Fuentes & Martínez García, 2020). NEET youth ages 16–29 years old have increased by 2.5 million from 2007 to 2012 (Carcillo et al., 2015). Female youth, in particular, are more likely than their male counterparts to fall into the NEET category. However, both males and females are at-risk (Dickens & Marx, 2020) as reported poor psychological health, dissatisfaction with life, lack of control over life, and fatalistic attitudes (Bynner & Parsons, 2002; Soggiu, Klevan, Davidson, & Karlsson, 2019). Negative effects of NEET are not constrained to poor psychological health for disengaged individuals but contribute to economic and social challenges for the entire communities (De Luca, Mazzocchi, Quintano, & Rocca, 2020). Given the propensity for poor life outcomes brought about from being disengaged, and the coincident rate of the NEET youth population in Jamaica, this chapter examines (a) how a positive youth development program affects the developmental progression of Jamaican NEET youth; (b) what occurs developmentally in youth that are not provided an opportunity for positive youth development and (c) the trajectory of development for youth that do not meet minimum requirements for participating in a PYD program, which has consequences for future iterations of PYD aimed at the lower stratum of NEET youth.

NEET Youth in Jamaica

Disengaged youth represent a global issue and a particular concern in the Caribbean, where youth unemployment is twice the general unemployment rate (Parra-Torrado, 2014). Countries, such as Barbados, Jamaica, Bahamas, Trinidad and Tobago are especially impacted by a high NEET prevalence. The quality of education is low in these regions and can best be shown by the passing rates on the Caribbean Secondary Education Certificate (CSEC). To enroll in higher education

or to get an entry-level job requires passing five or more CSEC assessments. In 2009, only 21% of students in the Caribbean successfully passed enough assessments to qualify for enrollment in higher education or to meet entry-level job requirements (Parra-Torrado, 2014). In addition, the two primary subjects, mathematics and English, have an average passing rate of only 45%. Thus, the majority of students in the Caribbean fail to meet the required thresholds to either attend college or start an employment career (Saxon, Hull, Fearon, Williams, & Tindigarukayo, 2012). To compound the educational issues, there is a discrepancy in the supply and demand of the workforce. The workforce demands previous employment and skills, but without proper training and poor education, the supply of youth that fit these requirements for employment is restricted (Fazio & Pinder, 2014). This is particularly impactful in Jamaica. Jamaican youth have twice the international unemployment rate (Parra-Torrado, 2014; Trading economics, 2020), low willingness to work (Lindo & McArdle, 2009; Ministry of Labour and Social Security, 2016), and poor job skills with extremely high failure rates on proficiency exams (Fox, 2003).

Developmental Trajectory for NEET Youth

Several key factors have been identified in determining life outcomes for NEET youth. Two such factors are poor educational achievement and disadvantaged family backgrounds (Gregg, 2001; Papadakis, Amanaki, Drakaki, & Saridaki, 2020). Early life experiences, that are often absent or infrequent among disadvantaged families (i.e., prosocial peer relationships, safe neighborhoods, and available resources), are fundamental for school readiness and help build cognitive, social, and behavioral skills that guide positive developmental trajectories for disengaged youth (Karyda, 2020; Viner et al., 2012).

Disadvantaged families tend to be seen as intergenerational and intragenerational, meaning that the cycle of poor education, poverty, and lack

of resources goes from parent to child then from childhood to adulthood (Graham & Power, 2004). This cycle is accelerated by high teen pregnancy rates, which reduces or delays educational and employment training opportunities for young females. Socio-economic origins and parental support set a foundation for the future development and life trajectory of a child. In the absence of interventions, the expected developmental trajectory for NEET youth is bleak. The cycle of poverty persists for those not engaged in educational, employment, or training opportunities (Buheji, 2019).

Positive Youth Development and the Big 3

There are efforts to help NEET youth through increasing opportunities for engagement, such as the development of the National Youth Service Corps, which primarily focus is on personal and professional development (National Youth Service, 2009). Positive Youth Development (PYD) is a popular construct that helps unattached adolescents, such as NEET youth through community, peer, family, and school engagement (Hull, Powell, Fagan, Hobbs, & Williams, 2020; Larson, 2000). PYD has been conceptualized through three important components of (1) opportunities for youth participation in and leadership of activities; (2) these opportunities emphasize the development of life skills; and (3) they occur within the context of a sustained and caring adult-youth relationship (for new PYD conceptualizations see Abdul Kadir, Mohd, & Dimitrova, *this volume*; Dimitrova et al., *this volume*; Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, *this volume*). These components are frequently referred to as the Big 3 features of PYD (Lerner, 2004). Implementation of the Big 3 for at-risk youth has the potential to strengthen pro-social relationships, academic achievement, and youth self-efficacy; yet, at present no research efforts have examined these outcomes in the Caribbean region. The advantages of these efforts may potentially extend beyond targeted youth. In

addition to these positive outcomes for children and youth, PYD opportunities may also provide long-term economic advantages to the community (Petersen, Koller, Motti-Stefanidi, & Verma, 2016).

In the Caribbean, many government programs have been put into place to increase vocational skills in relation to the Big 3 features, but without proper training and instruction for NEET youth, the programs will not be successful (Parra-Torrado, 2014). One way to guide vocational skill development programs would be to envisage them as PYD programs that incorporate features of the Big 3 with the intention of developing ecological assets (Hull et al., 2020; Hull, Saxon, Fagan, Williams, & Verdisco, 2018). Ecological assets include aspects, such as growing up with support from significant others, accessibility to facilities, such as libraries, recreation centers and schools. Youth who have access to ecological assets are encouraged in community engagement as well as school and family collective activities (Ettekal & Agans, 2020; Mohamed & Hassan, 2020). For example, adolescent involvement in out-of-school time programs is an ecological resource that provides opportunities to increase self-regulation, particularly in girls, which leads to better developmental outcomes (Lerner, Bowers, Geldhof, Gestsdóttir, & DeSouza, 2012). While this relation is established in more developed nations, it is unclear if it may hold in developing environments, such as Jamaica.

Career Self-Efficacy and Youth Assets

The present chapter examines two developmental outcomes of Jamaican NEET positive youth development referred to career self-efficacy and youth assets. As defined by Bandura (1997), self-efficacy is one's beliefs about their capabilities to execute necessary behaviors to perform a task. In a more narrow scope, career self-efficacy has been defined as an individual's understanding of their capability to complete tasks that are required for making career decisions (Betz & Hackett, 2006; Taylor & Betz, 1983). Career self-efficacy

is affected by personal and environmental factors (Tsang, Hui, & Law, 2012). Prior research in the Bahamas (Rowland, 2004) suggests that students with a quality education (private school), who attained a higher grade level, and who received support from a guidance counselor, had better career decision-making skills than their counterparts. Likewise, experience in life skill development activities within the context of a caring relationship with an adult (features of the Big 3), may enhance the career self-efficacy of participating youth (Tsang et al., 2012).

In addition to career self-efficacy, youth assets are a crucial aspect of positive youth development (Hayes, Huey, Hull, & Saxon, 2012; Roehlkepartain & Blyth, 2020; Wiium & Dimitrova, 2019; Wiium & Kozina, *this volume*). Youth assets include parent-adolescent communication, decision-making skills for good health and aspirations for the future (Oman et al., 2002). Effective development of these assets is critical for NEET youth to become capable adults who lead productive lives. In addition, these assets might serve as protective factors against risky behaviors in which these youth often engage (Uka et al., *this volume*). Examples of risky behaviors include sexual activity, drug and alcohol use. Certain positive behaviors that may increase due to implementation of youth assets include academic achievement, self-efficacy, and community involvement (Fang et al., 2020; Kozina, Wiium, Gonzalez, & Dimitrova, 2019; Oman et al., 2002). Youth assets should expand on the Big 3 features of PYD by utilizing opportunities, experiences, and support related to increasing school success, prosocial behavior, and leadership as well as decreasing risky behaviors (Ettekal & Agans, 2020; Koller & Verma, 2017; Mohamed & Hassan, 2020).

The Present Chapter

The purpose of the present chapter is to examine the developmental progression of NEET youth exposed to a positive youth development program, which relates to the Big 3 in Jamaica, with a special focus on career decision self-efficacy

and youth assets. In addition, we seek to better understand the developmental progression of NEET youth engaged in the National Youth Service Corps PYD program relative to youth in a randomly assigned control group and in a non-equivalent comparison group representing the lower stratum of NEET youth in Jamaica. Following this, we expect that improvements in the PYD youth group will not decrease over time, i.e., 6 months after completion of the PYD program.

A total of 1069 youth (59% female, age range 16–24, M age = 18.3, SD = 1.73) applied to the National Youth Service (NYS) Corps Program from all 13 parishes in Jamaica. Over 68% of participants met the requirements for NEET status with 9.7% reporting as non-working students, 7.6% working part-time, 2.2% working full-time, 1.1% self-employed, and 11.6% not reporting occupational status. However, all participants were classified as NEET because the NYS program requires them to attend a month long residential training followed by a six-month internship; thus, requiring a commitment to a seven-month long every day program. Additionally, 98% of participants were no longer looking for employment with 77.2% receiving financial aid from the government.

The NYS staff interviewed each applicant individually according to routine procedures including asking participants to describe their intent for applying to the NYS Corps program, their history with negative behaviors and school/exam performance. Each applicant must successfully read aloud a brief passage, assumed to be at the level of Grade 6, to be considered for the program. As there were more applicants at all times from every parish than available space, NYS staff selected only applicants that met the reading requirement and did not exhibit risky behaviors, such as delinquency. Youth that were not accepted into the program were retained as a non-equivalent control group. Consequently, three groups of a treatment group ($n = 318$), a control group ($n = 467$), and a non-equivalent control group ($n = 284$) were formed.

Stratified random assignment produced two groups (treatment and control groups) within

26 blocks composed of males or females from the 13 parishes. NYS program's capacity is 325 participants, so the researchers requested that the NYS recruit 800 participants for random assignment to treatment and control groups. The treatment group contained 41% of participants because it was anticipated that attrition would be greater in the control group. Upon beginning of the treatment program, some immediate attrition occurred, resulting in corrected sample size for treatment ($n = 318$), control ($n = 467$), and non-equivalent control group ($n = 286$).

Baseline assessments using the measures described below and three repeated measures with the same assessments were administered to correspond with key program elements: (T_0) prior to the intervention; (T_1) following a one-month residential training program; (T_2) six months after T_1 upon completion of an unpaid work internship; and (T_3) another six months after the conclusion of the program to examine post treatment effects following the end of the program.

Demographic information was obtained with a questionnaire designed to record the age, ethnicity, marital status, living situation, and educational and employment-seeking interests of the participants in each group. Additionally, *personality* based on the Big 5 (neuroticism, extroversion, openness to new experiences, agreeableness, and conscientiousness; McCrae & Costa, 1987) and *cognitive ability* (Shipley, Gruber, Martin, & Klein, 2009) measures were included and used as covariates to capture individual differences in participants that were not the focus of the primary analyses.

Career decision making self-efficacy was measured with The Short Form of the Career Decision Making Self Efficacy Scale ([CDSE-SF]; Taylor & Betz, 1983) regarding the beliefs of an individual that they can successfully complete tasks necessary to making career decisions. The CDSE-SF is a 25-item self-report with five items composing each of the five subscales of self-appraisal, organizational information, goal selection, planning, and problem solving. Participants rated their ability

on a 5-point Likert scale ranging from 1 (*no confidence at all*) to 5 (*complete confidence*). The reliability of the scale was $\alpha = .86$ and subscale reliability estimates based on McDonald Omegas ranged from $\omega = .64$ to $\omega = .72$. In addition, test-retest reliability calculated using the control group from T_0 to T_1 showed $T_0 = .677$ ($p = 7.68 \times 10^{-54}$).

Youth assets were measured with The Youth Asset Survey-Revised ([YAS-R]; Oman et al., 2002; Oman, Vesely, Tolma, Aspy, & Marshall, 2010). The survey evaluated self-perceptions on six subscales of family communication, peer role models, future aspirations, responsible choices, community involvement, and non-parental role models using 38-items rated on a 4-point Likert scale from 1 (*low or less of the construct*) to 4 (*high or more of the construct*). The reliability of the scale was $\alpha = .86$ and subscale reliability estimates based on McDonald Omegas ranged from $\omega = .74$ to $\omega = .80$. In addition, test-retest reliability calculated using the control group from T_0 to T_1 showed $T_0 = .630$ ($p = 1.52 \times 10^{-44}$).

The Intervention

The NYS Corps Program is a 28-day residential session where NEET youth live together at a rural campsite undergoing intensive training in limited sector skills and general workplace skills, followed by a 6-month job internship exposing participants to the working environment. The NYS Corps Program is designed to reflect the Big 3 features of PYD by developing life skills through fostering the growth of basic work skills, creating mentorships to build youth-adult relationships and generating greater community involvement through internships. The overall goal of the program is to provide participants with opportunities that will enhance their development and enable them become working and contributing members of their communities (National Youth Service, 2009; National Youth Service Act, 1998).

Once participants arrived at the rural campsite, they were divided into teams with an adult

leader designated to lead them over the course of the month-long residential portion of the program. Participants received 6 h of instruction per weekday with curriculum consisting of two sections of a standardized core curriculum focusing on the development of employable life skills and a special orientation curriculum on specific jobs that change with each new group of participants. The standardized core curriculum totals up to 50 h of instruction and includes courses on information technology (10 h), behavioral development (7 h), leadership (7 h), personal development (7 h), social studies (7 h), writing and talking for success (7 h) and gender sensitization (5 h). The special orientation curriculum (77 h of instruction) covers areas of clerical and administrative assistance, customer care, education, health aides, and sales and administration.

After completion of the residential stage, each participant begins phase two of the NYS Corps Program consisting of a six-month, full-time internship in their parish of residence. Over 95% of internship positions are in the public sector and intended to match the participants' special orientation curriculum. During the internship, participants are exposed to general workplace requirements and some specialized training while under the direction of a workplace supervisor. The supervisor acts as a mentor aiming to reinforce positive work attitudes and behavior from the residential phase. Additionally, each participant must attend once a month one-day workshop to reinforce the components from the residential camp. To further support participants, the NYS Corps Program provides them with a flat stipend to cover their travel and lunch expenses over the 6-month period. Upon conclusion of the internship, participants are eligible to receive 22% of their tertiary tuition for three years of college; 85 weeks of minimum wage contribution to a housing loan taken out within two years of program completion and medical reimbursement of 80% of the costs during the 7-month duration of the program. The NYS handles all reimbursements and contributions directly with participants.

Analytical Procedures

Preliminary analyses were conducted to evaluate the normality of the continuous variables (i.e., career decision-making self-efficacy, youth assets, personality, and cognitive ability) and to check for missing data. Normality was supported if skewness and kurtosis values were below 3.00 for all continuous variables in the study (Osborne, 2013). Missing data were also checked and cases were removed where all values were missing for the primary analyses. The remaining missing values were estimated using maximum likelihood methods in combination with the main analyses.

The primary analyses used linear growth models to analyze growth over time for the three groups (Duncan & Duncan, 2004; Herle et al., 2020). All analyses were conducted using the default maximum likelihood estimator. Linear growth models with multiple groups were run separately for the career decision-making self-efficacy and youth assets and both models were estimated with the covariates of gender, cognitive ability, and personality. Time was coded as 0, 1, 2, and 3 for the four testing times and the groups were coded as 1 (treatment), 2 (matched control) and 3 (non-equivalent control).

Covariates of gender, cognitive ability, and personality were included as time-invariant covariates due to their impact on career-decision making self-efficacy and youth assets (Lent, Brown, & Hackett, 1994; Wium, Dost-Gözkan, & Kotic, 2019; Wium & Kozina, *this volume*; Wu, Zhang, Zhou, & Chen, 2020; Xin, Tang, Li, & Zhou, 2020). Further, all continuous covariates were mean centered to allow for clearer interpretation of the results, such that the intercept for each group indicated the value of the outcome at Time 0 for the average cognitive ability and personality scores. Gender was coded as 0 (male) and 1 (female) to support interpretation as well, such that the coefficient for the gender covariate indicated the change in outcome scores from male to female at Time 0, holding all other covariates constant.

The model fit was tested by a combination of relevant indices such as the χ^2 , the Root Mean

Squared Error of Approximation (RMSEA; recommended < .06), the Confirmatory Fit Index (CFI; recommended > .95), the Tucker-Lewis Index (TLI; recommended > .95), and the Standardized Root Mean Square Residual (SRMR; recommended < .08) (Rutkowski & Svetina, 2017). Once an adequate model fit was determined, the models were interpreted first by the slope and intercept values for each of the three groups (Duncan & Duncan, 2004; Herle et al., 2020). Then, the impact of the covariates was analyzed for each of the three groups separately, with covariates that show statistical significance being supported as meaningful in the analyses.

Main Findings

Descriptive statistics for the continuous variables are presented in Table 1. All variables were found to be within the range of the normal distribution and no transformations or adjustments were made. Limited missingness was found in the data and a total of 81 cases (0.08%) were removed from the analyses due to missing values on all study variables.

A linear growth model was estimated to evaluate growth on youth assets as measured by the YAS-R over the four time points for the three groups (Fig. 1). The model fit was very good, $\chi^2(57, 1069) = 64.21, p = .24, RMSEA = .02, CFI = .99, TLI = .99, \text{ and } SRMR = .04$ (Table 3). For the treatment group, the model resulted in an intercept of 123.93 with a slope of 0.27, indicating a small rate of positive growth over time. As shown in Table 3, personality covariates of neuroticism, extraversion, and conscientiousness had a statistically significant impact on the intercept for this group, with neuroticism negatively and extraversion and conscientiousness positively impacting the YAS-R scores. Openness to new experiences had a small but statistically significantly negative impact on the slope for the treatment group (Table 2).

For the matched control group, the model resulted in an intercept of 121.90 with a slope of -0.35, indicating a small rate of negative growth

Table 1 Descriptive statistics for continuous study variables

| Variable | Mean (SD) | Skewness (SE) | Kurtosis (SE) |
|-----------------------------|----------------|---------------|---------------|
| Age | 18.30 (1.77) | .98 (.08) | 2.02 (.15) |
| Cognitive ability | 80.14 (11.67) | .31 (.08) | 1.56 (.15) |
| Neuroticism | 45.67 (8.24) | .01 (.08) | -.11 (.15) |
| Extraversion | 49.40 (8.62) | -.05 (.08) | -.13 (.15) |
| Openness to new experiences | 43.37 (7.40) | .17 (.08) | -.15 (.15) |
| Agreeableness | 53.34 (9.60) | -.26 (.08) | -.10 (.15) |
| Conscientiousness | 61.54 (7.67) | -.75 (.08) | .72 (.15) |
| CDSE T ₀ | 95.56 (12.54) | -1.06 (.08) | 2.66 (.15) |
| CDSE T ₁ | 96.89 (13.02) | -1.07 (.08) | 2.34 (.16) |
| CDSE T ₂ | 102.87 (13.68) | -1.02 (.09) | 2.21 (.17) |
| CDSE T ₃ | 102.10 (14.66) | -.99 (.10) | 2.94 (.19) |
| YAS-R T ₀ | 122.63 (13.55) | -.73 (.08) | 1.39 (.15) |
| YAS-R T ₁ | 123.34 (13.14) | -.63 (.09) | .40 (.16) |
| YAS-R T ₂ | 122.48 (13.19) | -.63 (.09) | .40 (.17) |
| YAS-R T ₃ | 121.53 (13.93) | -.64 (.10) | .85 (.19) |

Note. SD = Standard Deviation; SE = Standard Error; CDSE = Career Decision Self-Efficacy; YAS-R = Youth Assets Survey Revised; T₀ = Time 0; T₁ = Time 1; T₂ = Time 2; T₃ = Time 3

over time. Personality covariates of neuroticism, extraversion, and conscientiousness were again found to have a statistically significant impact on the intercept for this group, with neuroticism negatively and extraversion and conscientiousness positively impacting the YAS-R scores. Neuroticism was also found to have a small but statistically significantly positive impact on the slope for the treatment group.

Finally, for the non-equivalent control group, the model resulted in an intercept of 124.08 with a slope of -0.64, also indicating a small rate of negative growth over time. Personality covariates

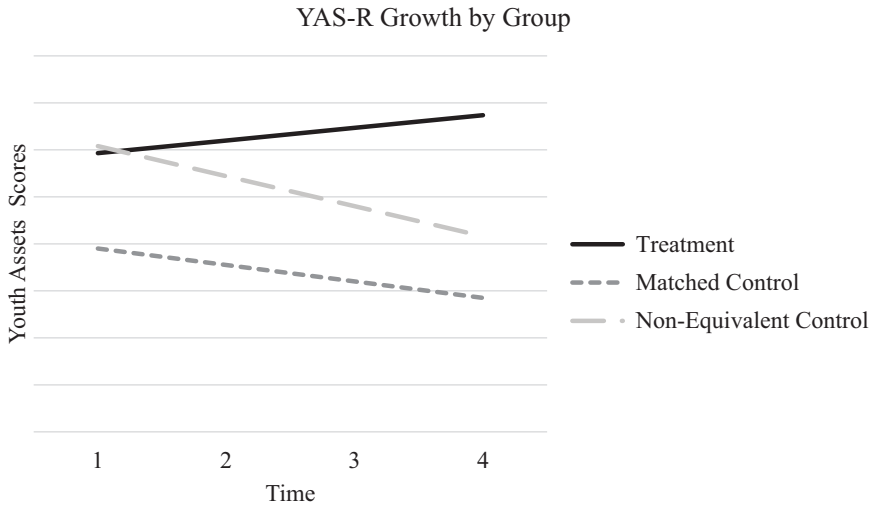


Fig. 1 Linear latent growth model of youth assets for all three groups (Note. YAS-R = Youth Assets Survey-Revised)

Table 2 Sample statistics for career decision self-efficacy and youth assets at three time points

| Variable | T ₀ M (SD) | T ₁ M (SD) | T ₂ M (SD) | T ₃ M (SD) |
|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|
| CDSE | | | | |
| Treatment | 95.41 (11.70) | 98.06 (11.91) | 105.00 (12.77) | 104.49 (14.93) |
| Matched control | 97.03 (11.46) | 97.49 (12.20) | 103.34 (13.78) | 102.30 (14.64) |
| Non-eq. control | 93.27 (14.70) | 94.58 (15.15) | 99.70 (13.97) | 99.45 (14.07) |
| YAS-R | | | | |
| Treatment | 122.92 (13.67) | 124.91 (12.26) | 123.98 (13.18) | 122.91 (13.48) |
| Matched control | 122.79 (13.23) | 122.68 (13.21) | 121.98 (12.94) | 121.28 (14.00) |
| Non-eq. control | 122.04 (13.98) | 122.75 (13.84) | 121.64 (13.52) | 120.62 (14.19) |

Note. M = Mean; SD = Standard Deviation; CDSE = Career Decision Self-Efficacy; YAS-R = Youth Assets Survey Revised; Non-eq. control = Non-equivalent control group; T₀ = Time 0; T₁ = Time 1; T₂ = Time 2; T₃ = Time 3

Table 3 Linear growth model of youth assets

| Covariate | Estimate | p-value |
|--|----------|---------|
| Treatment group: I = 123.93, S = 0.27 | | |
| Intercept | | |
| Neuroticism | -1.97 | .01 |
| Extraversion | 2.98 | < .001 |
| Conscientiousness | 4.06 | < .001 |
| Slope | | |
| Openness | -.78 | .01 |
| Matched control: I = 121.90, S = -.35 | | |
| Intercept | | |
| Neuroticism | -1.39 | .022 |
| Extraversion | 2.31 | < .001 |
| Conscientiousness | 2.74 | < .001 |
| Slope | | |
| Neuroticism | .51 | .05 |
| Non-equivalent control: I = 124.08, S = -.64 | | |
| Intercept | | |
| Extraversion | 2.88 | < .001 |
| Conscientiousness | 4.98 | < .001 |
| Slope | | |
| Openness | -.60 | .05 |

Note. Gender coded as 0 = Male; 1 = Female; I = Intercept; S = Slope

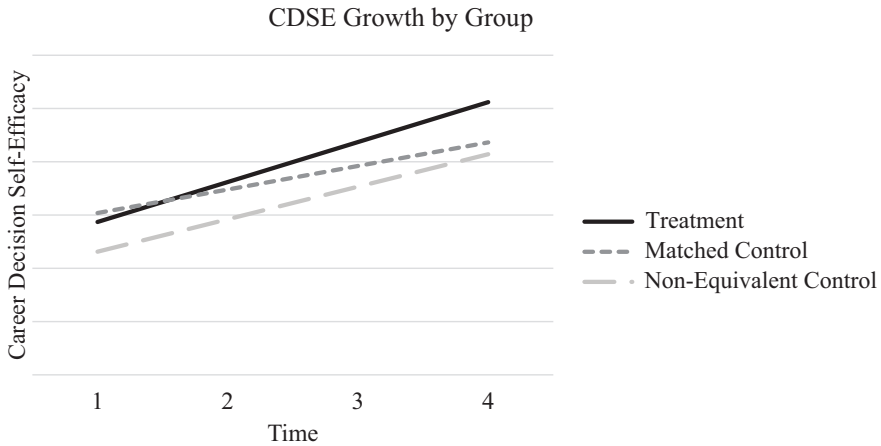


Fig. 2 Linear latent growth model of career decision self-efficacy for all three groups (Note. CDSE = Career Decision Self-Efficacy)

of extraversion and conscientiousness were again found to have a statistically significantly positive impact on the intercept for this group. Openness to new experiences had a small but statistically significantly negative impact on the slope for the non-equivalent control group.

A second linear growth model was estimated to evaluate growth on the career-decision making self-efficacy measured by CDSE over the four time points for the three groups (Fig. 2) that showed a good fit, $\chi^2(57, 1069) = 114.11$, $p < .001$, RMSEA = .06, CFI = .95, TLI = .92, and SRMR = .05 (Table 4). For the treatment group, the model resulted in an intercept of 94.35 with a slope of 3.75, indicating a rate of positive growth over time. Cognitive ability and personality covariates of openness to new experiences and conscientiousness had a statistically significantly positive impact on the intercept for this group.

For the matched control group, the model resulted in an intercept of 95.19 with a slope of 2.21, indicating a slower rate of positive growth over time when compared to the treatment group. Gender was a statistically significant covariate for this group, with females showing a 2.27 point higher level of career decision-making self-efficacy at baseline when compared to males in the same group. Cognitive ability and personality covariates of neuroticism, extraversion, openness to new experiences, and conscientiousness had a statistically significantly impact on the intercept

Table 4 Linear growth model of career decision self-efficacy

| Covariate | Estimate | p-value |
|---|----------|---------|
| Treatment group: I = 94.35, S = 3.75 | | |
| Cognitive ability | 1.29 | .04 |
| Openness | 1.56 | .02 |
| Conscientiousness | 3.64 | < .001 |
| Matched control: I = 95.19, S = 2.21 | | |
| Gender | 2.27 | .03 |
| Cognitive ability | 1.01 | .05 |
| Neuroticism | -1.10 | .03 |
| Extraversion | 1.30 | .02 |
| Openness | 1.39 | .004 |
| Conscientiousness | 3.07 | < .001 |
| Non-equivalent control: I = 91.56, S = 3.05 | | |
| Gender | 4.13 | .02 |
| Extraversion | 1.67 | .05 |
| Conscientiousness | 4.92 | < .001 |

Note. Gender coded as 0 = Male; 1 = Female; I = Intercept; S = Slope

for this group. Neuroticism showed a negative impact while the other covariates all had a positive impact on the intercept.

Finally, for the non-equivalent control group, the model resulted in an intercept of 91.56 with a slope of 3.05, also indicating a slower rate of positive growth over time when compared to the treatment group. Gender was again found to be a statistically significant covariate for this group, with females showing a 4.92 point higher level of career decision-making self-efficacy at baseline

when compared to males in the same group. Personality covariates of extraversion and conscientiousness showed a statistically significantly positive impact on the intercept for this group.

Conclusions

The main scope of this chapter was to examine the developmental trajectories of career decision self-efficacy and assets among NEET youth (Not active in Education, Employment, or Training opportunities) in hardly investigated context in Jamaica. In so doing, the chapter provided evidence on the latent growth trajectories of large sample of NEET youth from a longitudinal field trial, a treatment group that participated in the National Youth Service (NYS) Corps program, a randomly assigned control group, and a non-equivalent comparison group representing the lower stratum of NEET youth in Jamaica. The main findings largely supported the expected growth in youth assets over time as a result of the treatment of inclusion in the PYD program. Both control groups exhibited negative growth over time on average, further supporting the effect of the treatment to increase youth assets. However, the slopes for all three groups were rather small, raising questions about the practical significance of the observed changes.

There are alternative possibilities for the observed slopes being smaller than expected. The first has to do with identity exploration during the developmental period youth described in the present chapter were experiencing. First, we would have expected the treatment group slope to have been larger, which we did observe. However, the age of participants, being older and separating from established family structures with their parents to become emerging adults would possibly explain truncated outcomes on some of the assets, such as family communication, responsible choices and community involvement for these youth in Jamaica (Ferguson & Dimitrova, 2019). It is not unusual for emerging adults to reduce their contact with family (Dykas & Siskind, 2020), engage in irresponsible and risky behaviors (Romm, Barry, & Alvis, 2020) and eschew

involvement in community activities (Núñez & Flanagan, 2016) as they are establishing adult role identities and exploring ways they can become unique individuals, apart from parents. Relatedly, it is important to note that one of the assets subscales regarding future aspirations was composed of two items on parental and own expectations for the future. These two “future” concepts are likely to be confounded with one another at this critical separation juncture in life. It seems likely that interventions similar to the NYS would result in larger practical effects with younger adolescents that are not already approaching adulthood and establishing lives separate from prior family structures. Moreover, NEET youth might be conceived of as a subset of youth that already experienced low levels of assets prior to involvement in the program, and increases in youth assets might require substantially more resources than those available in the program to generate notable growth.

The personality factors of extraversion and conscientiousness were shown to have a positive impact on youth assets, indicating that those who are more outgoing and those who tend to take tasks seriously have increased positive youth assets, on average. This is supported by previous literature showing that extraversion has positive relation with belief-in-self, belief-in-others, and engaged living (Marino et al., 2016). Additionally, conscientiousness had a positive relation with belief-in-self. Conversely, neuroticism exhibited a negative relation with youth assets, such that increased emotional instability would result in less positive youth assets, on average. This finding is unique in comparison to previous literature reporting lack of relations between neuroticism and youth assets (Marino et al., 2016).

In relation to career decision-making self-efficacy (CDSE), the main findings supported a positive growth as a result of the treatment. However, both control groups also exhibited positive growth on CDSE over time, though at a smaller rate of increase. At some level, this is problematic as it could be indicative of lack of impact by the treatment itself. However, self-efficacy in longitudinal studies associated with work actually has been shown to decrease over

time as employees are exposed to increased job requirements (Tierney & Farmer, 2011). The findings of the present chapter suggest that control group self-efficacy remains high and continues to grow due to a lack of understanding about what is truly required to obtain work. However, the growth trajectory of those in the NYS program suggests that positive support from employers and the NYS program help their ability to obtain employment. Consequently, positive support through the program resulted in self-efficacy counter to an expected decrease once exposed to the realities of the job market. This demonstrates the importance of examining self-efficacy with positive youth development programs, and importantly, that future observations of PYD program participants would benefit from longitudinal investigations of self-efficacy constructs. From a practice point of view, participants in programs designed to provide positive support require affirmation that their new role identity should correspond with a sense of personal agency in achieving desired outcomes when the program provides participants authentic contexts to view newly acquired skills or experiences, in this case the work experiences/internships provided.

The covariate analysis for career-decision making self-efficacy (CDSE) was multi-faceted, which may be another reason for the complex growth results for the three groups over time. The cognitive ability covariate had a positive impact on CDSE generally, indicating that youth with higher cognitive ability have higher CDSE scores on average. This is contradictory to previous research that found no significant relation between fluid intelligence and CDSE (Di Fabio & Saklofske, 2014).

Personality factors of extraversion, conscientiousness, and openness also had a positive impact on CDSE, with conscientiousness in particular showing a strong relation. This suggests that youth who are more outgoing, those who take things seriously and are willing to try new things are all more likely to have a higher level of career decision-making self-efficacy. Conversely, neuroticism had a negative impact on CDSE, indicating that youth who are emotionally unstable are more likely to struggle with their self-

efficacy towards career decisions. These findings are generally consistent in strength and direction with previous work on the relation between the Big 5 personality factors and CDSE in Chinese emerging adults (Jin, Watkins, & Yuen, 2009), Australian (Rogers, Creed, & Glendon, 2008), and Italian youth (Di Fabio & Saklofske, 2014).

Finally, gender was a significant covariate for both control groups, with females in these groups outscoring males at the start of the study by about 2–4 points. This is an interesting finding supported by prior work reporting that males tended to score 2 points lower than females (Jin et al., 2009). However, this difference was not observed in the treatment group, possibly suggesting that the treatment may be effective in reducing gender differences in CDSE that occur outside of the intervention.

Caveats and Prospects

The findings reported in this chapter call for future work and refinements. Given the non-equivalent group design and the inability to randomly assign subjects to treatment condition, it is impossible to make causal inferences regarding the effects found in this study. Another issue regards the generalizability of findings. The study sample is not generalizable to all NEET youth in Jamaica or throughout the Caribbean. NEET youth are often seen as a continuum, where on one end there are youth who may be illiterate but would want to engage in a program, such as the National Youth Service Corps. On the other end, there are NEET youth who are illiterate, have no motivation, and would never participate in such a program. The present sample of NEET youth did not reflect the entirety of this continuum. The latter of this continuum may be a worthwhile population to study. In addition, the outcomes of career decision self-efficacy and youth assets addressed here are relatively short-term ones. Future research should consider longer-term effects on NEET youth who undergo training programs and the impact on their early adulthood in comparison to those who did not undergo training programs.

Implications for Research, Policy and Practice

Future researchers should continue to evaluate the effectiveness of PYD programs to increase youth self-efficacy and assets. Research to replicate the present findings with other diverse samples would be ideal, particularly as it relates to the unique gender differences observed in the chapter. Additional research is particularly needed in other developing nations as it relates to success among youth and emerging adults and researchers could take the findings from this chapter as a starting point for future research in other national contexts (see Dimitrova & Wiium, [this volume](#)).

The present chapter demonstrated that an intensive intervention program with NEET youth can produce positive and statistically significant effects on youth assets and career decision self-efficacy. For policy makers, these findings support continued investment in positive youth development programming for youth. If these features translate to youth navigating successfully to emerging adulthood as productive members of the workforce (Dimitrova, 2018), this form of positive youth development possesses the potential to radically alter the economies of developing nations. More specifically, a positive alteration in life trajectory for a single NEET youth could save their society anywhere between US\$2.6 to US\$5.3 million (Cohen & Piquero, 2009).

Concerning practice, connecting positive development programs to outcomes that are of substantial interest to youth, such as obtaining a job when youth lack job skills, can increase the desirability of PYD programs for youth. In Jamaica, the number of applicants to such programs at any point in time varies, but generally the program has applicants that exceed the number of available positions by a factor of 4 to 1. Given the potential of the program to improve youth self-efficacy and assets in combination with economic productivity, we suggest other practitioners to consider incorporation of PYD components (the Big 3 of the PYD) with work-based skills training for adolescents.

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Leadership Development of Zulu Male Youth in a South African Township

Dawn Bremner and Kelly Dean Schwartz

Abstract

Amidst a history of colonialism, apartheid, and constant social, economic, and political uncertainty, the children and youth of South Africa are demonstrating a trajectory of thriving that gives evidence to their capacity for substantial growth in all areas of development. The present chapter reviews the empirical evidence on Positive Youth Development (PYD) as an active process in the lives of South African children and youth, with a particular focus on the ecological and cultural forces that can shape leadership in general, and male youth leadership in particular. Specifically, the chapter provides a brief history of South Africa and the apartheid, a discussion of how youth leadership is influenced by context and culture, and the application of these critical constructs to the development of youth leadership in a sample of South African male youth. The study engaged with eight young men ($M = 19.0$ years) who participated in a year-

long mentoring program that involved learning new skills/concepts and having opportunities to practice and apply these skills. The findings of the program highlight how successful leadership development is undergirded by the belief that youth have a choice or a sense of control over their own lives that allowed them to see that they could be leaders. The chapter conclusions focus on how an ecological, systems approach to youth leadership development via relationship with the community and mentors is critical to leadership programming, as is having choices, access to education, and developing communities as priorities for developing future leaders.

Keywords

South Africa · Black township youth · Youth leadership development · Zulu male youth · Positive youth development

A history of colonization, institutionalized segregation and the HIV/AIDS crisis has created a set of circumstances that are unjust for Black, Coloured, and Indian South Africans (terms used to distinguish between racial groups that faced systematic oppression and segregation during the apartheid). As a relatively new democracy, the country is striving for positive change and intent

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on providing a new hope for future generations. In the post-apartheid era, South Africa's youth are regarded as a key resource in the country's future. There has been considerable research dedicated to identifying the issues and negative consequences facing young people related to mental health, illness, education, and poverty (Oluwaseyi & Fotso, 2020). In contrast, there is a great need to adopt a strengths-based approach to better understand the experiences of young, male Zulu South Africans and the factors that are associated with positive outcomes for Zulu youth and their communities.

The South African Context

Beginning in 1948, the country was ruled under a policy known as apartheid (Tibane & Honwane, 2015). The Apartheid (i.e., Afrikaans word for "apartness") promoted the social, economic, and political oppression of Coloured, Indian, and Black South Africans through formal policies and laws. Under these conditions, each racial group was responsible for their own development. White South Africans were in power at the time and ensured that the best geographical areas, schools, jobs, and other resources were reserved for them (Daniels, Collair, Moolla, & Lazarus, 2007). Black South Africans received the fewest resources despite making up the majority of the population. In the current chapter, Black South Africans will be used as a proxy for Indigenous South Africans in general due to their shared history of oppression and segregation, although it is acknowledged that there is a great deal of diversity amongst the cultures, experiences, and languages of Black South Africans. Where possible, Zulu will be used to speak to the experiences of the Zulu people.

The apartheid created inequality amongst the different racial groups in relation to education (Bhana et al., 2011; Brown, 2006), employment opportunities (Lindegger & Quayle, 2009), health (Rispel, Moorman, & Munyewende, 2014), and social support networks (Leclerc-Madlala, Simbayi, & Cloete, 2009). This inequality was systematic and intentional. One means by

which the government controlled and segregated Black South Africans was through the allocation of land. During the apartheid, Black South Africans were divided into ten ethnic nations and they were moved into rural homelands (Tibane & Honwane, 2015). Black South Africans were allocated only 13% of the land despite making up 80% of the total population (Tibane & Honwane, 2015). This form of segregation was meant to separate the majority Black population so that they would not form a united front against the White minority (Dlamini, 2005). The resource-poor land took away Black South Africans' economic independence and they had to travel for work (Mesthrie, 2008). However, they were not permitted to reside in White designated areas where there were opportunities for work and townships were formed as designated spaces where Black South Africans could reside on the periphery (Dlamini, 2005).

To further compound the situation was the rapid rise and spread of HIV/AIDS. In 2017, there were 7.9 million South Africans (i.e., 14% of the country's total population) living with the disease (Simbayi et al., 2019). KwaZulu-Natal had the highest prevalence rate in the country at 18%, and rates were significantly higher for residents of rural areas in comparison to those living in urban centers (Simbayi et al., 2019). Due to AIDS and AIDS-related deaths, the provincial life expectancy at birth for residents of KwaZulu-Natal is 57.7 years for males and 64.1 years for females (Statistics South Africa, 2018).

The issues surrounding HIV/AIDS are exceptionally complex (Gona et al., 2020). The disease impacts families and communities through widespread stigma, reduced productivity, and long-term illness (Skovdal & Daniel, 2012). With increased access to medications and interventions, the incidence of the disease has stabilized or declined in certain populations (Simbayi et al., 2019). However, families and communities continue to face ongoing stress and the loss of their social support networks (Rohleder, Swartz, Kalichman, & Simbayi, 2009).

There is a call from Indigenous and allied African scholars to reconnect with Indigenous values and traditions to ensure that the cultural

and linguistic needs of communities are met (Iwowo, 2015). As is common across Indigenous cultures across the globe, the Zulu people have faced oppression that has impacted all aspects of their daily lives (Semali & Kincheloe, 2011). Their culture and life ways were challenged through both the loss of land and cultural identity (Fairweather, 2006). Rather than valuing different ways of knowing and being, traditional African beliefs and practices were made to seem inferior to the West and Europe (Semali & Kincheloe, 2011). Western notions of knowledge focus on compartmentalized knowledge, specialization, standardization, and systematization (Barnhardt & Kawagley, 2005). In contrast, Indigenous knowledges are holistic, experientially grounded, and relational (Barnhardt & Kawagley, 2005), and it is in operationalizing this Indigenous knowledge that we can come to understand how traditional South African practices are being used to develop youth leadership among a small sample of male Zulu youth.

How Youth Leadership Is Influenced by Culture and Context

The need to develop a contextualized understanding of leadership practices in Africa is clearly articulated in the literature (Bolden & Kirk, 2009; Fourie, van der Merwe, & van der Merwe, 2017; Mazrui, 1970; Ngcobo & Tikly, 2010; Riley, 2000). Given the diversity and historical influences in the country, effective leadership practices need to be understood based on the circumstances and context in which it is to be exercised (Ngcobo & Tikly, 2010). There is a clear need for Indigenous perspectives on leadership development in the South African context (Bolden & Kirk, 2009; Heussen-Montgomery & Jordans, 2020).

In a large-scale study about views of leadership in sub-Saharan Africa, four common themes were identified: (1) anyone can be a leader at any level; (2) leadership begins with self-awareness; (3) leadership is a relational process that requires listening and responding to the changing needs of the community, and (4) leadership is about ser-

vice to the community (Bolden & Kirk, 2009). Positive changes in one community contributed to positive change for the country. Traditional African leadership places significance on collaboration, active participation, community, and authenticity from leaders (Haruna, 2009; McManus & Perruci, 2015). Leadership identity is based on one's relationship with others and individuals are willing to sacrifice self-interests to help others (Muchiri, 2011). Collaboration and consensus are also important so that everyone is given a voice and the best decisions are those that honor all perspectives (McManus & Perruci, 2015).

Following this line, researchers have discussed how the concept of Ubuntu could form the foundation for an Indigenous African style of leadership (Bolden & Kirk, 2009; Mangaliso, 2001; Msila, 2008; Ncube, 2010). Ubuntu is a social philosophy that forms the core of most Indigenous African cultures (Ncube, 2010). The term is derived from the Zulu, Xhosa, Swati, and Ndebele languages and has no English equivalent (Ncube, 2010). This single word represents the interconnectedness amongst people (Tutu, 2000). The concept of Ubuntu emphasizes people and their dignity and adopts a deeply collectivist perspective. It is about relationships, harmony, and community, and it requires a deep understanding of what it means to be connected to one another (Muchiri, 2011). According to this paradigm, individual needs and desires will be met once the needs of the group have been met (Nussbaum, 2003).

Ncube (2010) proposed a framework guided by principles of Ubuntu as a transformative leadership philosophy that complements and adds to current discourse on leadership and is relevant within African contexts (see Table 1). The recognition and acknowledgement of human beings as people with unique languages, histories, and cultures is of utmost importance. Leadership and decision-making are viewed as actions that are participatory, democratic, and transparent. Consensus and agreement are prioritized over individual decision making with the needs and outcomes of the group overriding those of the individual. A collectivist mentality encourages

Table 1 Ubuntu leadership framework

| Guiding Principles | Practical Application |
|--|---|
| Modeling the way | Leaders must set an example for others, especially in regards to ethical values. |
| Communal enterprise and a shared vision | Group outcomes and multiple perspectives are important. |
| Change and transformation | Decisions are made by ongoing consensus. |
| Interconnectedness, interdependency, and empowerment | Building relationships and trust are important to foster collaboration. |
| Collectivism and solidarity | Social responsibility, teamwork, and non-competitive environments are encouraged. |
| Continuous integrated development | Recognize others' contributions and human potential. |

Note. Author elaboration based on Ncube (2010)

teamwork, solidarity, loyalty, harmony, and shared rewards (Ncube, 2010). It is this collectivist mentality and shared vision for the future that may be the impetus motivating efforts to develop youth leaders, particularly Indigenous youth (e.g., Zulu) in South Africa.

Youth Leadership and Positive Youth Development

The study of youth leadership has emerged only since the 1980s (Rost, 1993), but there has been a growing interest in the topic. Dominant leadership theories are based on research conducted in businesses and organizational settings with adult populations. However, these theories do not always apply directly to youth due to differences in development and the purpose of leadership (Getz & Roy, 2013; MacNeil, 2006; Mortensen et al., 2014). Research shows clear differences in what youth value and how they conceptualize leadership. Young people value change, collective action, mentorship, strong character, and believe that anyone can be a leader (Mortensen et al., 2014). Youth conceptualize leadership as actions that contribute to civic responsibility and community engagement (Klau, 2006; Naseem, 2020).

Youth development focuses on the whole person within their context rather than one issue or a single set of skills (Kress, 2006), and globally, there is a trend at better understanding positive outcomes for youth (Dimitrova, Sam, & Ferrer-Wreder, 2021; Wiium & Dimitrova, 2019). Generally speaking, it is the cumulative effects of a number of factors that supports young peoples' coping (Ebersohn, 2007; Schwartz, Theron, & Scales, 2017). Scholars dedicated to the study of resilience are trying to better understand how the interaction between the individual and their social-ecological context can support resilience (Mhongera & Lombard, 2020; Theron, 2020; Twum-Antwi, Jefferies, & Ungar, 2020; Ungar, 2008). For example, Theron (2015) examined culturally specific influences on positive outcomes for youth in township and rural communities. Female family members, kin-like care, and accessible, quality education were unique factors that supported young people's development.

For the purpose of this chapter, leadership is regarded as a specific aspect or representation of positive youth development (Van Niekerk, 2014), and an important assumption of youth leadership development programs is that leadership can be learned (Brungardt, 1996). Leadership development occurs as a component of broader programs that target character development and life skills, stand-alone programs specific to leadership or through experiences where young people are given specific leadership duties to perform (Kress, 2006; Libby, Sedonaen, & Bliss, 2006; MacNeil, 2006; Mohamed & Abu Hassan, 2020). The variety of activities classified as youth leadership development, however, often leads to confusion and a lack of conceptual clarity (Klau, 2006). One of the criticisms levied against programs aimed at developing young leaders is that they can include almost anything, and their content is often a projection of the practitioners' own beliefs rather than based on research and theory (MacNeil, 2006). Furthermore, they are often not long enough for youth to be able to use their prior experience to further enhance their leadership development (Kress, 2006).

Similar to the study of adult leadership, European and Western research may not be appli-

cable for Zulu youth in South Africa. Zulu youth may have different conceptualizations of what it means to be a leader. There also may be different variables to consider for developing leaders. The purpose of the following section is to review the research surrounding the specific topic of youth leadership development in the South African context, including a brief summary of a small study that employed appreciative inquiry to explore the development of youth leadership in a small ($N = 8$) sample of Zulu male youth.

A Call to Study Youth Leadership Development in South Africa

Youth leadership development in South Africa is challenging to study given the diversity in the country and lack of published literature on the topic (Bhana et al., 2011). Yet, developing leadership skills in young people is strongly supported by researchers (Jobson, 2011; Longo & McMillan, 2015; Van Niekerk, 2014; Zuze & Juan, 2020). Studies are therefore needed to provide evidence-based interventions that support this development. It is important to distinguish between leadership programs aimed at adults versus youth because it is well documented that leadership looks different in these populations (MacNeil, 2006).

The extant peer-reviewed studies that address the topic of youth leadership development within the South African context provide important insights from participants with regards to aspects of programming they regarded as valuable in their leadership development. Consistent with the broader research literature (Redmond & Dolan, 2016), learning leadership skills coupled with opportunities to practice and apply these skills was viewed as valuable by participants. Of note, three of the programs (e.g., Draper, Lund, & Flisher, 2011; Van Niekerk, 2014; Waller, Wheaton, & Ashbury, 2016) had goals of strengthening communities and took a social justice perspective. Being a leader requires the ability to critically examine issues, recognize injustices, and frame practices in a manner that addresses those injustices. The emergent litera-

ture shows an orientation towards social justice, experiential learning, personal development, and interpersonal skills as being important components of leadership development within the South African context, and it is from this literature that a small study of male Zulu youth was completed using an appreciative inquiry approach.

Exploring Youth Leadership in Male Zulu Youth

This study emerged from research collaboration between the second author and the Seed of Hope (SOH) Community Development center in Bhekulwandle, KwaZulu-Natal, South Africa to better understand the development of youth leadership skills in a township community. The province of KwaZulu-Natal was formed by amalgamating together KwaZulu, which translates to “place of the Zulu,” and Natal Province, whose population was primarily White and English-speaking. Appreciative Inquiry (AI) was chosen as the methodological framework guiding this study due to the emphasis on strengths, practical change, and participation. These principles were consistent with the priorities of the SOH and the direction they were moving in as an organization. Simply stated, AI is a strengths-based approach to understanding what works and then building upon these strengths (Cooperrider, Whitney, & Stavros, 2008).

AI does not prescribe to specific methods. Instead, the process is developed and adapted to suit the particular context in which it is to be applied (Ludema & Fry, 2008). This flexibility was appealing to meet the needs of the research, the participants, and the organization. The process involves bringing people together to share stories that are positive and exemplary in nature and that can be built upon and applied to the future (Reed, 2007). The first step involves identifying or defining a topic of inquiry. Once a key topic has been chosen, the evaluation follows a process commonly referred to as the 4D method. This is a cyclical process that involves identifying existing strengths (i.e., Discovery), envisioning future possibilities (i.e., Dream),

identifying goals (i.e., Design), and developing an action plan (i.e., Destiny; Cooperrider et al., 2008).

Participants

Purposive sampling was used to target potential participants who were school age, proficient in English, and would be the most knowledgeable about youth leadership development in their community (Teddle & Yu, 2007). Each participant had participated in the Live Out Loud (LOL) program offered through the SOH. LOL was for youth between 16 and 19 years and program participants learned skills related to teamwork, leadership, effective communication, and goal setting. The first program ran in 2008 and was 6 months long. The SOH wanted to better understand the perspectives and experiences of these young leaders to learn (1) what factors contributed to their own leadership development and (2) what they believed to be important in developing future leaders. Eight males ranging in age from 18 to 20 years participated in this study. Seven of these males were in Grade 12 and one had just completed Grade 12 and was working. All participants spoke Zulu as their first language. Background information about the participants who joined for the group meetings was not obtained. At least two participants had been involved with the SOH since elementary school because a number of family members were also involved (e.g., mom, aunt, cousins).

Data Collection and Analyses

Data collection and analyses followed the principles of AI. AI does not adhere to a specific set of steps and procedures and the process was designed to suit the context and needs of the inquiry (Elliott, 1999; Ludema & Fry, 2008). AI is well suited for qualitative methods given its focus on storytelling and understanding phenomena within context (Reed, 2007). Furthermore, the use of qualitative methods is aligned with the oral culture of Indigenous South Africans (Malunga, 2006; Nussbaum, 2003). In the Zulu culture, metaphors and stories are often used to convey important lessons (Monteiro-Ferreira, 2005). An overview of

Table 2 Overview of the data collection/analyses process

| Research Activity | Corresponding Stage(s) |
|-------------------------|--------------------------|
| Individual Interviews | Discovery, Dream, Design |
| Group Meeting 1 | Discovery |
| Group Meeting 2 | Discovery, Dream |
| Group Meeting 3 | Dream, Design |
| Individual Member Check | Discovery, Dream, Design |
| Group Member Check | Discovery, Dream, Design |

Table 3 Interview questions

| |
|---|
| I would like to learn more about you and your involvement with the SOH and LOL. |
| What brought you to the SOH? |
| What does the SOH mean to you? |
| What do you value about the SOH? What’s special about it? |
| As you know, I wanted to talk to you because you are recognized as a leader. Can you tell me a time when you felt the most like a leader? |
| Who was involved? |
| What led to that experience? |
| What made the experience memorable/special to you? |
| What are three things that you wish for the future of SOH/LOL and the community? |

Note: SOH = Seed of Hope community; LOL = Live Out Loud program

the activities and their associated stages from the 4D cycle is presented in Table 2.

Four individual interviews were conducted. All members from the selected cohort were made aware about the study. Interviews were conducted with those who expressed interest by approaching the first author. Interviews are critical to the overall success of an AI (Whitney & Trosten-Bloom, 2010). Appreciative interviews follow a common format with each question carefully crafted to be unconditionally positive (i.e., Positivity Principle; Cooperrider et al., 2008). The final list of questions is presented in Table 3. With permission, each of the interviews was audio-recorded and then later transcribed.

Findings and Conclusions

Participants in this study identified a number of distinct, but related, factors that contributed to their own leadership development while living in a township community. These factors included the lessons and experiences gained through a leadership program both in relation to personal development and having opportunities to practice new skills. They also discussed the importance of having positive peer and adult relationships as well as factors in their community, home, and school life. Future goals regarding the development of future leaders were related to benefiting the community as a whole. They recommended specific steps that can be taken now, and in the future, to contribute to their goal of developing more leaders.

The findings of the study reported in this chapter offer some unique contributions to the PYD field about the development of leadership skills among Zulu youth living in townships. The first and arguably most important contribution was gaining the perspective of township youth as their voices are absent from the published research regarding youth leadership development. The second contribution was how choice, or realizing that participants have some aspect of control over their lives, was important in their own development as a leader. This overarching concept included youth having a sense of agency, control, and power in their lives and in their future. Lack of any real control or power has been identified as a barrier to leadership development (Jansen, Moosa, & Van Niekerk, 2014; Liebenberg & Roos, 2008; Majee, Jooste, Aziato, & Anakwe, 2019). Through the leadership program, participants realized that they could bring about change in their own lives and the lives of others. They had a sense of control and persistence that has been previously identified to support leadership activities and social change in young people (Waller et al., 2016). This power and new perspective led to the realization that they could choose to be leaders even if they did not hold a designated role or position. They had a role to play in building up the people in their community (i.e., *masakhane*; Malisa, 2011). This understanding is particularly relevant in a coun-

try in which there is a call for large-scale change and leadership from all of its citizens (Longo & McMillan, 2015; Mandela, 1996). Increasing civic responsibility and engagement are regarded as an effective way to go about promoting this type of change (Preece, 2013).

A third contribution is that the findings from this study support Bolden and Kirk's (2009) assertion that focusing on leadership is also about developing the communities in which leaders live. Developing the community and taking responsibility for benefiting all people in the community is consistent with principles of Ubuntu. Cooperation is a key aspect of Ubuntu, containing beliefs that imply progress is made only when there is benefit to all (Malunga, 2006). The "kingdom" takes precedence over personal interests (Malunga, 2006). Aspects of Ubuntu were particularly evident when discussing the future. Participants focused on what can be done to help others in their community through having choices available, ensuring access to education, and having the community as a place where they feel proud to live. The connection and involvement with the community influence young people's perceptions of the future of their community (Majee, Anakwe, & Jooste, 2020).

Fourth, the findings of the current study highlight the critical role of relationships in supporting the development of leadership amongst youth. These relationships included family members, teachers, program facilitators, leaders from community organizations, as well as their friends. These people played a role in getting them to the leadership program, providing support and stability, acting as mentors, and furthering their development after the program was complete. Social connectedness and a sense of belonging play important roles in coping (Ebersohn & Loots, 2017). This emphasis on interconnectedness implies that leaders do not exist without others (Muchiri, 2011). Participants valued having people that they could rely on but also realized the influence that they could have on others. Positive relationships can promote healing among youth who have experienced oppression (Govan, Fernandez, Lewis, & Kirshner, 2015).

Finally, participants in this study strongly supported the need for specific programming aimed at developing leaders. As previously highlighted, Black youth in townships often have less access to programming in general and especially to programming aimed at building capacity and leadership (Majee et al., 2019; Moses, 2008; Rohleder et al., 2009). Organized programs and having a meeting place for youth builds a sense of solidarity and gives them a platform to be heard (Govan et al., 2015). The leadership programs reported in the literature often do not seem to be accessible to township youth, although recent studies have included them (Forbes-Genade & van Niekerk, 2019). Specifically, participants in this study highlighted the need to focus on intra- and interpersonal development (Draper et al., 2011; Efthimiadis-Keith, 2007; Jansen et al., 2014; Van Niekerk, 2014) as well as opportunities for practical experiences (Draper et al., 2011). Participants clearly benefited from direct teaching about what leadership is, how to be a leader, and understanding the needs of their community. These insights contributed to their own personal development as well as their sense of social justice.

Implications for Research, Policy, and Practice

This chapter promotes relevant research, policy, and practice. Although including youth and community members in research and change efforts is strongly supported in the literature (Cooper, Swartz, & Mahali, 2019; Dawes, Bray, & Van Der Merwe, 2007; Kunene, 2013; Schenk & Michaelis, 2010; Skovdal & Campbell, 2010), there are several barriers to their participation. Language may serve as a barrier since there are 11 official languages in South Africa and services and research may not be accessible to everyone (Moses, 2008). Power differentials also exist with regards to gender and race, with both female and Black South Africans often disadvantaged and having fewer opportunities for participation (Forbes-Genade & van Niekerk, 2019; Seedat, Duncan, & Lazarus, 2001). Factors that contribute to the lack of young people's participation

include the perceptions of youth's incompetence, not wanting to burden them with such a responsibility, and a lack of adults willing or able to facilitate participation (Moses, 2008; Sloth-Nielsen, 2002). Yet, youth generally want to be involved in programming and decisions (Checkoway et al., 2003) and offer insights that differ from that of adults (L'Etang & Theron, 2012; Libby et al., 2006).

Moving forward, policy needs to be directed at better understanding how to build on the strengths, knowledge, and resources of youth and communities. Most of the research and programming to date has focused on the negative consequences and circumstances facing today's youth, which contributes to government and community responses addressing these types of needs by providing access to resources (e.g., food, grants) and medical care (Richter & Rama, 2006; Richter & Sherr, 2012). Although necessary, these types of efforts do not meet the developmental and long-term needs of youth, such as affection, security, culture, and social connectedness (Gulaid, 2004; Lundgren & Scheckle, 2019; Skovdal & Campbell, 2010). What is needed is a clear understanding of the factors that contribute to positive outcomes for young people and to build on that capacity (Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Pillay, 2003; Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). There is a growing body of research that recognizes the resilience (Theron, 2007, 2015, 2020; Theron, Theron, & Malindi, 2013), social competencies, positive identities (Dimitrova et al., 2017; Eloff, Ebersohn, & Viljoen, 2007), and high academic achievement (Dass-Brailsford, 2005) amongst Black youth. Government and researchers should try to tap into the strengths and resourcefulness of the youth.

Finally, while there is certainly no "best practice" in facilitating positive youth development via leadership development, it is clear that there is a need for more research from Africans for Africans (Bolden & Kirk, 2009). Black South Africans have a rich culture and understand their own circumstances and strengths better than any outside researcher ever could. In particular, the application of a strengths-based, participatory

approach allows youth to find their voice by using their voice. Any future efforts that attempt to explore the development of leadership without seeking and finding the voices of youth will continue to perpetuate the Western, individualized perspectives that lack the richness, perceptiveness, and creativity that can only come from the youth themselves. Said more directly, it may be best that we step aside and let youth build their own capacity from their deep wells of naïve understandings and boundless energies.

In conclusion, the development and implementation of interventions to support Black Zulu youth are critical to their current well-being and it also has implications for future generations (Dawes et al., 2007; Nelson Mandela Children's Fund, 2005). Young people make up a significant proportion of South Africa's population. Half (i.e., 50%) of the country's citizens are Black and under the age of 29 with 16% of Black South Africans between the ages of 15 and 24 (Statistics South Africa, 2018). This presents a powerful resource for the country as long as youth are supported to become active members of society (National Youth Development Agency, 2015). As others have done (e.g., Manrique-Millones et al.; Uka et al., *this volume*; Skovdal & Daniel, 2012), the present chapter highlights the need to advocate for an approach to research and service delivery that honours the wisdom and knowledge of young people, acknowledging that their opportunities to exercise agency and achieve good health and well-being are limited or enabled by their social context.

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Social Emotional Learning Program From a Positive Youth Development Perspective in Slovenia

Ana Kozina

Abstract

This chapter combines Positive Youth Development (PYD) and Social and Emotional Learning (SEL) models as joint prevention and intervention strategies to address positive youth development. The chapter is based on two main assumptions (i) on the significant theoretical overlap between PYD and SEL models and (ii) that SEL interventions can be used also as PYD interventions. The first assumption is addressed by a literature overview and arguments for the theoretical overlap between PYD and SEL models, and the second assumption by a two-step case study. In the first step, the effectiveness of a specific SEL program, My FRIENDS, in Slovenia is presented. Internalizing and externalizing difficulties are used as indicator of the effectiveness of the program comparing an intervention ($n = 44$) and an untreated control group of students ($n = 36$). In the second step, content analyses investigated whether the activities and aims of My FRIENDS program could facilitate the 5Cs of PYD. The chapter brings novel bottom-up approach by applying already

existing programs from the local context to planning and development of PYD interventions in Slovenia.

Keywords

PYD · SEL · Intervention · My FRIENDS · Slovenia

This chapter combines Positive Youth Development (PYD) and Social and Emotional Learning (SEL) models as joint prevention and intervention strategies to address positive youth development. In so doing, the chapter examines the content of a specific SEL program used in Slovenia from a PYD perspective. The basic assumptions are (i) that there is a significant theoretical overlap between PYD and SEL models and (ii) that SEL interventions can be used as PYD interventions. The chapter addresses these assumptions by first presenting arguments for the theoretical overlap between PYD and SEL models. Second, a case study that describes an evaluation of a specific SEL program, My FRIENDS (Barrett, 2005), in Slovenia is presented. The SEL program effects on internalizing and externalizing difficulties in addition to My FRIENDS content analyses linking SEL activities with PYD are further explored. Internalizing and externalizing difficulties are included as indicator of the

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effectiveness of the program to illustrate if SEL interventions, or its specific version, such as My FRIENDS, can be incorporated in future PYD interventions in Slovenia and other contexts. Additionally, the content analyses aimed at identifying elements of the SEL program that can contribute to PYD and suggest guidelines for further PYD intervention development in Slovenia.

This chapter is novel in its bottom-up approach (i.e., building on knowledge from the micro context and individual cases) where already existing SEL programs such as My FRIENDS are used for development of PYD interventions. To the best of our knowledge, this is the first time PYD and SEL models have been conceptually aligned to share a common goal of addressing youth development and a specific intervention in an ongoing case study. The chapter informs PYD interventions globally and in Slovenia, where these types of interventions are not yet developed at national level.

Theoretical Overlap Between PYD and SEL Models

This section presents theoretical conceptualizations on youth development with a special emphasis on PYD and SEL models. The goal is to investigate an overlap among both models and establish whether it is sufficient to justify the use of SEL strategies as part of interventions promoting PYD. SEL (Humphrey, Lendrum, Wigelsworth, & Greenberg, 2020) and PYD (Burkhard, Robinson, Murray, & Lerner, 2019; Geldhof et al., 2015) are two of the most prominent theoretical models with similar focus on positive development across the life span. These models share a strength-based perspective promoting healthy development in youth.

The Positive Youth Development (PYD) model is embedded in the relational development systems model that emphasizes the potential of the individual to contribute to the development of self and the society. Core elements of the PYD are the 5Cs of *competence* (internal sense of positive self-worth and self-efficacy), *confidence* (positive view of one's actions in various

domains), *connection* (positive reciprocal bonds with people and institutions), *character* (standards for correct behavior with respect to societal and cultural norms) and *caring* (sense of sympathy and empathy for others) (Geldhof et al., 2015; for expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). The 5Cs are prerequisites for the sixth C of *contribution* to the self, family, community and the society, traditionally associated with a reduction of risky behaviors, such as internalizing and externalizing difficulties (Johnson, Kilpatrick, Bolland, & Bolland, 2020; Manrique-Millones et al., [this volume](#)).

The Social and Emotional Learning (SEL) model assumes that individuals learn and develop their abilities to understand, manage and express their social and emotional aspects of life (Durlak, 2015; Humphrey et al., 2020). This process involves the development of social and emotional skills, such as self-awareness, self-management, social-awareness, relationship skills and responsible decision making. *Self-awareness* regards the familiarity with one's own emotions and feelings and a realistic assessment of one's own competences, skills and self-concept. *Self-management* regards the regulation of one's own emotions in ways that enable the individual forgo reward in pursuit of personal goals and persevere in the face of failure, stalemate or regression. *Social-awareness* refers to the ability to perceive other people's emotions and feelings and to view things from their perspective with a positive attitude to others and active participation in different groups. *Relationship skills* regard an efficient emotion regulation, establishing and maintaining positive relationships based on cooperation, opposition to unsuitable social pressure, use of negotiation to resolve conflicts and enlistment of help whenever necessary. *Responsible decision making* refers to an accurate risk assessment, taking decisions based on consideration of all factors influencing that decision and the most probable consequences of alternative actions or decisions, respect for others and a personal responsibility for one's decisions (Durlak, 2015).

The SEL programs have shown impact on social and emotional skills, participants' view of themselves, others and school, and have been associated with less internalizing and externalizing difficulties in school and outside of school, cooperative behaviors and academic achievement (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Sklad, Diekstra, Ritter, Ben, & Gravestijn, 2012).

There is a considerable overlap between PYD and SEL models in terms of their positive focus on youth development. Yet, there exist differences in terms of conceptualization, population of interest, outcomes and intervention designs. As to conceptual differences, Tolan, Ross, Arkin, Godine, and Clark (2016) in a comparison of theoretical models with a focus on positive development noted that the models differ along two dimensions. The first dimension describes the relative emphasis on *innate disposition* or *skills and experience*. SEL and PYD models both focus on skills that can be trained. The second dimension is the definition of the outcomes as *state of adequacy* (focusing on the absence of problems or being below average level of functioning) vs. *continuum toward thriving* (a dynamic process of adaptation, influenced by numerous individual and social factors, which emerges and changes over the life course). Here, SEL conceives positive outcomes mainly in terms of absence of problematic or risky behaviors (e.g., internalizing and externalizing difficulties), whereas the PYD sees positive outcomes associated with thriving (Tolan et al., 2016). Thus, SEL and PYD have a common focus on skills development and experiences (i.e., the first dimension) while differing on the second dimension – *state of adequacy* vs. *continuum toward thriving*.

Further conceptual differences regard the core base of PYD embedded in a developmental framework that emphasizes an interaction between the individual and their context. SEL is derived from social information-processing theory (i.e., understanding that interpretation of situations influences behaviors) and social cognitive theory (i.e., the importance of individual and context interactions as well as perceived levels of control over environment). As to target popula-

tions, PYD focuses solely on young people in general, whereas SEL is also applicable to pre-school and primary school children (Tolan et al., 2016).

As to intervention designs, the majority of SEL interventions take place in schools, while PYD interventions usually occur in community settings, after-school programs, mentoring programs and schools (Curran & Wexler, 2017; Tolan et al., 2016; Waid & Uhrich, 2020). Additional distinguishing feature of SEL interventions is the preference for curricula and a structured set of activities aiming at teaching participants a set of social and emotional skills. The focus is on learnable skills with strong emphasis on emotional regulation that are usually highly structured and prescribed, not taking individual characteristics into account. That means that the individual differences are not prominent feature in SEL interventions (Tolan et al., 2016). However, the issue of individual differences is a prominent feature in PYD interventions, which build on the individual capacities and the existing relations between the individual and their context. Main similarities and differences between PYD and SEL models are presented in Table 1.

In summary, there is a considerable overlap between PYD and SEL models in terms of the positive focus and the learning process (skills that can be learned). On the other hand, there are relevant differences in how both models consider individual differences, the context and their focus on outcomes. SEL focuses on reduction of inter-

Table 1 Similarities and differences between Social and Emotional Learning (SEL) and Positive Youth Development (PYD)

| | SEL | PYD |
|------------|---|--|
| Outcomes | Absence of negative outcomes (adequacy) | Presence of positive outcomes (thriving) |
| Population | Childhood, youth | Youth |
| Setting | School (mostly) | Community (mostly) |
| Tools | Skills (and experiences) | Skills (and experiences) |

Note. Author's elaboration based on Tolan et al. (2016); *SEL* = Social and Emotional Learning; *PYD* = Positive Youth Development

nalizing and externalizing difficulties, while PYD on thriving. A combination of both models could focus on both positive (thriving) and negative (internalizing and externalizing difficulties) outcomes.

PYD and SEL Interventions

This section presents a comparison between PYD and SEL interventions to address the second assumption in that SEL interventions can be used in PYD interventions. PYD interventions aim at enhancing strengths, establishing engaging and supportive contexts and providing opportunities for bidirectional, constructive youth-context interactions (Taylor, Oberle, Durlak, & Weissberg, 2017). These interventions are usually non-structured and non-specific and understood as providing resources that address youth strengths and needs (Bonell et al., 2016; Tolan et al., 2016). PYD interventions promote agency (active involvement) of youth and self-engagement in social groups without focusing on specific activity or lesson (Tolan et al., 2016). Key elements of these interventions are the promotion of bonding and competence, self-determination, resilience, spirituality, self-efficacy, clear and positive identity, belief in the future and prosocial norms, recognition of positive behaviors and opportunities for prosocial involvement (Catalano et al., 2019; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004).

There are several PYD programs mainly in the United States (Worker, Iaccopucci, Bird, & Horowitz, 2019). PYD interventions are usually a type of mentoring programs that connect youth with mentors (e.g., YMCAs/YWCAs, 4-H organizations). The *Changing Lives* program (CLP) is a community-supported PYD intervention in the USA that focuses on development of a positive identity (i.e., coherent, and dynamic organization of drives, abilities, beliefs and personal history). The intervention is based on a participatory transformative approach and the concept of mastery experiences (a sense of autonomy and self-efficacy in setting personal goals and achieving them) (Eichas, Montgomery, Meca, Garcia, &

Garcia, [this volume](#)). Adolescents are encouraged to identify problems they want to solve and engage in transformative activities in order to gain greater control over their lives. The program was developed for alternative high schools in Miami, Florida and has been implemented as a PYD program to create contexts to empower adolescents at risk. The intervention showed promising effects on participants' feelings of personal expressiveness, identity development and a significant gender moderated direct effect on internalizing difficulties (Eichas et al., [this volume](#)).

A PYD intervention developed in Europe is the *Dream Teens*, a national intervention in Portugal designed to promote PYD and empower young people by participatory action research projects and inform public policy. The *Dream Teens* uses social media and face-to-face meetings to support PYD outcomes, such as health and well-being among youth in Portugal (Branquinho & de Matos, 2019; Frasilho et al., 2018). Similarly, the *Dream School* intervention in Norway engages youth as both users and facilitators of health promotion and education activities in schools. The *Dream School* is intended to facilitate and nurture the development of the 5Cs through peer support and participatory learning activities by combining a health promotion perspective, participatory learning activities, peer-support initiatives and a focus on solutions, motivation and opportunities (Holsen, Larsen, Tjomsland, & Servan, 2015; Larsen & Holsen, [this volume](#)).

As to SEL interventions, these are designed as universal, school-based programs that take a comprehensive, coordinated approach combining promotion of youth development skills to reduce difficulties by fostering protective mechanisms and positive development (Durlak et al., 2011; Schonert-Reichl et al., 2015). SEL interventions promote social and emotional skills and reduce internalizing and externalizing difficulties (Durlak et al., 2011; Sklad et al., 2012; Zych, Farrington, & Ttoli, 2019). The focus is on acquiring core skills in recognition and management of emotions, setting and achieving positive goals, appreciating the perspectives of others, establishing and maintaining positive relation-

ships, making decisions responsibly and handling interpersonal situations constructively (Durlak, 2015). Supporting the development of these skills increases well-being of participants and their contribution to the society (Cefai, Bartolo, Cavioni, & Downes, 2018; Ferrer-Wreder et al., *this volume*).

In addition to targeting multiple skills, SEL interventions are long-lasting (multi-year), combine school and family-based activities and actions in the wider community. These interventions include environmental support (from school and parents) to ensure that children and youth have opportunities to practice positive skills and receive consistent reinforcement. SEL interventions have been shown to enhance positive outcomes and prevent difficulties, to apply to entire age cohorts within a school and be easily and effectively administered by school staff (Durlak, 2015).

There are several examples of evaluated SEL interventions in the USA (for review see Durlak, 2015) and across Europe (Hughes & Cline, 2015; for review see Marušić et al., 2017; Mihic, Novak, Basic, & Nix, 2016). One of the most frequently used interventions in the USA is *Promoting Alternative Thinking Strategies* (PATHS) curriculum (Kusché, 2020). It is an evidence-based, universal prevention program of social and emotional learning delivered by classroom teachers (Ferrer-Wreder et al., *this volume*). In Europe, there are small scale SEL programs such as My FRIENDS used as a case study in the present chapter.

In summary, main difference between PYD and SEL interventions lies in the structure and the level of individualization that is, to what extent the individual differences are taken into account. As described above, PYD interventions are highly individualized, based on strengths and contexts of individuals, and often involve non-specific activities without pre-prescribed structure and recognized heterogeneity in the outcomes and gains for participants. The positive outcomes can be individually evaluated and highly contextualized (Tolan et al., 2016). The focus is on the active involvement and agency of young people who are encouraged to develop their own resources (Tolan, 2016). SEL interven-

tions consist of highly structured activities with a more universal focus (Durlak, 2015). Both interventions are similar in their aims but differ in methods. In following common aims (promoting positive development and absence of difficulties) PYD and SEL interventions could be combined to structure activities by taking in consideration context and individual differences.

PYD and SEL Interventions in Slovenia

Slovenia is a small (2.1 million) and newly formed country (30 years) located in Southern Central Europe bordering with Italy, Croatia, Austria and Hungary. Slovenia gained independence in 1991 from Yugoslavia and in 2007 became the first former communist country to join the European Union and subsequently the OECD (Organization for Economic Co-operation and Development), a global association of middle- and high-income countries. The current population of young people aged 15-29 years has decreased to 17% out of the total population compared to the period before the independence (24%) (Republic of Slovenia Statistical Office, 2020).

In Slovenia, PYD is an emerging field of research (Kozina, Wiium, Gonzales, & Dimitrova, 2019) with intervention still in the planning phase. Although PYD-based interventions have not been yet developed in Slovenia, there are initiatives, projects and small scale SEL-based programs that have similar theoretical framework as PYD. Small scale means that SEL interventions are not national based but more or less embedded in research projects (such as My FRIENDS program) carried out on a small scale, since non-governmental organizations or small associations are the main providers of those.

As to SEL-based programs focusing on social and emotional competences, there has been a significant progress with the program HAND in HAND – Social and Emotional Skills for Tolerant and Non-Discriminative Societies (Kozina, 2020). The HAND in HAND program's overall goal is to help build inclusive contexts (i.e., class-

rooms, schools) by improving Social, Emotional and Intercultural (SEI) competencies of students and school staff. The program aims are addressed through a wide range of activities with students, teachers and other school staff. These activities include workshops, group work, collaborative learning, role-play, social games, guided exercises for students, and relaxation techniques, which are implemented in schools in a five 90 min modules. HAND in HAND started with in-depth and systematic state-of-the-art analyses in 5 countries (including Slovenia) in relation to SEI competencies measure and program development, resulting in three comprehensive catalogues (Marušić et al., 2017; Müller et al., 2020; Nielsen et al., 2019). One of the conclusions was that in the Slovenian education system, there are no major international SEI programs implemented at a national level (Štremfel, 2020).

As PYD and SEL models are still emerging fields in Slovenia and have not yet been used as a basis for intervention development, the timing is right for a joint intervention that would include the combined benefits of both models. To look at this possibility more deeply and test the second assumption of this chapter (i.e., SEL interventions can be used as PYD interventions), a case study of a specific SEL program from Slovenia is presented. This is done in two steps to address two main questions: (1) does a SEL-based program My FRIENDS have an effect on internalizing and externalizing difficulties? (2) If so, are there activities included in My FRIENDS that can facilitate the 5Cs of PYD?

A Case Study: My FRIENDS SEL Program in Slovenia

My FRIENDS (Barrett, 2005) is a SEL-based program that has already been evaluated in Slovenia (Kozina, 2018a, 2018b). In this section, the evaluation and activity analyses are used to test the second assumption that SEL interventions can be used as PYD interventions. The aim is to find out if SEL could contribute to PYD interventions in the Slovenian context. As previ-

ously mentioned, SEL focuses on prevention of difficulties (internalizing and externalizing) and PYD promotes strengths. However, there is a prevention aspect in the PYD as well. Based on the relational developmental model, an increase in the 5Cs of PYD can lead to a decrease in risky and problem behaviors (e.g., internalizing and externalizing difficulties).

Yet, the available evidence mainly in the USA has shown a more complex pattern of relations between the 5Cs and problem behaviors. For instance, Phelps et al. (2007) documented that not all youth manifested a negative relation of PYD and problem behaviors as many remained stable over time or showed increases in PYD and risky behaviors at the same time. Similarly, it has been documented that indicators of PYD can be maladaptive and positively related to problem behaviors (Geldhof et al., 2019; Lewin-Bizan et al., 2010). Accordingly, the case study presented here investigates these relations when looking into a decrease in internalizing and externalizing difficulties due to a SEL-based intervention (My FRIENDS) and increase in the 5Cs of PYD. In so doing, the effects of the SEL intervention are examined first followed by an analysis on the relation between My FRIENDS and the 5Cs.

My FRIENDS Evaluation

The evaluation used a quasi-experimental design with students who participated in My FRIENDS program (Barrett, 2005) and a control group. A decrease in internalizing (e.g., anxiety) and externalizing (e.g., aggression) difficulties due to an increase in participants' social and emotional competencies was expected (Kozina, 2018a, 2018b). FRIENDS is a SEL program based on cognitive behavioral techniques (builds on the relationship of thoughts, emotions and behaviors) primarily for prevention or intervention on internalizing difficulties with possibility of influencing also externalizing difficulties. There are different versions for different developmental stages. The youth version, My FRIENDS

(Barrett, 2005), has been evaluated in Slovenia ($N = 80$ thirteen-year-olds; 37 males and 43 females) and used as a case study in this chapter. My FRIENDS program consisted of 10 sessions (45 min lessons delivered weekly for 10 weeks), 2 booster sessions and 2 parental meetings (Barrett, 2005).

The student sessions covered (1) introductions (personal goals, strengths); (2) emotion recognition and empathy (understanding own and others' emotions, empathy development, perspective taking); (3) self-esteem (positive emotions, friendships, communication skills); (4) relaxation (mindfulness, focused attention, body relaxation); (5) recognition of positive cognitive style (connections of emotions, thought and behaviors); (6) adopting a positive cognitive style (changing thoughts, positive self-talk); (7) coping strategies (coping step plan); (8) problems (problem-solving strategies including identification of alternative solutions); (9) friendships (assertiveness training, friendship skills, support groups); (10) prosocial orientation (practicing new skills by helping others).

The parental sessions included presentation of activities that parents can do at home to support school-based competence activities and discussion about protective and risk factors of emotional difficulties (e.g., anxiety), building family resilience (health and well-being, prevention activities, empathy with all living beings, developmental readiness, parenting skills, family happiness, mindfulness and awareness). The program was supported by a handbook, which the group leader used to set the objectives and activities for individual sessions as well as special booklets for students (for notes, program exercises and homework) (Barrett, 2005). The program can be delivered in a selective (groups of 6–10 at-risk participants) or in a universal format (for all individuals in a particular cohort). In Slovenia, My FRIENDS was used in a universal format, where all students in the class participated. In order to test the effectiveness of MY FRIENDS, an intervention group of students (participating in My FRIENDS) and a control group (students who

did not participate in the program) were compared in terms of self-reported internalizing (anxiety) and externalizing (aggression) difficulties.

Internalizing difficulties were measured with The Anxiety Scale for Pupils and Students (Kozina, 2012; Kozina, 2014a) consisting of 14 items designed to measure general anxiety and three components of anxiety such as emotions, worries and decision-making. Answers were given on a 5-point Likert scale from 1 (*never*) to 5 (*always*). All anxiety components showed adequate internal consistency with Cronbach's coefficients from $\alpha = .70$ to $\alpha = .83$.

Externalizing difficulties were measured with The Aggression Scale for Pupils and Students (Kozina, 2013; Kozina, 2014b) consisting of 18 items measuring general aggression and specific forms of physical, verbal, inner aggression and aggression towards authority. Responses were given on a 5-point Likert scale from 1 (*totally agree*) to 5 (*totally disagree*). All aggression components showed adequate internal consistency with Cronbach's coefficients from $\alpha = .69$ to $\alpha = .86$.

Measurements were made at pre-post-intervention and at a six-month follow-up. Prior to the intervention, anxiety and aggression were measured in both intervention and control groups. The intervention group was involved in My FRIENDS program during 10 weekly sessions followed by booster sessions (two additional sessions aimed at consolidating the learning material) 1 and 2 months after completing the program. Baseline levels were similar in the control and intervention groups for internalizing (anxiety), $t(74) = 1.21$, $p = .68$, and externalizing (aggression) difficulties, $t(70) = -.422$, $p = .36$. The evaluation showed that the intervention group reported significantly lower internalizing difficulties at the post-intervention and at 6-month follow-up assessments (Kozina, 2018a). Externalizing difficulties showed stable levels throughout measurement points for the intervention group (Figs. 1 and 2) and increasing levels for the control group (Kozina, 2018b).

Fig. 1 Internalizing difficulties for control and intervention groups at pre-intervention, post-intervention and six-months follow-up measurements

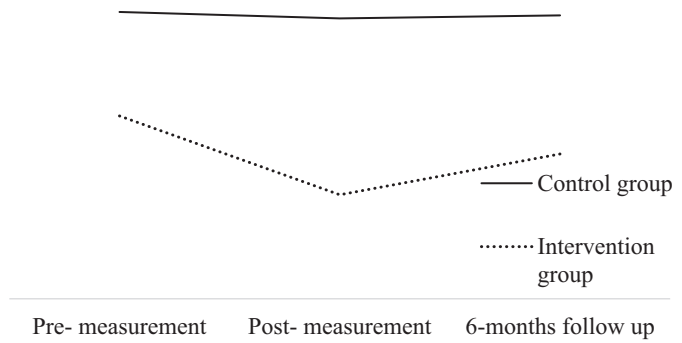
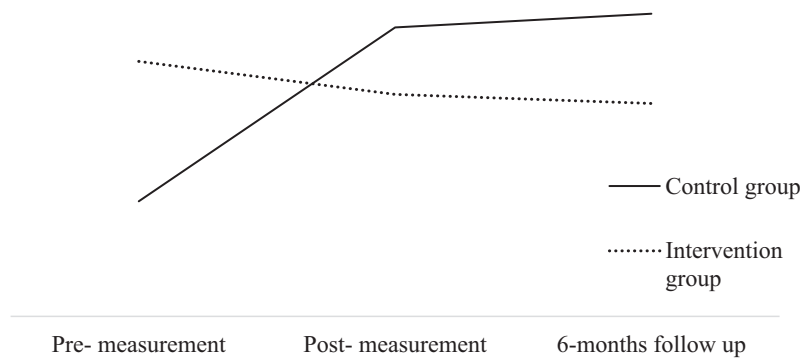


Fig. 2 Externalizing difficulties for control and intervention groups at pre-intervention, post-intervention and six-months follow-up measurements



My FRIENDS Activity Analyses

In the first step of the case study, the conclusion was that My FRIENDS as SEL intervention had an effect on internalizing and to some extent on externalizing difficulties. In the second step, the activities of My FRIENDS program and how they relate to the 5Cs were examined. The content of all 10 sessions in My FRIENDS program was reviewed to assess similarities with the 5Cs. The 5Cs of PYD refer to competence, caring, confidence, connection and character. Social and emotional competencies tend to overlap with competence (the social competence part) and caring (empathy, emotional regulation). Due to this overlap, it was assumed to find activities in My FRIENDS that would relate to competence and caring and to some extent to connection, character and confidence. For instance, social and emotional competencies are positively associated to

positive relationships with others. As for confidence, the relation is straight forward as well-the more skills youth are managing, more confident in their emotions and relationships they are. Character is more related to social competencies in the alignment of behavior with societal norms (Durlak, 2015). Table 2 shows the list of the 5Cs related activities from My FRIENDS program based on the activity analyses.

As can be seen from Table 2, skills and aims of My FRIENDS with examples of activities emerged for all 5Cs. In addition, the content analyses evidenced the possible link to the 5Cs. In fact, the content analyses showed that the activities used in the SEL intervention can also reflect the 5Cs. Even though the impact of these activities on the 5Cs is not yet empirically supported, the content analyses present a promising first step in combining PYD and SEL models.

Table 2 The content of My FRIENDS program targeting the 5Cs of PYD

| The 5Cs of PYD | My FRIENDS content |
|--|---|
| Connection (healthy connections to adults and peers) | Communication skills (mindful conversation); Support group (identifying one own support group, significant others who can support and help in variety of situations, for different areas of life; how to be a good support for your support group). Friendships skills (discussion on how to be a good friend, the difference between online and real-life friendship). |
| Caring (sense of sympathy and empathy for others) | Importance of empathy and perspective-taking (use of role play, pre-prepared scenarios, one's own scenarios); Prosocial behavior (homework, making a positive contribution to the society, helping somebody). Sharing positive thoughts (positive experiences); |
| Confidence (positive view of one's actions in various domains) | Assertiveness exercises (role plays in assertive, aggressive and passive communication style); Inner strengths (identifying one's own strengths and developing skills for dealing with problems and difficulties). |
| Character (standards for correct behavior with respect to societal and cultural norms) | Environmental issues (discussion of positive contributions to the environment); Decision-making (scenarios for making decisions on the basis of possible consequences for all involved); Prosocial behavior (discussions about ways of contributing to society and plans for doing so). |
| Competence (internal sense of positive self-worth and self-efficacy) | Emotional regulation Establishing and maintaining social contacts. |

Conclusions

The present chapter examined the content of a specific SEL program in Slovenia from a PYD perspective based on two assumptions that there is a theoretical overlap between SEL and PYD models and that SEL interventions can be used as

PYD interventions. The first assumption was addressed by a literature review identifying similarities and differences of both models in relation to intervention. The first assumption was met by showing the existence of an overlap among models having the same focus on positive and learning capacities but different interpretation of interventions goals. More specifically, SEL focuses on absence of risk and preventing difficulties, whereas PYD on thriving. Another difference between PYD and SEL interventions is that PYD focuses on the path towards thriving and improving participant-environment fit, whereas SEL on prevention (Tolan et al., 2016).

The second assumption explored whether SEL interventions can also be used as PYD interventions. A case study from Slovenia, an evaluation of a SEL based program My FRIENDS (Barrett, 2005) was used. In the first step of the evaluation, the focus was on prevention of internalizing and externalizing difficulties which had a theoretical foundation in both models. The case study revealed a decrease in internalizing difficulties in the intervention group compared to the control group and an increase in externalizing difficulties in the control group compared to the intervention group.

The findings of the first step in the case study are similar to earlier work using the SEL model (Ahlen, Lenhard, & Ghaderi, 2015; Briesch, Hagermoser Sanetti, & Briesch, 2010; Rodgers & Dunsmuir, 2013). The contents of the program related to the decrease in anxiety are coping strategies, relaxation and adapting positive coping (Kozina, 2018a). These findings are aligned with a set of meta-analytic studies on school-based SEL programs showing that these programs impact internalizing and externalizing difficulties (Durlak et al., 2011; Rimm-Kaufman et al., 2014; Schonfeld et al., 2015; Sklad et al., 2012). The components of My FRIENDS most probably related to aggression prevention or at least acting as a buffer effect, are problem-solving, communication techniques, perspective-taking and empathy (Kozina, 2018b).

Further step focused on the activities analyses in the SEL program, My FRIENDS that can promote the 5Cs and be used as PYD intervention.

Several activities in the program that have the potential to contribute to the 5Cs emerged. For instance, *connection* was supported by activities related to support groups, communication skills and friendship skills. *Caring* was supported by activities related to empathy, perspective taking and prosocial behaviors. *Confidence* was supported by assertiveness exercises, *character* by activities related to decision-making and *competence* by emotional regulation and support for productive social contacts. Therefore, the SEL based intervention can be framed within a PYD as there were activities in My FRIENDS reflecting the 5Cs and affecting the decrease in internalizing and externalizing difficulties.

Prospects

The assumptions presented in this chapter are preliminary in nature and based on a case study that involved a relatively small and non-randomized sample. The findings from the case study can be considered from a PYD and SEL perspective, but it is important to acknowledge how these models differ in their approach to evaluate intervention outcomes. It has been proposed that evaluations of PYD interventions should take into account individual variations in adolescents' needs, capabilities and resources, rather than calculate population-level effects (Lerner, Lerner, Urban, & Zaff, 2016; Roth & Brooks-Gunn, 2016). According to the PYD model, individual variations are more informative of adolescent's development because development itself is not constant. Thus, development cannot be properly assessed with standard statistical approach on averages across samples, but with monitoring individual change and focusing on one individual adolescent (Lerner et al., 2016). Relatedly, further empirical support is needed to investigate whether the SEL content related to PYD actually promotes the 5Cs. In the current chapter, only difficulties were measured and the case study did not provide information about positive outcomes (Tolan et al., 2016). Prospective work would be useful to measure more explicitly positive outcomes in relation to the 5Cs (van de Vijver, 2017).

Implications for Research, Policy and Practice

This chapter furthers relevant implications for research, policy and practice. The case study provides new research evidence not only for Slovenia where evaluation of interventions is scarce, but also internationally with added empirical support to SEL programs evaluation. Further, the chapter promotes PYD research in Slovenia by suggesting the common foundations of PYD and SEL models using a case study and content analyses. Until now, these models have not yet been combined in an intervention program. Finally, the content analyses can be used as a base line for joint research- intervention design in Slovenia as so far, most PYD intervention evaluations have been carried out in the USA (Catalano et al., 2004; Worker et al., 2019).

As to policy, this chapter encourages taking recommendations from both PYD and SEL models. A recent review on social, emotional and intercultural learning policies in Slovenia has found that despite a general recognition of social, emotional and intercultural competencies, there is a lack of medium and short term planning policy (Štremfel, 2020). PYD and SEL interventions have to be included in the planning and implementation of such policy. Further, the review presented in this chapter indicated the lack of policy driven research. Such research investigates systematically the nature, causes and effects of specific public policy (e.g., how implemented measures at school, institution, classroom levels have contributed to public policy goals reflected in the national/regional policy). The findings of this chapter would feed into short and medium term policy planning through SEL evaluation.

As to practice, a useful suggestion for practitioners is to use the interventions already present in their school. The findings of this chapter suggest that the school setting has a lot of advantages, such as universal nature, possibility of implementing a whole school approach, but has also a lot of time constraints (e.g., limited time for implementing prevention and intervention programs). With the combination of SEL and PYD intervention strategies, practitioners can use something that is already present in the context as

in case of Slovenia, My FRIENDS program that has shown promising effects and would be therefore time efficient. Based on the content analyses, it can be expected that one intervention can target more than one goal, build social and emotional skills and at the same time promote PYD.

In conclusion, this chapter provides a starting point for joint SEL and PYD intervention using a bottom-up approach in Slovenia. Aligned with the PYD model, the chapter pays careful attention to the context and builds recommendations based on interventions already present and evaluated, such as My FRIENDS in the Slovenian context. Based on the findings, although preliminary in nature, a joint intervention program that would build on the existing SEL program and add a PYD dimension is highly recommended.

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The Trajectories of Positive Youth Development in Lithuania: Evidence from Community and Intervention Settings

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Abstract

This chapter explores the different pathways of the 5Cs model of Positive Youth Development (PYD) represented by competence, confidence, character, connection, and caring among adolescents in Lithuania. We present a longitudinal four-wave study with a community sample ($N = 458$, M age = 15.14, $SD = .48$ at T1, 52% females) and a quasi-experimental four-time point intervention study using the *Try Volunteering* program ($N = 605$, M age = 15.26, $SD = .67$ at pre-test, 43% females) in a school setting. In the first study with a community sample, high, medium, and low developmental trajectories of PYD were distinguished and the change of the 5Cs over time was explored. In the second study, investigation of the 5Cs focused intervention revealed that the intervention program *Try Volunteering* shifted the developmental

trajectories of all 5Cs towards positive development. The findings have relevant implications for PYD interventions to promote thriving in adolescence and practical evidence-based tools for fostering positive youth development in Lithuania.

Keywords

Positive youth development · 5Cs · Intervention · Trajectories · Adolescents · Lithuania · Try volunteering

This chapter applies the 5Cs model of Positive Youth Development (PYD) focusing on the psychological, behavioral, and social characteristics of person-context relations as the appropriate guideline for investigating PYD and developing, implementing, and evaluating interventions aimed at promoting PYD (Lerner et al., 2019). According to the model, competence refers to socio-emotional, cognitive, academic and vocational competencies; confidence to the internal sense of self-esteem and self-efficacy; character to the respect for social and cultural norms, connection to the positive relationships with people and institutions and caring to the internal sense of empathy and sympathy for others (for an expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova, Fernandes,

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et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)).

The 5Cs model has been empirically tested mainly in the United States and supported by growing work in Europe, Latin America, Asia, Africa and the Caribbean (Chen, Li, & Chen, 2017; Chen, Wiium, & Dimitrova, 2018; Dimitrova, Buzea, et al., [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Dominguez, Wiium, Jackman, & Ferrer-Wreder, [this volume](#); Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#); Holsen, Geldhof, Larsen, & Aardal, 2017; Hull, Ferguson, Fagan, & Brown, [this volume](#); Kozina, Wiium, Gonzalez, & Dimitrova, 2019; Manrique-Millones et al., [this volume](#); Tirrell et al., 2019; Wiium & Dimitrova, 2019; Wiium, Ferrer-Wreder, Chen, & Dimitrova, 2019). This chapter adds to this relevant scholarship and knowledge two critical insights. First, we discuss whether and how the 5Cs model could be used to study developmental trajectories of PYD in Northern-European Lithuanian context. Second, we present the long-term effects of the developmental intervention aimed at fostering youth thriving by directly addressing the 5Cs of PYD.

Developmental Pathways of Positive Youth Development

Based on the assumptions of relational developmental systems metatheory ([RDS]; Lerner et al., 2019; Overton, 2015) individuals differ in their developmental paths. Yet, empirical findings on such paths mainly U.S. based in relation to PYD are inconsistent. While some authors found a mild decrease of PYD in early adolescence (Phelps et al., 2009), others report stability (Schmid, Phelps, & Lerner, 2011) or even nonlinear development (Bowers et al., 2010). It has been suggested that PYD is relatively stable and does not change from early to late adolescence (Lerner & Lerner, 2013). Thus, it is hard to determine whether stability or change may be observed across adolescent years.

Despite relevant strengths, these studies present some limitations. First, all known attempts to

investigate PYD developmental pathways were carried out with data from the 4-H PYD study developed at Tufts University, USA with adolescents from middle working-class families (Lerner et al., 2019). Second, these studies estimated and compared PYD means over time to investigate PYD developmental pathways (Bowers et al., 2010; Schmid et al., 2011). Third, inconsistent number of distinct developmental pathways in adolescents was distinguished. However, three similar trajectories have been identified in all known studies, namely youth consistently demonstrating *high*, *low*, and *intermediate* PYD levels (Lerner & Lerner, 2013). Thus, a relevant gap addressed in this chapter is the use of the Latent Growth Curve Modeling (LGCM), which has considerable methodological advantages for capturing the most fitting pattern of change and possible variations within a sample (Wickrama, Lee, O'Neal, & Lorenz, 2016). In carrying out the Latent Growth Curve Modeling with European adolescent sample, we sought to expand knowledge regarding the developmental pathways of PYD. By doing this, we investigate the generalizability of PYD model outside the USA. Determining whether the PYD model is applicable in the specific contexts creates the foundation for the development and implementation of 5Cs based intervention and contributes greatly to the understanding of how to foster optimal adolescents' lives. Thus, in the next section we discuss interventions for promoting PYD.

PYD Interventions Promoting Positive Change

Roth and Brooks-Gunn (2016) suggested guidelines for the development and evaluation of PYD programs that should address the 5Cs (competence, confidence, character, connection and caring) as program *goals*; include *activities* to provide opportunities for practicing new skills and broadening horizons and being implemented in a positive *atmosphere* empowering and encouraging positive relationships with adults and peers. However, research following these guidelines is

still very scarce (Roth & Brooks-Gunn, 2016). We could not find a single study using these guidelines for PYD program development.

In addition, the evaluation of existing PYD interventions is mostly limited to the assessment of developmental outcomes (e.g., reduction of problem behaviors and enhancement of social-emotional skills; Taylor, Oberle, Durlak, & Weissberg, 2017), while the assessment of the 5Cs of PYD is often left out (Tolan, Ross, Arkin, Godine, & Clark, 2016). A longitudinal quasi-experimental study conducted in the U.S., which used the 5Cs as indicators of the efficacy of two PYD programs failed to find any within-group time effects or between-group effects on the 5Cs, despite the practitioners' claims that the evaluated programs are highly beneficial (White, 2009). Similarly, another longitudinal U.S. study did not find any consistent effects of participation in the PYD program (Lerner & Lerner, 2013).

On a positive side, there is evidence that PYD-informed programs successfully promote PYD related outcomes (see Eichas, Montgomery, Meca, Garcia, & Garcia, [this volume](#); Ginner Hau, Ferrer-Wreder, & Westling Allodi, [this volume](#); Kozina, [this volume](#); Ferrer-Wreder et al., [this volume](#); Larsen & Holsen, [this volume](#)) in addition to intentional self-regulation (Mueller et al., 2011), positive identity (Eichas, Ferrer-Wreder, & Olsson, 2019), self-efficacy, resilience, and spirituality (Shek & Sun, 2010). Thus, it remains unclear whether PYD interventions actually contribute to the development of psychological, behavioral, and social characteristics of person-context relations as described in the 5Cs model (Shek, Dou, Zhu, & Chai, 2019; Truskauskaitė-Kunevičienė, Romera, Ortega-Ruiz, & Žukauskienė, 2020).

In relation to the above considerations, Tolan et al. (2016) note that PYD intervention studies are not sufficiently focused on comparing normative development, observed without any intentional external efforts and the change due to the impact of the intervention. Thus, so far, most studies and program reviews emphasizing the benefits of PYD interventions are based on results that fail to specify the actual impact of these interventions. In addition, as most of PYD inter-

ventions are developed and tested in the U.S., the understanding of these interventions is concentrated in one particular context. The novel contribution of this chapter consists in presenting the normative and impact trajectories of the 5Cs of PYD and the effects of a PYD program in Lithuania based on the guidelines outlined by Roth and Brooks-Gunn (2003).

The Lithuanian Context

In this chapter, we present the findings of a longitudinal research project “Mechanisms of promoting Positive Youth Development in the context of socio-economic transformations (POSIDEV)” conducted in Lithuania. This project is the first and so far the only attempt to study PYD in Lithuania. Lithuania is located in Northern Europe in the Baltic region bordered by Latvia, Belarus, Poland, and Russia, and has been an independent republic from the Soviet Union since 1991. The country population is approximately 2.79 million people and 6.5% are adolescents aged 11–17 years (Statistics Lithuania, 2019).

Along with other Baltic post-Soviet countries, Lithuania joined the European Union in 2004. Almost three decades of political independence have brought numerous essential changes in the post-communist societies, such as the establishment of democracy and adoption of Western values. Lithuania is keeping up with the European countries regarding industry growth rates (Lazutka, Juška, & Navickė, 2018) and adolescents' development is expected to show some similarities to their counterparts in the WEIRD (Western, Educated, Industrialized, Rich, and Democratic) countries (Kaniušonytė & Žukauskienė, 2018). However, currently most of the parents of adolescents in Lithuania were raised in the Soviet Union, where conformity and obedience were highly encouraged (Gorlizki & Khlevniuk, 2020; Lebedeva, Dimitrova, & Berry, 2018). This occurred by means of de-individualization, conformity to group behavior, and external attribution of responsibility (Grigorenko, Ruzgis, & Sternberg, 1997). Such

history had deep implications for the mentality of Lithuanian citizens (Sakalauskas, 2018) making this setting very interesting for the exploration of PYD in adolescence.

Efforts to foster positive development in Lithuanian adolescents are scarcely documented. In 2014, a review was carried out to evaluate youth development programs for late adolescents (15–19 years) implemented in 2006–2013 (Gabrialavičiūtė, Raižienė, Truskauskaitė-Kunevičienė, & Garckija, 2014). Program *goals*, *activities*, and *atmosphere* (Roth & Brooks-Gunn, 2016) were evaluated in the 15 available programs. The findings suggested that all programs were aimed at developing at least one of the 5Cs and two programs aimed at fostering all of them. The overall conclusion of the review highlighted that no single program implemented in Lithuania can be truly indicated as PYD program.

This Chapter

The main goal of this chapter is to explore the different trajectories of the 5Cs of PYD among adolescents in Lithuania from community and intervention settings. In order to reach this goal, two longitudinal exploratory and intervention studies were conducted. The aim of the exploratory study was to examine the change and the developmental trajectories of PYD and 5Cs from 9th to 12th grade by using latent growth modeling that allows a comprehensive exploration of possible trajectories of PYD and sheds light on more subtle aspects of thriving (Park & Lin, 2020).

The intervention study aimed at evaluating the long-term efficacy of the PYD intervention program *Try Volunteering* on the 5Cs. Because the school-based short-term structured intervention program (8 classroom meetings within the period of 2 months) is explicitly based on the PYD framework, we investigated whether it is effective in promoting the 5Cs. This study is one of the first attempts to assess and analyze the effects of a PYD intervention program with a quasi-experimental longitudinal research design (Roth & Brooks-Gunn, 2016). Also, for the first time,

the efficacy of a PYD program was addressed by separating a normative change and impact (also known as treatment) change trajectories (Curran & Muthen, 1999). This separation makes it possible to properly assess whether positive expected changes are driven solely by the intervention program.

Different samples were used for the exploration and intervention studies. The normative development was explored in the community sample (all adolescents from Utena region were included in the study) which is comparable to the Lithuanian population in terms of main socio-demographic characteristics. The intervention study was carried out in a smaller sample consisting of younger adolescents (9th to 10th graders) from two schools in Vilnius, the capital city of Lithuania. As the normative development was established in a bigger and more representative sample before the intervention study, we were able to inquire whether normative trajectory distinguished in the intervention sample represents the normative development of Lithuanian youth.

The Exploratory Study

A total of 458 students from five high schools participating in four waves of the project (T1 – T4) (52% females, age 14–17, $M = 15.14$, $SD = 0.48$ at T1) participated in the study. The four waves of data collection took place in the springs of 2013–2016 during regular class hours. Parental consent was obtained before the first assessment in 2013. Before each assessment, adolescents were reminded about the purpose of the study, confidentiality issues, and their voluntary participation. In terms of family socioeconomic status (SES) indicated by education and work status of both parents and free school meals, 18% were from low, 32% medium, and 50% high SES families. The sample was homogeneous in terms of Lithuanian ethnic background. Participation rates for the second wave were 98%, 86% for the third wave and 82% for the fourth wave of the initial sample.

The 5Cs of PYD were measured with the 78-item original measure of the 5Cs of PYD

Table 1 Fit indices and McDonald omega reliability coefficients for the 5Cs of PYD

| The 5Cs | χ^2 (df) | CFI | RMSEA [90% CIs] | ω [95% CIs] |
|------------|---------------|------|-------------------|--------------------|
| Character | 344.80 (162) | .928 | .051 [.043, .058] | .85 [.82, .87] |
| Competence | 97.91 (33) | .921 | .067 [.052, .083] | .76 [.72, .80] |
| Connection | 428.89 (203) | .921 | .051 [.044, .057] | .82 [.78, .85] |
| Caring | 57.62 (26) | .962 | .053 [.034, .071] | .87 [.84, .89] |
| Confidence | 266.59 (97) | .938 | .063 [.054, .072] | .89 [.87, .90] |

Note. χ^2 = Chi-square test; df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; CIs = Confidence Intervals; ω = McDonald omega coefficient

(Geldhof et al., 2015) addressing various aspects of competence (e.g., feeling pretty intelligent), confidence (e.g., liking myself), character (e.g., usually doing the right thing), connection (e.g., trusting friends) and caring (e.g., being bothered when bad things happen to people). The fit indexes of the strong longitudinal invariance models and reliability coefficients for the separate Cs are provided in Table 1.

In other U.S. and European samples, the bi-factor structure of the measure was proven to be more appropriate than the higher order PYD structure (Erentaitė & Raižienė, 2015; Geldhof et al., 2014; Holsen et al., 2017; see also Dimitrova, Buzea, et al., *this volume*). The bi-factor measurement model fitted the data well in this sample as well, $\chi^2(1971, 458) = 2908.61$, $p < .001$, CFI = .932, RMSEA = .032. McDonald omega internal consistency coefficient for the general PYD factor supported good measurement reliability, $\omega = .74$. Full measurement invariance (i.e., the degree to which the scale measurements conducted across different groups exhibit similar psychometric properties) of the bi-factor model for gender, SES and age groups with the same sample was established by Erentaitė and Raižienė (2015). Full longitudinal invariance in the same sample was established by Vosylis (2015). For this study, factor scores from the strong longitudinal invariance model were used for all subsequent analyses.

Main Findings

The aim of the exploratory study was to investigate the change and the developmental trajectories of PYD and the 5Cs in Lithuania. To examine

PYD change, we estimated two latent growth models using the most widely applied fit indices of the Root-Mean-Square Error of Approximation (RMSEA; recommended $< .08$) and the Comparative Fit Index (CFI; recommended $> .95$) (Rutkowski & Svetina, 2017). The linear growth model fitted the data poorly, $\chi^2(1, 458) = 141.94$, CFI = .880, RMSEA = .246. The quadratic growth model represented a better fit, $\chi^2(1, 458) = 8.13$, CFI = .994, RMSEA = .125 but still marginal. The poor model fit could be explained by the significant variance (Wickrama et al., 2016), that we found for intercept (Var = 0.97, $p < .01$), linear slope (Var = 0.51, $p < .01$), and the quadratic slope (Var = 0.04, $p < .01$), suggesting individual differences in the level and change of PYD. Thus, according to Wickrama et al. (2016), there was a reason to further explore different developmental trajectories. The retained quadratic growth model is presented in Fig. 1. In summary, the average pattern suggests a decrease in general PYD score with small positive acceleration in grade 12.

To identify developmental trajectories of PYD, a Latent Growth Curve analyses (with the slope and intercept variances fixed to zero) was performed. An optimal three class solution was selected based on entropy, average posterior probabilities, likelihood ratio tests, and the sample size of the classes (available upon request). Three PYD classes (Fig. 2) were labeled as *high* ($n = 138$, 30%, positive linear and negative quadratic slope $d_{\text{unb}} = 0.04$ [−.19, .28]), *medium* ($n = 216$, 48%, negative linear and positive quadratic slope $d_{\text{unb}} = 0.2$ [.01, .39]), and *low* ($n = 100$, 22%, negative linear and positive quadratic slope $d_{\text{unb}} = 0.04$ [−.19, .36]). The trajectories were compared across gender and SES.

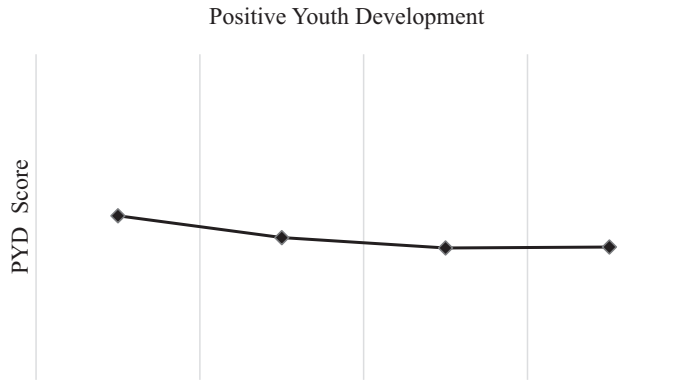
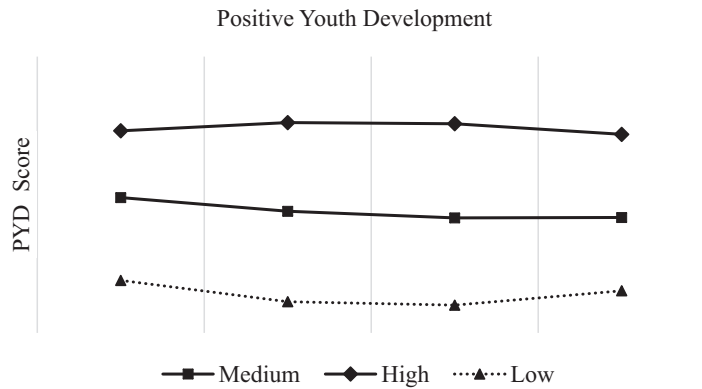


Fig. 1 Change of the positive youth development from Grade 9 to Grade 12 (Note. Mean estimates refer to the model of strong measurement invariance. The initial mea-

surement occasion at grade 9 was used as a reference having a factor mean of zero, that is, factor means from grade 10 to 12 reflect deviations from the reference)

Fig. 2 Trajectories of positive youth development over time



The results indicated that the trajectories did not differ by gender ($p = .31$ to $.16$).

Finally, the change in the 5Cs was estimated for different developmental trajectories of PYD. The results of a repeated measures ANOVA (with the Greenhouse-Geizer correction) revealed that change of confidence, $F(31.75, 4.30) = 4.65, p < .001$, partial $\eta^2 = .02$, connection, $F(10.08, 4.36) = 4.69, p < .001$, partial $\eta^2 = .02$, and competence, $F(61.97, 4.75) = 4.00, p < .001$, partial $\eta^2 = .02$ differed across PYD trajectories, whereas the change of caring, $F(4.02, 4.97) = 0.97, p = .434$, partial $\eta^2 = .004$, and character, $F(10.74, 5.09) = 1.39, p = .226$, partial $\eta^2 = .006$ did not. The results of the ANOVA in all PYD trajectories showed that in the *high* PYD trajectory, all components, except for confidence

and competence decreased ($p < .01$). In the *low* PYD trajectory, connection and confidence decreased until tenth grade and increased afterwards. Competence did not change significantly over the four years ($p = .213$), while character and caring decreased ($p < .01$). In the *medium* PYD trajectory, all components, except confidence, decreased (see Fig. 3).

The Intervention Study

In this study, the efficacy of the short-term (8 meetings) school-based PYD intervention program *Try Volunteering* was assessed. The program was developed in 2014 during the implementation of the project POSIDEV with the

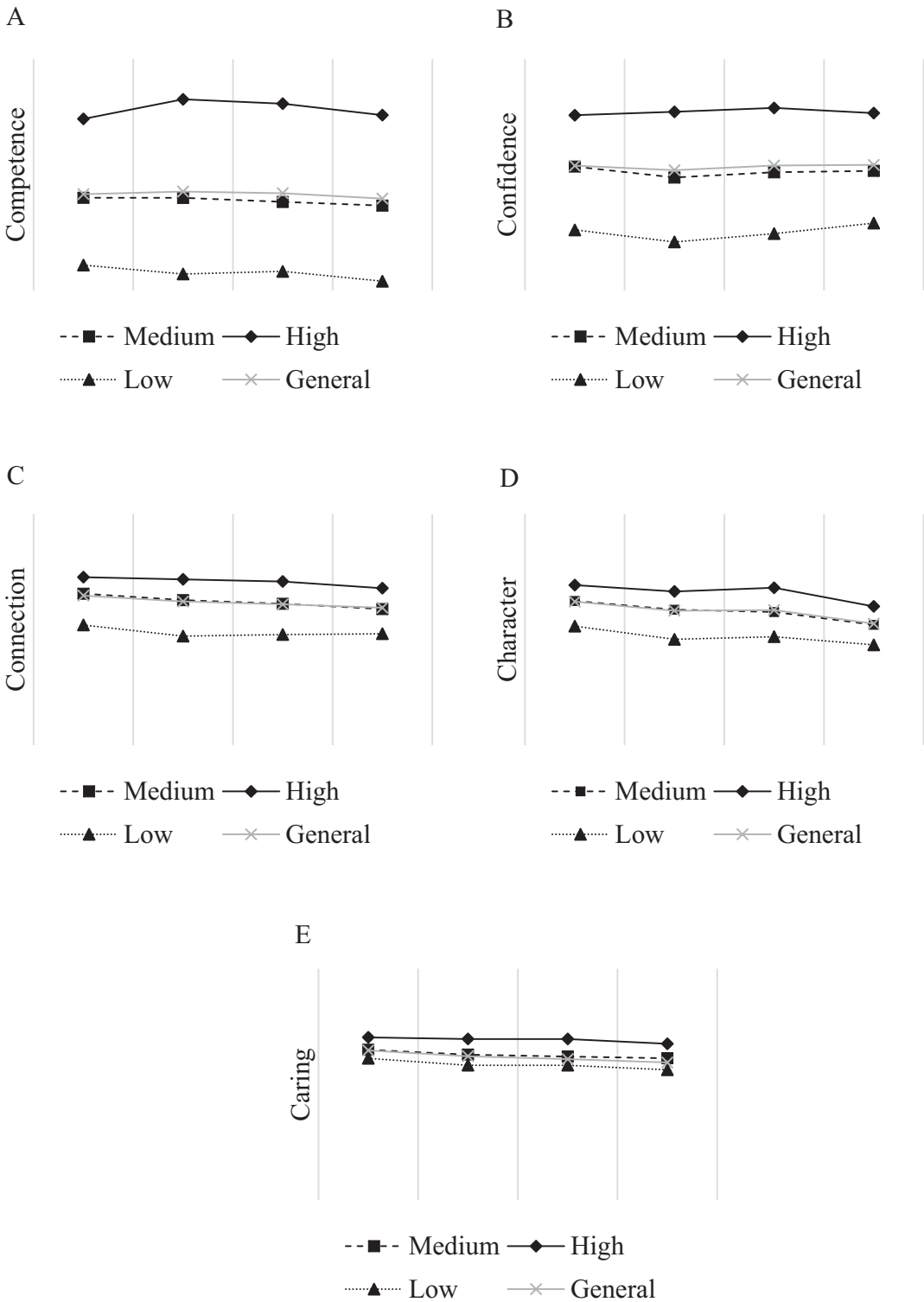


Fig. 3 Change of the 5Cs in low, medium and high PYD trajectories (*Note.* A = Trajectories of competence; B = Trajectories of confidence; C = Trajectories of connection; D = Trajectories of character; E = Trajectories of caring. Trajectories of the 5Cs in A, B, C graphs significantly differ from one another over time)

main goal to promote adolescents' thriving. While developing the program, we sought to ensure that the new program meets all criteria for effective PYD programs (Roth & Brooks-Gunn, 2016) and promotes the 5Cs. We sought to help adolescents to develop healthy and productive behaviors that are valuable for their future, and the program *Try Volunteering* focused on building strengths of adolescents that will enable positive interactions within their context. During each of the eight meetings, it was highlighted what particular actions and behavioral strategies were related to the acquisition of the 5Cs that contribute to thriving. Additionally, *program activities* were sought to provide opportunities for practicing new skills and behaviors related to the 5Cs and broadening horizons. Thus, we provided the possibility for each participant to actively engage in a variety of real-life activities such as, problem-solving games, role-playing games, case studies, discussions, reflective writing and speaking.

The tasks were carried out individually, in pairs, in small groups and altogether in one group. Also, we offered participants the opportunity to face challenges by suggesting activities that are relatively new and unusual for them (e.g., evaluating their social networks) and assigning tasks that students are less likely to encounter during the regular education process (e.g., sharing their emotions or implementing the small charity projects outside the regular classroom environment). Special emphasis was given to the empowering *program atmosphere*, which was also sought to encourage positive relationships with adults and peers. Therefore, we provided the possibility to learn and practice active listening skills and encouraged the commitment to accept different opinions. To encourage positive relationships with adults, we selected program leaders who had positive attitudes towards youth. The training of program leaders brought special attention to the recognition of adolescents as a resource, recognizing that everyone matters and has strengths and potential (for more details see Truskauskaitė-Kunevičienė et al., 2020).

The longitudinal quasi-experimental research design was used for the program efficacy evaluation (Shadish, Cook, & Campbell, 2002). Thus,

the participants were non-randomly assigned into two groups – the experimental (or intervention) and the control group – at the school level. The participants from both groups were evaluated four times: one month prior to the intervention program (*pre-test*), immediately after the implementation of the intervention program (*post-test*), 4 months after the implementation of the program (*follow-up 1*) and 16 months after the implementation of the program (long-term sustained-effect *follow-up 2*).

The intervention sample consisted of 9th to 10th graders from two schools in the capital city of Lithuania. Participants from one school were assigned to the intervention group, and participants from another school were assigned to the control group. Selected schools had similar characteristics of structure, environment, and activities provided. Both schools were gymnasium with high school (9–12) classes only, situated in areas with predominantly middle-class residents, offering extracurricular activities (e.g., sports), but no structured programs for youth. The study sample consisted of 605 adolescents (43% females) of whom 336 (45% females) from the intervention school and 269 (40% females) from the control school. The intervention and control groups did not differ in terms of gender. The attrition rate in the *post-test* was 3.58%, 4.40% in the *follow-up 1*, and 12.87% in *follow-up 2*. The age range of the participants was 13 to 17 years old ($M = 15.26$; $SD = 0.67$) at *pre-test*, 13 to 16 years old ($M = 15.27$; $SD = 0.69$) in the intervention group, and 14 to 17 years old ($M = 15.24$; $SD = .65$) in the control group. The intervention and control groups did not differ in terms of age. The sample was homogeneous in terms of nationality, most of the participants reported Lithuanian (93%) followed by Russian (2.6%), Polish (2.0%) and other ethnic background (2.0%).

The complete intervention study included (1) the development of the program content; (2) the selection, training, and supervision of the program leaders; (3) the implementation of the program; (4) assessment and evaluation. Although the intervention and evaluation procedures partially overlapped in time, for the sake of clarity,

the two procedures will be described in distinct sub-sections.

Intervention Procedure The program development took place in May–October 2014 and included scientific literature analysis, meetings with the school administration, scientists and experts. Each of eight fully structured weekly classroom sessions were 45 minutes long. The introductory program event took place in September 2014. Program sessions took place in November–December 2014. To ensure the quality of the program implementation, adolescents were divided into 26 subgroups (11–15 participants each) and immediately after each session, supervisory meetings, led by the program developers, were organized. The program was delivered by 28 program leaders. All leaders were undergraduate or graduate (mostly in psychology) students and led the program voluntarily after completing a two-day long program training. At the end of the eight program sessions, participants were offered volunteering possibilities in one of the 22 organizations and a volunteering fair was organized at the school. Participation in the fair and volunteering were optional.

Evaluation Procedure The first measurement (*pre-test*) took place in September 2014; the second (*post-test*) in January 2015; the third (*follow-up 1*) in May 2015; and the fourth (*follow-up 2*) in May 2016. Prior to the study, appropriate consent was obtained from the Ministry of Education and Science, the schools' administration and adolescents' parents. Participants in the intervention and control group completed identical questionnaires.

The 5Cs of PYD were measured with 48-items of The Positive Youth Development Inventory ([PYDI]; Arnold, Nott, & Meinhold, 2012). Sample items referred to competence (e.g., being a good student), confidence (e.g., being a worthy person), character (e.g., trying to do the right thing), connection (e.g., having a wide circle of friends) and caring (e.g., caring about how own decisions affect other people). For the current

intervention study, a strong longitudinal measurement invariance was established, $\chi^2(860, 605) = 1695.01$, CFI = .929, RMSEA = .039.

Main Findings

The intervention study aimed at evaluating the long-term efficacy of the PYD intervention program *Try Volunteering* on the 5Cs. The univariate multiple groups in the Latent Growth Curve Analysis (LGCA) were used for the baseline comparison of the intervention and control groups (Wickrama et al., 2016). Differences in intercepts were evaluated using the Wald Chi-square test for parameter comparisons (Wickrama et al., 2016). The results of the multiple group LGCA revealed that the intervention and control groups did not differ in terms of the initial level of the 5Cs, thus were suitable for comparison (intercept differences with model fit indices are available from the first author upon request).

The intervention effects were calculated using a Multi-Group Latent Curve Analysis (M-GLCA) that allows evaluating the direct effects of intervention programs by separating the normative trajectory of the development from the impact (or treatment) trajectory (Curran & Muthen, 1999). This is done in several steps: (1) determining change trajectory in the control group by defining the normative slope; (2) determining the change trajectory in the intervention group by defining the treatment slope; (3) multiple group analyses with normative and treatment (intervention effect) trajectories, where the normative is attributed to both the intervention and the control group, and treatment trajectory only to the intervention group (the conceptual M-GLC model is shown in Fig. 4); (4) moderation analysis to determine whether the initial levels of evaluated variables (intercepts), gender, and socio-demographic characteristics of the participants affected the effects of the intervention (i.e., the impact trajectory).

To compare nested models, we followed Chen's recommendations (2007) that $\Delta\text{CFI} \geq .010$ supplemented by $\Delta\text{RMSEA} \geq .015$ would

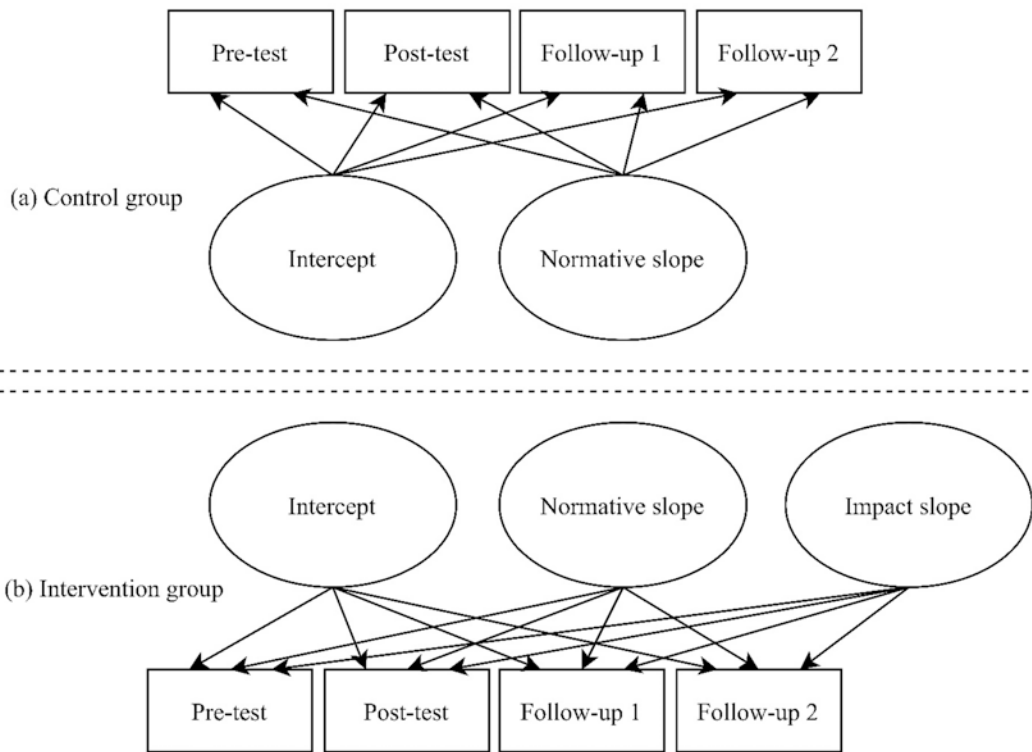


Fig. 4 General multiple-group latent curve model

indicate significant difference. The results of the first step of the M-GLCA (determining the normative trajectory) revealed that in the control group, the no change model was the best-fitting for all 5Cs, except for connection, where the best-fitting was the quadratic change model. The results of the second step (determining the impact trajectory) indicated that in the intervention group, the linear change model was the best-fitting for competence, confidence, and character and the quadratic change model for connection and caring (Table 2). The results of the third step (evaluation of the intervention effects) revealed that the intervention program had a direct and similarly strong effect on all 5Cs. Impact change effect sizes with confidence intervals were calculated for all variables (Kelley & Preacher, 2012; Thompson, 2002). Bias-corrected effect sizes (d_{mb} ; see Fritz, Morris, & Richler, 2012 for full

formula) were also reported by following established effect size guidelines for small effect (between values of 0.1 and 0.2), moderate effect (between values of 0.2 and 0.3) and large effect (values greater than 0.3) (Gignac & Szodorai, 2016). The impact slope of all 5Cs was statistically significant and moderate (Table 3). Under normative conditions, confidence (slightly) and connection (strongly) significantly decreased; character (slightly) significantly increased; competence and caring remained stable (Fig. 5). Finally, the results of the fourth step (moderation analysis) indicated that the connection intercept negatively predicted impact slope, $\beta = -.81$, $\chi^2(20, 605) = 31.75$, CFI = .984, RMSEA = .058 indicating that the intervention was more effective for participants with relatively lower initial levels of connection. Gender and SES had no moderation effects on the 5Cs.

Table 2 The modality of change in the 5Cs of PYD in the intervention and control groups

| | | Model fit indices | | |
|-------------------|----------------|-------------------|-------|-------------------|
| | Slope modality | χ^2 (df) | CFI | RMSEA [90% CIs] |
| Competence | | | | |
| Control | No change | 9.63 (8) | .993 | .028 [.000, .080] |
| Intervention | Linear | 16.16 (7) | .983 | .062 [.021, .103] |
| Confidence | | | | |
| Control | No change | 8.47 (8) | .997 | .015 [.000, .074] |
| Intervention | Linear | 7.76 (7) | .998 | .018 [.000, .071] |
| Connection | | | | |
| Control | Quadratic | 2.57 (6) | 1.000 | .000 [.000, .042] |
| Intervention | Quadratic | 9.41 (6) | .994 | .041 [.000, .089] |
| Character | | | | |
| Control | No change | 15.20 (8) | .959 | .058 [.000, .102] |
| Intervention | Linear | 34.14 (7) | .947 | .107 [.073, .145] |
| Caring | | | | |
| Control | No change | 12.64 (8) | .977 | .046 [.000, .093] |
| Intervention | Quadratic | 18.36 (6) | .977 | .078 [.039, .120] |

Note. χ^2 = Chi-square test; df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; CIs = Confidence Intervals

Table 3 Normative and impact slopes of the 5Cs of PYD

| | Slope | | d_{unb} [90% CIs] | Model fit indices | | |
|-------------------|--------------------------------|---------------------------|----------------------------|-------------------|-------|-------------------|
| | M | σ^2 | | χ^2 (df) | CFI | RMSEA [90% CIs] |
| Competence | | | | | | |
| Normative | .001 | .000 | .03 [-.09, .14] | 4.76 (7) | 1.000 | .000 [.000, .055] |
| Impact | .009*** | – | .25 [.10, .40] | | | |
| Confidence | | | | | | |
| Normative | -.007* | .001 | -.15 [-.26, -.03] | 7.20 (7) | 1.000 | .010 [.000, .072] |
| Impact | .012*** | – | .26 [.11, .41] | | | |
| Connection | | | | | | |
| Normative | -.051*** .007 ^q | .000 .000 ^q | -.31 [-.42, -.19] | 5.93 (6) | 1.000 | .000 [.000, .074] |
| Impact | .012** | – | .24 [.09, .39] | | | |
| Character | | | | | | |
| Normative | .007* | .003*** | .15 [.04, .26] | 2.72 (7) | 1.000 | .000 [.000, .028] |
| Impact | .012*** | – | .26 [.11, .41] | | | |
| Caring | | | | | | |
| Normative | .003 | .004* | .05 [-.06, .16] | 7.45 (5) | .996 | .040 [.000, .096] |
| Impact | -.026* .008*** ^q | – | .22 [.07, .38] | | | |

Note. χ^2 = Chi-square test; df = degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; CIs = Confidence Intervals. M = mean; σ^2 = dispersion; d_{unb} = Bias corrected effect size; q = quadratic change parameter

* $p < .05$; ** $p < .01$; *** $p < .001$

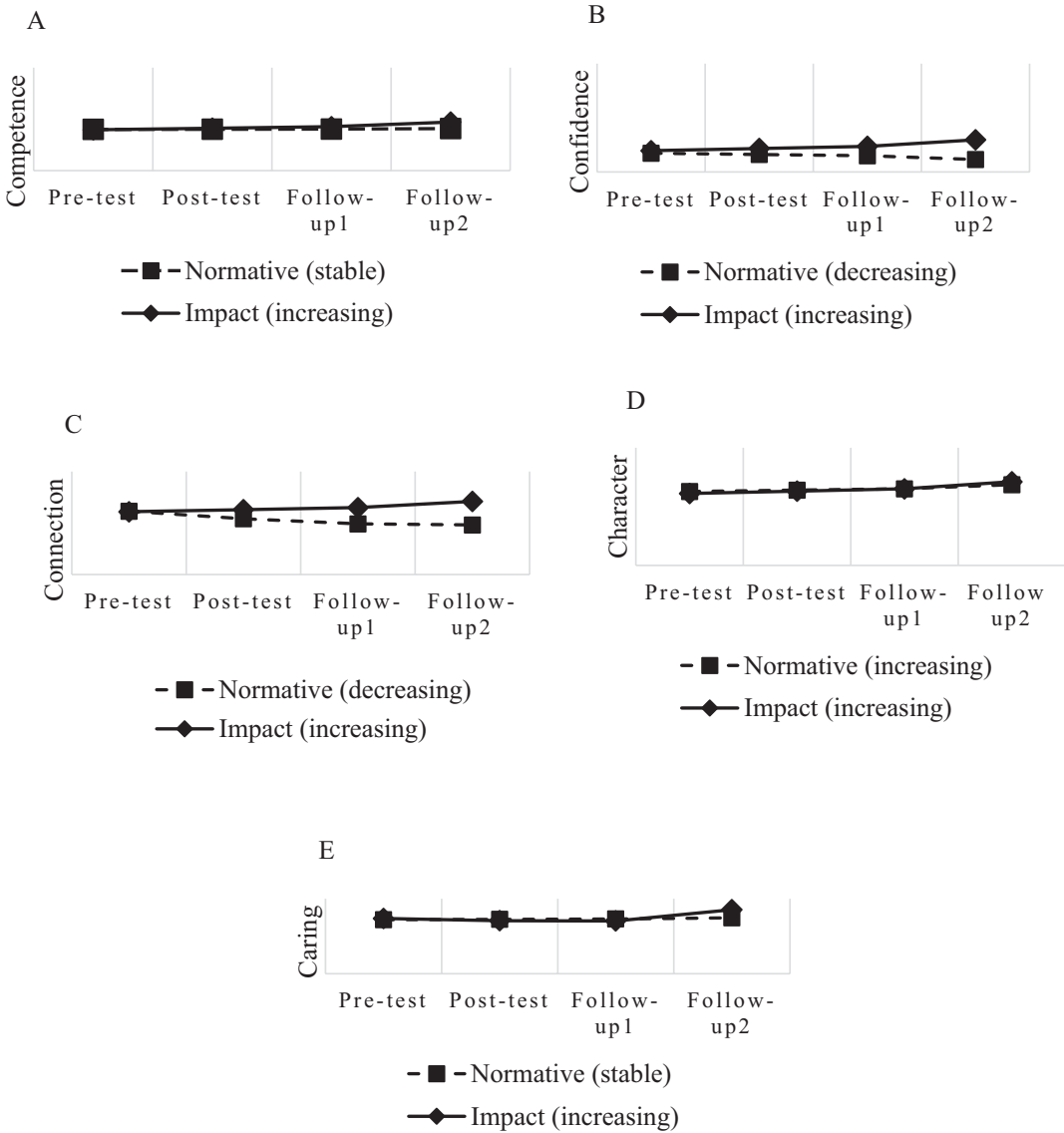


Fig. 5 Normative and impact slopes for the 5Cs of PYD (Note. A = Competence; B = Confidence; C = Connection; D = Character; E = Caring)

Conclusions

The first aim of this chapter was to determine the change and trajectories of PYD in Lithuania. In so doing, first the overall change of PYD during a four-year period in an adolescent sample was identified and second, groups of young people with different PYD trajectories and how those trajectories were reflected in the 5Cs were determined. The latent curve analyses revealed that

during the period of four years, PYD in the general sample slightly decreased. However, the nonlinear change should be considered, indicating the potential PYD increase in later years. Although this pattern is partly consistent with U.S. based studies (Bowers et al., 2010; Lerner & Lerner, 2013; Phelps et al., 2007, 2009; Schmid et al., 2011), the present chapter suggests a positive feedback loop of PYD, meaning that optimally developing young people strengthen their contexts and, in turn, these contexts contribute to

their positive development. However, in real life not all young people develop equally well and not all elements of the environment can change so easily (Baltes, Lindenberger, & Staudinger, 2006). The current findings support the idea, that without additional interventions, PYD in a general population remains relatively stable. Therefore, it is more informative to search for groups and study adolescents who are demonstrating different developmental paths.

Next, in line with the existing literature, the investigation of the PYD developmental trajectories identified three high, medium, and low optimal trajectories. Thus, it can be argued that adolescents in our sample differed from one another in their PYD, and the trajectories in part coincided with the general tendencies of PYD reported in the U.S. context (Lerner & Lerner, 2013; Phelps et al., 2007; Schmid et al., 2011). In discussing the quadratic shapes of PYD trajectories, it can be assumed that in the long run, all adolescents were potentially regressing towards the mean. Such regression can be explained in light of maturation theories, which state that all development paths tend to lean towards normative development (Meeus, 2016). It may also reflect the principle of equifinality suggesting that different paths can lead to similar outcomes (Almy & Cicchetti, 2018). In the broader model of positive youth development, this would mean that both PYD and its five components are not endlessly growing and have a saturation limit, where they reach the optimal point.

Finally, the analyses of the change of the 5Cs in different PYD trajectories revealed that the highest levels of all five indicators were in the high PYD trajectory and the lowest ones were in the low PYD trajectory. However, the change patterns of the 5Cs differed. Character, connection and caring decreased slightly, and confidence and competence remained relatively stable over the course of four years in all PYD trajectories. Furthermore, the levels of the 5Cs within the trajectories differed as well. For example, adolescents in high and low PYD trajectories differed from one another much more in terms of confidence and competence, than in terms of caring. It can be noted that the difference between trajectories in caring was the smallest, meaning that car-

ing does not differentiate adolescents with high and low PYD trajectories strongly enough. Thus, we advance the premise that caring was not an essential indicator for success in these adolescent groups. Research in other countries such as U.S. and Norway has found that caring was either unrelated with other indicators of PYD or even negatively related to these (Geldhof et al., 2014; Holsen et al., 2017). Such controversial findings, may suggest that caring and PYD are related in a nonlinear manner, and that excessive empathy, or compassion can lead to emotion dysregulation (van Lissa, Hawk, Koot, Branje, & Meeus, 2017), anxiety or depressive symptoms (Gambin & Sharp, 2018).

Regarding other PYD indicators, the trajectories differed mostly for confidence, connection, and competence. Competence and confidence levels in high PYD trajectory were considerably higher than those in other indicators, meaning, that competence and confidence were most important in differentiating the adolescents from different PYD trajectories. This could be explained by the subdomains of competence and confidence, such as self-esteem, social-emotional skills, or academic motivation. These indicators are most commonly analyzed in the well-being literature and have strong links with adolescent's successful adaptation (Žukauskienė, Kaniušonytė, Truskauskaitė-Kunevičienė, & Malinauskienė, 2015).

The second aim of the chapter was to evaluate the long-term efficacy of a youth development program on the 5Cs of PYD through an intervention study. The direct effects of the short-term school-based PYD intervention *Try Volunteering* on the 5Cs were evaluated by distinguishing the normative trajectories not affected by the intervention and the impact trajectories describing the intervention effects. The PYD program *Try Volunteering*, as expected, had moderately strong effects on all 5Cs suggesting that structured and supportive environments, where adolescents have an opportunity to acquire new skills, play an important role in fostering PYD (Eichas et al., 2019). This also implies that the PYD programming guidelines (Roth & Brooks-Gunn, 2016) serve as a useful tool when seeking positive developmental change in Lithuania.

Relatively similar program effects on the 5Cs suggested that chosen program activities were well balanced for fostering all targeted components. Also, the intervention effects in size were similar to those found for effective PYD-related mentorship programs (Ciocanel, Power, Eriksen, & Gillings, 2017), and qualify for being worth investing time, financial, and intellectual resources (Hedges & Hedberg, 2007). It is noteworthy that characteristics, such as initial level of the PYD components, gender, and SES played a minor role in predicting intervention effects. We only found that the program is more useful for those who had worse relationships with adults and peers. A possible explanation may be found in the relative group processes. While the other characteristics described with the 5Cs were personal factors, connection requires the inter-individual interaction. It might be that increasing a sense of belongingness to one another within the intervention subgroups allowed those who were previously more out of the groups to experience higher levels of peer acceptance (Albarello, Crocetti, & Rubini, 2020). The new experience of belongingness might be less significant for adolescents who already have good relationships with others. No other interactions between the 5Cs and measured characteristics were found. This implies that PYD programming may be beneficial for both genders from different socio-economic backgrounds and different developmental trajectories.

Overall, we can conclude that the 5Cs model of PYD is a universal robust approach to define and promote youth thriving. However, some contextual specifics indicate that both studies reflect a decrease in connection over time, meaning that in normative settings adolescents' relationships with others tend to get worse. This may be due to an increased academic workload-related stress and burnout (Salmela-Aro, 2017), as stress in general has negative effects on interpersonal relationships (Nguyen, Karney, & Bradbury, 2020). This finding may indicate that Lithuanian adolescents have increasingly hard times at school due to high requirements related to academic achievement. Further, it may well be that young people do not possess enough resources at school to invest sufficient time and effort in fostering their relationships. Therefore, particularly in the

Lithuanian context, PYD programming may be an important bounce-back against negative shifts of adolescents' development.

Future Directions

This chapter opens avenues for future work beyond the use of self-reported data. Although using a self-assessment method alone is common practice in adolescent research, it is important to keep in mind the possible evaluation error (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This could be reduced by using peer, teachers and parents reports recommended for both community and intervention settings. Another avenue regards the use of different PYD measures. Although both measures used here have acceptable validity, the comparability among both studies may be restricted. Further efforts should be directed towards the reduction of attrition in intervention studies. Although dropout rates are particularly common in interventions, especially in terms of long-term effects, the attrition rates of more than 5% may already be related to a certain measurement error (Dumville, Torgerson, & Hewitt, 2006). Finally, when implementing future interventions, program design could be constructed using factorial experimental design (Collins, Dziak, Kugler, & Trail, 2014), which allows evaluating the effectiveness of individual program components (e.g., the number of exercises or specific activities).

Implications for Research, Policy and Practice

This chapter confirms the applicability of the 5Cs of PYD in Lithuania by suggesting further implications for research. First, we provide the evidence that similarly to other countries, in Lithuania, caring is a very weak indicator of overall PYD. Thus, we bring additional arguments that unique contribution of caring to the overall PYD model should be further investigated. Second, we found that in normative Lithuanian settings, connection decreased over time, thus the two studies imply the need for fur-

ther cross-cultural investigation of the development of connection to indicate whether this finding is culturally specific or universal. Third, for the first time, we confirmed the empirical robustness and practical usefulness of the theoretical guidelines of PYD programs.

The 5Cs model and guidelines of PYD programs (Roth & Brooks-Gunn, 2016) can be used as a useful framework for the development, implementation, and evaluation of youth development programs targeted at youth thriving in Lithuania and, arguably, similar social contexts. To make this possible, action from policy makers is required, such as adjusting educational curriculum and devoting additional financial resources to address not only academic but also the psychological well-being of adolescents in schools. The current chapter is relevant to policy in several other ways as well. First, it informs that PYD-related programming efforts direct the developmental trajectories of youth towards thriving. Thus, youth development stakeholders (i.e., young people, parents, researchers, teachers, youth development leaders, policy makers) can advocate the importance of programming targeted towards positive development at schools as it changes the lives of young people and helps them to flourish. Additionally, we would like to emphasize the importance of influencing the public opinion on youth. There is a recent evidence that positive regard towards youth increases their well-being, academic performance (Qu, Pomerantz, Wang, Cheung, & Cimpian, 2016), and even neuro plasticity (Qu, Pomerantz, McCormick, & Telzer, 2018). Adolescents should rather be regarded as resources to be fostered, not problems to be solved. In this way, the efforts to establish PYD programming nationwide can become easier (Dimitrova & Wiium, *this volume*).

With regards to practice, we demonstrated that the 5Cs model based intervention program is beneficial and therefore can be used as a practical evidence-based tool for PYD promotion in Lithuania and, with proper replication, in other cultural contexts. We provided additional evidence that practitioners should pay attention not only to the goals and activities of the intervention program, but also to the youth-adult partnership as one of the most important program elements. Moreover, we advocate that school context is

suitable for the implementation of developmental interventions and we believe that the current chapter may assist schools in implementing their extended mission to foster not only academic achievement but also the positive development of adolescents in general.

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Positive Youth Development Through Student Engagement: Associations with Well-Being

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Abstract

High engagement in studies is an important strength of adolescents, which promotes positive development, successful educational and occupational transitions, and overall well-being. This chapter reviews relevant evidence on students' positive development through student engagement during a major transition to higher education and employment. In addition, different pathways of student engagement and the role of personal (e.g., gender, performance) and contextual antecedents (e.g., parenting styles, autonomy support) of engagement are discussed. The review showed that the positive continuum of engagement in studies and work is often associated with indicators of well-being (e.g., life satisfaction, career satisfaction), and negatively associated with ill-health (e.g., burnout, depressive symptoms) during the transition to higher edu-

cation/work. The chapter concludes that student engagement facilitates late adolescents' positive development in multiple ways and enhances their future career development.

Keywords

Student engagement · Positive youth development · Latent trajectories · Well-being · Spillover · Social context · Person-environment fit

High engagement in studies is an important aspect of positive development among adolescent students, and plays a crucial part in a major developmental task to complete one's studies and prepare for future career. Scholarship on student engagement has recently expanded due to increased interest in positive psychology, which focuses on human strengths and optimal functioning rather than on weaknesses and malfunctioning (Buck, Carr, & Robertson, 2008; Peláez, Coó, & Salanova, 2020; Smith, Ford, Erickson, & Guzmán, 2020). Engagement is often conceptualized as students' emotional, behavioral, cognitive, and psychological involvement in their studies (Appleton, Christenson, & Furlong, 2008; Appleton, Christenson, Kim, & Reschly, 2006) or as feelings of energy, dedication, and absorption while studying (Salmela-Aro & Upadyaya,

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2012). Thus, student engagement scholarship provides knowledge about adolescent students' experiences and positive development in academic contexts. Moreover, the role of student engagement and positive development becomes especially important during the transition to higher education or work, a major milestone of life during which late adolescents make many important decisions related to their future education and occupation (Perry, 2008; Zarrett & Eccles, 2006).

Student engagement is also associated with youth and young adults adjustment, feelings of connectedness (Bradley, Ferguson, & Zimmer-Gembeck, *this volume*; Castillo-de Mesa & Gómez-Jacinto, 2020), learning (Fiorilli, De Stasio, Di Chiacchio, Pepe, & Salmela-Aro, 2017; Salmela-Aro, Tolvanen, & Nurmi, 2009), commitment (Snijders, Wijnia, Rikers, & Loyens, 2020), values, goals, and participation (Fredricks, 2011; Fredricks, Blumenfeld, & Paris, 2004) in academic environments. All these aspects become increasingly important during late adolescence and young adulthood when many developmental and contextual changes occur in young people's lives as they face the transition to higher education or work.

High student engagement plays an important role for Positive Youth Development (PYD) in promoting adaptation to changes which often shape young people's future pathways. PYD occurs in various contexts – homes, schools, after school programs – and has been characterized in terms of Five Cs of competence, confidence, character, connection, and caring (Geldhof et al., 2015; for an expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, *this volume*; Dimitrova et al., *this volume*; Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, *this volume*). In a PYD perspective, student engagement represents a relevant feature of competence as an individual youth strength promoting PYD (Waid & Urich, 2020). High student engagement is of fundamental importance for understanding positive youth development as it is linked to students' overall success (Li, Bebiroglu, Phelps, Lerner, & Lerner, 2008; Li & Lerner, 2011) and describes students' individual strengths in the school context.

Disengagement, in turn, is often related to student mobility, drop out, and increase in burnout symptoms (Bask & Salmela-Aro, 2013; Ketonen et al., 2016; Salmela-Aro, Moeller, et al., 2016; Salmela-Aro, Muotka, et al., 2016). High student engagement also predicts many long-term positive outcomes, such as life-satisfaction (Lewis, Huebner, Malone, & Valois, 2011; Upadaya & Salmela-Aro, 2017) and positive self-perceptions (Linnakylä & Malin, 2008), facilitates academic success and career choices (Annunziata, Hogue, Faw, & Liddle, 2006; Ketonen et al., 2016) and transition to higher education/work (Upadaya & Salmela-Aro, 2013b).

The present chapter provides an overview of the currently available research evidence on positive development through student engagement during a major transition to higher education and employment. In so doing, we review research on student engagement as an individual strength leading to PYD and well-being (i.e., life satisfaction, career satisfaction) during educational and occupational transitions in late adolescence (i.e., between ages 16 and 22). We specifically focus on this developmental stage as in late adolescence concurrent changes occur in multiple life domains (e.g., entering from adolescence to young adulthood, switching to new school- and work- environments, establishing new social networks) making it a critical development period in young people's lives. By capturing developmental changes and processes that occur between school context-specific engagement and general well-being (e.g., life satisfaction), we gain knowledge on how positive development in one aspect of life may promote positive development in another aspect of life. Examining various personal and environmental demands (e.g., changes in peer groups, beginning of a more independent life, pressure to achieve well at new study/work environment, changes in self-esteem and efficacy), in turn, gives us knowledge concerning the factors that may promote or hinder positive development in young adulthood. Consequently, the present chapter reviews studies examining the associations between student engagement and well-being during the period when adolescents face the transition to higher education or work.

The present chapter relies on the Finnish Educational Transitions (FinEdu) Study, in which student engagement, well-being, and development has been examined to a great extent across multiple educational and occupational transitions, as a framework, and incorporates findings from additional literature focusing on student engagement during the transition to higher education or work. The chapter begins by defining different components of school engagement, typically examined within two approaches – a multi-dimensional approach combining components of psychological, behavioral, emotional, and cognitive engagement and a second approach that focuses on students' psychological engagement in terms of energy, dedication, and absorption at school. Next, the chapter describes how school engagement as an individual strength develops over time and promotes PYD. Different engagement trajectories and their role for PYD are discussed together with longitudinal associations between student engagement, well-being and PYD. A special focus of the chapter is assigned to the development of student engagement during the time when young adults are facing the transition to higher education and work, which has seldom been discussed in relation to PYD. Finally, implications for research, policy and practice are provided, and suggestions are made for further research, interventions, and transition programs, which may help in better understanding and supporting student engagement as an individual strength leading to PYD.

Components of Student Engagement

Student engagement has been typically investigated within two approaches. One approach describes engagement as a multi-dimensional construct unifying psychological, academic, behavioral, cognitive, and emotional components (Appleton et al., 2006, 2008; Fredricks et al., 2004). The other approach describes psychological engagement in terms of energy, absorption, and dedication towards studies/work (Salmela-Aro & Upadyaya, 2012). Although the engage-

ment dimensions in these approaches are empirically distinguishable, research combining both frameworks has shown that they share a large proportion of common variance which indicates that the underlying mechanisms of engagement are the same (Tomás, Gutiérrez, Alberola, & Georgieva, 2020). Thus, both frameworks can be used when examining student engagement.

The first approach has received the most attention in school engagement research, where the components of behavioral, cognitive, and emotional engagement have been extensively examined (Jimerson, Campos, & Greif, 2003). The *behavioral* component refers to students' involvement such as being present at school and complying with school rules. The *cognitive* component describes students' investment in studies, and eagerness to learn new things and exert the required effort while studying. The *emotional* component is defined by students' enjoyment and interest in study challenges, positive and negative reactions to teachers and classmates, and willingness to do one's schoolwork (Appleton et al., 2008; Fredricks et al., 2004; Jimerson et al., 2003). In addition, *psychological* engagement describes students' sense of belonging, relatedness, and identification with school, whereas *academic* engagement refers to students' earned credits, their time on task and homework completion. All these different components of engagement simultaneously provide a rich picture of students' emotional and cognitive experiences and behavior at school (see also Appleton et al., 2006; Jimerson et al., 2003).

The second approach originated from work engagement research has been used to examine older students' (e.g., secondary education onwards) and workers' engagement in terms of three engagement components of energy, dedication, and absorption (Fiorilli et al., 2017; García-Ros, Pérez-González, Tomás, & Fernández, 2018; Ketonen et al., 2016; Salmela-Aro & Upadyaya, 2012). *Energy* (or vigor) equals to positive approach, high mental resilience while studying/working, and willingness to invest effort. *Dedication* is characterized by a sense of significance and meaningfulness, enthusiasm, and inspiration regarding studies and work,

whereas *absorption* refers to behavioral accomplishments and fully concentrating on studies or work so that time passes quickly. The different components of student engagement presented in both approaches correlate positively with each other (Fredricks et al., 2004), self-regulated learning (García-Ros et al., 2018) and life satisfaction (Lewis et al., 2011), and negatively with school burnout (Salmela-Aro, Tolvanen, & Nurmi, 2011; Salmela-Aro, Moeller, et al., 2016; Salmela-Aro, Muotka, et al., 2016), supporting the PYD model conceptualizing student engagement as an individual strength, covarying negatively with problem and risky behaviors.

In addition, differences occur in the development of engagement components with regards to grade levels and age (Fredricks et al., 2004). For example, during secondary education, student engagement is uni-rather than multi-dimensional, reflecting an overall positive attitude towards school (Salmela-Aro & Upadaya, 2012). After the transition to higher education or work, engagement becomes more differentiated and similar to work engagement, reflecting energy, dedication, and absorption (Salmela-Aro & Upadaya, 2012). During the transition from secondary education onwards, students become more oriented towards work and the new demands of working life, which also reflects the multidimensionality of engagement (Salmela-Aro & Upadaya, 2012).

Relatedly, developmental changes and longitudinal associations of engagement components may further contribute to PYD. For example, behavioral and cognitive components of student engagement are associated with high academic achievement and thus, often form strong cross-lagged associations across school years (Fredricks et al., 2004). The same is true for high energy in studies, which leads to increased school/work-related absorption and dedication before and after the transition from secondary education to higher education/work (Upadaya & Salmela-Aro 2015a). Feelings of absorption, in turn, promote dedication and energy especially during the study-work transition, probably because of its' close resemblance to flow (Csikszentmihalyi, 1990) and behavioral engagement (Upadaya &

Salmela-Aro, 2013a). Therefore, the separate components of student engagement may be manifested as strengths among individual students, and further contribute to their positive development at different educational/occupational phases and transitions.

Developmental Trajectories of Student Engagement

Increasing interest in individual differences in the development of student engagement has resulted in a growing number of longitudinal studies using person-oriented approach (see Tuominen, Viljaranta, & Salmela-Aro, 2017; Tuominen-Soini & Salmela-Aro, 2014). Instead of focusing on the mean level differences based on traditional variable-oriented research, the person-oriented approach examines homogeneous subgroups of students and employees with varying initial levels and developmental trends of engagement (Bergman & Andersson, 2010). This research is based on an assumption that among some people engagement changes over time, whereas among others engagement levels remain stable, and that variation emerges in the patterns of change (Mäkikangas, Bakker, Aunola, & Demerouti, 2010).

The development of engagement among adolescent students and young adults has been investigated broadly in the Finnish Educational Transitions (FinEdu) Study, in which adolescent students were followed up across the transitions to post-comprehensive education, university studies, and work. The participating students began the study when they were 16-years old, and were first followed up biannually, and then every second year until they were 30-years old. The students of the initial sample ($N = 804$) were born in 1987 and came from schools located in a medium-sized town in central Finland. Compulsory comprehensive education in Finland lasts for nine years until the students are 16 years old. After that, approximately 50% of adolescents enter senior high schools and nearly 41% go to vocational schools (School Statistics, 2010).

Medium to good grade point average at the end of the ninth grade is the minimum require-

ment for admission to senior high school. Both senior high schools and vocational education take three to four years to complete, after which students may apply to institutes of higher education (e. g., polytechnics, universities), or transition to employment. Graduation from high school is a prerequisite for university entrance, whereas education in vocational schools leads directly to a lower occupational degree, or enables young adults to pursue further studies in polytechnics. The education in Finland is state-provided and tuition is free, but admission exams to higher education are highly challenging. Approximately 39% of high school graduates enter in the higher education, 44% begin working, and 25% are studying and working one year after finishing high school, whereas 8% of young adults with a degree from a vocational school are studying, 69% are working, and 10% are both studying and working one year after their graduation. Some Finnish students and young adults also take a gap year after high school; however, they are equally likely to enter in higher education than students who intend to enroll to university directly after finishing high school (Parker, Thoemmes, Duineveld, & Salmela-Aro, 2015).

When examining individual differences in the development of student engagement, the results of the FinEdu Study showed that most students (72%) experience an overall high level of engagement during secondary education and after the transition to higher education or work, although for some students (9%) engagement decreased over time (Upadyaya & Salmela-Aro, 2013b). Moreover, among some students (14%) engagement increased after the transition to higher education or work (Salmela-Aro, 2009; Upadyaya & Salmela-Aro, 2013b, 2017), probably reflecting the better person-environment fit of the new study or work environment (Eccles & Roeser, 2009). Other studies have also shown that high student engagement facilitates career choices, whereas students who disengage from school often feel that their studies are as less significant and experience more insecurity concerning their career choices (Ketonen et al., 2016).

During the transition to higher education/work in late adolescence, change (in engagement) is

more typical than stability in study- and work engagement, and only small proportion of students (5%) and young adults experience continuously low engagement before and after the transition (Upadyaya & Salmela-Aro, 2013b). At the beginning of higher education studies and career, many young people may perceive their new study or work environment as being more appropriate for their future goals, and thus, the new educational/occupational environment may provide a better person-environment fit and offer opportunities for change in engagement (Eccles & Roeser, 2009, 2011).

Similarly, following the person-oriented approach, various homogeneous groups of North American middle-school students have been identified in line with the developmental trajectories of their engagement (Archambault, Janosz, Morizot, & Pagani, 2009; Janosz, Archambault, Morizot, & Pagani, 2008; Li & Lerner, 2011). According to these studies, most of the 12 to 16-year-old adolescent students followed moderate to high stable trajectories of overall and dimensional (e.g., cognitive, emotional, behavioral engagement) engagement. In their PYD study, Li and Lerner (2011) examined nearly 2000 adolescent students in grades 5th to 8th, and found out that the behavioral and emotional engagement developed differently across the school years (e.g., modest decreases occurred more often in students' emotional engagement), which also demonstrated the complexities of adolescent students' educational experiences. These results suggest that different components of student engagement are manifested as strengths among individual students, and further contribute to their positive development.

Importantly, in all these studies the stable, moderate, and high engagement trajectories were beneficial for students' future academic success and well-being, preventing depression and school dropout (Janosz et al., 2008; Li & Lerner, 2011). High behavioral and emotional engagement in school protected students from delinquent and risky behaviors. In addition, these trajectory groups differed in terms of gender, academic performance (Archambault et al., 2009; Janosz et al., 2008), socioeconomic status, and ethnicity (Li &

Lerner, 2011). For example, males and students from lower socioeconomic status families were more likely than females and students from higher socioeconomic status families to follow unstable school engagement trajectories often leading to school dropout (Archambault et al., 2009; Janosz et al., 2008; Li & Lerner, 2011). Similarly, among racial minorities, a cohesive racial identity was beneficial for students' engagement at school (Perry, 2008). Further, female students often experienced higher levels of overall engagement (Marks, 2000), emotional and behavioral engagement (Fernández-Zabala, Goñi, Camino, & Zulaika, 2016; Li & Lerner, 2011), and energy in their studies (Upadyaya & Salmela-Aro, 2015a), probably because female students show often higher academic achievement and belonging than male students (Bang, Won, & Park, 2020; Li, Chen, & Li, 2020).

In addition, within the person-oriented approach it is also possible to capture groups of students/workers who feel disengaged towards school or work and show lower or decreasing engagement trajectories (Ketonen et al., 2016; Symonds, Schoon, & Salmela-Aro, 2016; Watt, Carmichael, & Callingham, 2017). Some recent studies have also shown that among the generation of digital natives (e.g., the current generation of adolescents who are immersed in socio-digital activities from the very beginning of their lives) (Prensky, 2012) burnout and disengagement were increasing even among 12 years old students, which highlights the need for further study student engagement in a variety of contexts and developmental periods (Salmela-Aro, Moeller, et al., 2016; Salmela-Aro, Muotka, et al., 2016).

Student Engagement in Different Contexts

Engagement in studies/work always occurs in a larger social context that includes family, peers/coworkers, principles/management, and study/work environment (Eccles & Roeser, 2009, 2011; Engels et al., 2017; Furlong et al., 2003; Gonida, Voulala, & Kiosseoglou, 2009; Quin, Heerde, & Toumbourou, 2018). According to a

model on student engagement, social context, and academic success, student engagement is always tied to several social contexts simultaneously, which together with one's stage-environment fit also serve as a framework for students' engagement (Upadyaya & Salmela-Aro, 2013a). Mutual involvement between members of these different contexts, in turn, serves as an ecological asset, which further promotes PYD.

Concerning family characteristics, previous research has shown that parental involvement, affection, monitoring, and support promote engagement with studies/work (Englund, Egeland, & Collins, 2008; Garcia-Reid, Reid, & Peterson, 2005; Li, Lerner, & Lerner, 2010; Marks, 2000; Murray, 2009; Simons-Morton & Crump, 2003; Wang & Eccles, 2012). Similarly, authoritative parenting styles (e.g., high behavioral control and affect) may increase student engagement, which further reduces risk for school dropout (Blondal & Adalbjarnardottir, 2014).

Parents, teachers, peers, coworkers, and supervisors serve as sources of support for students/young adults by promoting high engagement, adjustment to transitions, and positive educational and vocational success (Englund et al., 2008; Gonida et al., 2009; Gonida, Kiosseoglou, & Voulala, 2007; Murray, 2009; Quin et al., 2018; Vasalampi, Salmela-Aro, & Nurmi, 2009). In the school context, teachers' autonomy support and enthusiasm often have positive consequences on student engagement (Watt et al., 2017; Yu, Li, & Zhang, 2015). Parental autonomy support and social support may serve as an environmental protective factor, and the more sources of social support one has, the higher the positive outcomes and engagement (Duineveld, Parker, Ryan, Ciarrochi, & Salmela-Aro, 2017; Kosic, Wiium, & Dimitrova, *this volume*; Rosenfeld, Richman, & Bowen, 2000). Multiple sources of support may serve as ecological assets for adolescent students and together with high engagement in studies (i.e., adolescents' strength) will promote PYD and successful school-to-work transition, which is a precursor of successful career development (Pinquart, Juang, & Silbereisen, 2003). Educational and occupational transitions are also optimal time peri-

ods for interventions designed to prevent possible decreases in engagement and to support PYD and students' and young adults' overall adjustment to the new educational and vocational environments (Salmela-Aro et al., 2009).

Engagement and Well-Being

Together with support provided by different contexts (e.g., parents, teachers), engagement as an individual strength leads to PYD and well-being (Bradley et al., [this volume](#); Geldhof et al., 2015). Continuum of high engagement may also develop in parallel with youth's well-being, study- and work-related well-being (e.g., life satisfaction, career satisfaction), resources (e.g., social support), and environmental characteristics (e.g., educational and occupational transitions). For example, it has been found that high engagement in studies co-develops with life-, and career satisfaction (Upadyaya & Salmela-Aro, 2015b, 2017), and perceived support from others (Green, Rhodes, Hirsch, Suárez-Orozco, & Camic, 2008).

Moreover, parallel changes often occur in engagement and other indicators of well-being. For example, among Finnish late adolescents, it was found that during secondary education, career satisfaction was typically higher than engagement, whereas after the transition to higher education/work, career satisfaction slightly decreased and engagement slightly increased, probably reflecting students' high investment in studies or work, and simultaneous new challenges they encounter (Upadyaya & Salmela-Aro, 2017). Related findings among Icelandic adolescent students showed that student engagement forms positive reciprocal associations with intentional self-regulation (i.e., adolescent strength), which helped students to obtain long-term goals and self-development (Stefansson, Gestsdottir, Birgisdottir, & Lerner, 2018). These findings are in line with the developmental contextual view of PYD (Geldhof et al., 2015) and highlight the importance of taking into account the parallel development of different personal- and study- or work context specific characteristics (i.e., ecological assets),

individual strengths (i.e., student engagement), PYD, and well-being simultaneously (Dimitrova et al., [this volume](#); Dimitrova & Wiium, [this volume](#)).

Spillover and positive development between engagement and other indicators of well-being can also be examined within the broaden-and-build theory. According to this theory, students who are satisfied with their studies and life, and experience frequent positive emotions, will exhibit adaptive coping behaviors, feel more engaged, and gain more resources (e.g., resilience) (Fredrickson, 2001). These resources, in turn, will promote positive upward spirals of success at studies or work. Following the broaden-and-build theory, positive continuum can often be found between school engagement and well-being (Aydinli-Karakulak, Baylar, Keleş, & Dimitrova, 2018). For example, students/young adults who are highly satisfied with their lives value their education more, experience high levels of cognitive engagement (Lewis et al., 2011), and feel more energetic, absorbed, and dedicated in their studies or work (Upadyaya & Salmela-Aro, 2017). Students with high level of engagement and study-related energy, in turn, seldom suffer from depressive symptoms (Bang et al., 2020; Olivier, Morin, Langlois, Tardif-Grenier, & Archambault, 2020) and experience high life satisfaction (Koyuncu, Burke, & Fiksenbaum, 2006; Lewis et al., 2011) and academic well-being (Paloş, Maricuţoiu, & Costea, 2019).

Cognitive engagement and dedication in studies/work is positively reflected in one's life-work and study satisfaction (Lewis et al., 2011), reducing also psychosomatic symptoms (Koyuncu et al., 2006). It is possible that students who experience high dedication and cognitive engagement in studies value highly education (Lewis et al., 2011), which further shows in their study/work/life satisfaction. Moreover, engaged students often experience positive emotions (Reschly, Huebner, Appleton, & Antaramian, 2008), which further promote openness to career-related opportunities (Cropanzano & Wright, 2001) and may lead to high satisfaction in multiple areas of life.

Further, high engagement in studies/work may protect against burnout and depressive symptoms, and promote students' and workers' subsequent well-being, life satisfaction, personal growth and learning (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Fiorilli et al., 2017). This is also in line with the PYD model being negatively associated with problem behaviors and ill-being (e.g., depression, risky behaviors). Past research has shown that students may suffer school-related burnout, which affects their overall well-being. Burnout symptoms can be described as exhaustion, cynicism, and a sense of inadequacy with regard to school (Salmela-Aro et al., 2009), all of which negatively impact adolescents' subsequent engagement in studies and work (Salmela-Aro & Upadyaya, 2012).

Relatedly, high student engagement can also be associated with burnout, as some students who experience high engagement reported simultaneously a high exhaustion and scarce educational achievement (Maslach, Schaufeli, & Leiter, 2001; Salmela-Aro & Read, 2017; Tuominen-Soini & Salmela-Aro, 2014). For example, students who simultaneously experience high engagement and exhaustion felt more exhausted than students who experience engagement but no exhaustion (Salmela-Aro & Read, 2017) and felt more stressed because of their high educational aspirations. These students were more worried about possible failures, and more willing to give up when faced with academic challenges (Tuominen-Soini & Salmela-Aro, 2014). However, despite various changes in students' engagement and well-being, most students experienced high engagement and well-being and only a small proportion reported low engagement and adjustment problems (Tuominen-Soini & Salmela-Aro, 2014). Yet, it would be important to take into account various aspects of student's personal- and school context-specific well-being and related resources in future studies (e.g., life satisfaction, burnout and depressive symptoms). For example, factors such as academic buoyancy, grit, belongingness, and social engagement can protect students from study-related stress and promote engagement (Salmela-Aro &

Upadyaya, 2020). More studies would be needed to examine lack of ecological assets and personal resources of students who regardless of high engagement experience burnout and ill-being, and the ways researchers and educators could promote their positive development.

Conclusions

The findings of the reviewed North American and European work in this chapter show rather similar directions indicating that a variety of moderate to high stable study/work engagement pathways are the most beneficial for one's well-being and PYD (Archambault et al., 2009; Li & Lerner, 2011; Upadyaya & Salmela-Aro, 2013b). As the findings of the presented studies are rather similar, it is reasonable to assume that high student engagement serves as an individual strength leading to PYD in other cultural contexts not reviewed in the present chapter. Such evidence also shows that most students experience a high level of engagement over time and a smaller number of students and young adults belong to less favorable trajectories (Li & Lerner, 2011).

High engagement in studies is an important aspect of adolescents' strengths, and facilitates their adjustment to educational and occupational transitions as well as adolescent students' and young adults' self-development, goals, and orientation to their future career paths (Stefansson et al., 2018). The wide range evidence presented in this chapter brings new knowledge in the field by showing that student engagement is a relevant individual strength leading to PYD and well-being. In addition, the chapter highlights the importance of examining student engagement as an individual's strength, which becomes especially important during educational and occupational transitions in young adulthood. Parents' and teachers' autonomy support, affection, and social support from various sources are relevant protective factors for student engagement to further promote PYD and adaptation to educational and occupational transitions (Duineveld et al., 2017; Upadyaya & Salmela-Aro, 2013b; Yu et al., 2015).

Further, study/work engagement pathways often co-occur with other indicators of general or context-specific well-being (e.g., life satisfaction, career satisfaction, personal and environmental resources, support) (Green et al., 2008; Mäkikangas et al., 2010; Upadyaya & Salmela-Aro, 2015b). Well-being (or ill-being) in one area of life is often reflected in other areas of life (Symonds et al., 2016; Upadyaya, Vartiainen, & Salmela-Aro, 2016), leading to various positive or negative gain cycles. During the transition to higher education/work, student engagement may function as an individual's strength, which facilitates PYD in multiple ways including various aspects of well-being, adjustment, and career decision making.

Implications for Research, Policy, and Practice

The present chapter focused on adolescent students' and young adults' transition to higher education/work, however, more research would be needed to examine the development of engagement across different educational transitions, among students from various cultural and socioeconomic backgrounds, and in association with other elements of individual strengths such as intentional self-regulation, hopeful future expectations (Fernandes, Fetvadjev, Wiium, & Dimitrova, *this volume*). Moreover, the combined effect of various individual strengths (including school engagement) on PYD could be studied further, taking into account the role of ecological assets, such as different social networks among youth (Wiium & Dimitrova, 2019).

In addition, this chapter reviews recent research showing that students' disengagement is increasing and some students who experience high engagement simultaneously report high exhaustion and reduced well-being (Tuominen-Soini & Salmela-Aro, 2014). Therefore, it would be important to examine students' engagement and disengagement conjointly (Salmela-Aro, 2015, 2017). Similarly, future research would be needed to better identify the processes leading to

disengagement and to plan interventions to prevent low and decreasing engagement trajectories among students and young adults (see also Symonds et al., 2016). For example, changes in engagement occur especially during educational and vocational transitions, which offer students and workers opportunities for change in their engagement (Li & Lerner, 2011; Upadyaya & Salmela-Aro, 2013b, 2015b).

As to policy, one possible way to facilitate the continuum of engagement among adolescent students and young adults would be to develop innovative transition programs for deeper understanding of one's study and career possibilities (Vinson et al., 2010), and to enhance students' career exploration (Perry, 2008). These transition programs could incorporate a wide range of novel, innovative, and traditional activities (e.g., small group tutoring, research projects, google mapping) with an emphasis on clarifying future possibilities and purpose of study courses and activities for students (for more examples see Vinson et al., 2010). Moreover, facilitating students' intrinsic career values and work goals prior to the transition to higher education/work may also enhance late adolescents' engagement and preparedness in further studies/work (Hultell & Gustavsson, 2011; Salmela-Aro, Mutanen, & Vuori, 2012; Sortheix, Dietrich, Chow, & Salmela-Aro, 2013). Teachers and educators could incorporate such programs in their own teaching and thus support students' successful transition to higher education/work.

In addition, the separate engagement components may have different emphasis and importance among individual students and at different educational phases, and more targeted interventions could be planned to support individual students (see also Watt et al., 2017). Similarly, students with high/low/transitory engagement profiles may benefit from diverse support and interventions. Based on the engagement research, instead of focusing on students' academic outcomes, educators and policymakers could together find tools to provide support on students' engagement, which would easily reduce dropout and show as increases in graduation rates (see also Janosz et al., 2008).

Further implications for practice regard students who typically report high behavioral but low emotional and cognitive engagement and may benefit from increasing the meaningfulness of learning and the tasks they encounter, whereas students who score high in emotional engagement may be encouraged and provided more support to participate frequently in class (Caraway, Tucker, Reinke, & Hall, 2003; Fredricks, 2011). Similarly, students who experience decreases in their engagement during the transition to higher education or work may benefit from tools to facilitate their adaptation to the new educational/occupational environments (e.g., peer support, help in navigating the labour market, goal support) (Haase, Heckhausen, & Köller, 2008). Thus, it would be important for future research, policy and practice to address the multiple facets of school engagement and students' psychological experiences, and to create a positive social-emotional learning environment (Archambault et al., 2009; Chase, Warren, & Lerner, 2015).

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Capitalizing on Classroom Climate to Promote Positive Development

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Abstract

Although many conceptualizations of classroom climate exist, one view is that it involves individual and group level interactions in a classroom with teachers and students, as well as interactions among students. Classroom climate is important to academic and social aspects of student learning and development. The research literature on classroom climate has largely been advanced by educational and public health theory and research. This chapter presents a novel pairing of ideas and evidence about classroom climate and the field of Positive Development (PD). From a PD perspective, the classroom is a setting, which has the potential to confer an array of resources to youth. To this end, we present Goals, Attitudes, and Values in School (GAVIS) as an illustration of a research program in Sweden that demonstrates how PD theory and the study of classroom climate can intersect. Future empirical work of classroom climate taking into

consideration the intersections with PD theory and research will open up new avenues for intervention and improvement of classroom climate, as well as more effective and frequent multidisciplinary collaboration within classrooms as a key ecology of youth development.

Keywords

Positive development theory · Ecological resources · Classroom climate · GAVIS · Sweden

Schools offer possibilities for benefiting or harming children, as does the classroom context embedded within the schools. Schools and classrooms represent complex ecologies for human development. These contexts are further embedded in and interacting with history including the zeitgeist of the moment and legacies from the past, as well as cultural sensibilities about what a particular society deems as pressing in the mission of schools and what is vital to preparing the next generation of adults. For the individual student, the classroom is the main context where this preparation occurs. The classroom is where the

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majority of both academic and social learning takes place. Yet, research has historically focused primarily on school environment and climate rather than classroom climate (Thornberg, Wänström, & Jungert, 2018).

With a multidisciplinary spirit, this chapter makes a novel pairing of ideas and presents evidence from what is known about classroom climate, a field largely advanced by educational and public health theory and research, and the field of Positive Development (PD), usually seen through the prism of principles and ideals of developmental science (Tolan, Ross, Arkin, Godine, & Clark, 2016). Contexts are important to positive developmental theories but are less often measured and thus receive short shrift in the extant evidence base about Positive Youth Development (PYD). Historically, PYD has had a strong focus on theory (for new PYD conceptualizations see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)) and measurement (Chen, Wiium, & Dimitrova, 2018, 2019; Kozina, Wiium, Gonzalez, & Dimitrova, 2019; Wiium, Ferrer-Wreder, Chen, & Dimitrova, 2019) about the individual young person by mapping positive attributes, qualities, and strengths (Dimitrova, Sam, & Ferrer-Wreder, 2021; Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#)). This chapter makes a clear conceptual and methodological contribution to the PYD field by highlighting the availability and utility of already existing theory, research knowledge, and assessment tools in the educational field that are geared to better understanding the ecological resources within educational contexts and how young people interact with these contexts to advance their development and learning (Dimitrova, 2018; Kotic, Wiium, & Dimitrova, [this volume](#); Wiium & Dimitrova, 2019). By integrating knowledge within different disciplines, this chapter aims to encourage greater cross-fertilization of ideas and methods across fields that are concerned with youth (Dimitrova & Wiium, [this volume](#)) and as a byproduct provide a catalyst to greater emphasis on theory and methods that better capture the affordances for

development provided by key contexts within schools and classrooms.

With the aim to offer an overview of the concept of classroom climate, this chapter begins with a short presentation of previous research followed by definitions, dimensions, and interventions that concern classroom climate. In the next section, we integrate the field of classroom climate and PD theories to clarify the potential benefits of integrating these two concepts. We then present an illustrative case from Sweden that concerns a program of research focused on better understanding and measuring classroom climate. Finally, we discuss how the intersection of PD theory and classroom climate can advance future research, policy, and practice.

Research on Classroom Climate

School climate and classroom climate are constructs that are closely related to each other and indeed complementary (Fraser, 1991; Khalfaoui, García-Carrión, & Villardón-Gallego, 2020; Wang, Degol, Amemiya, Parr, & Guo, 2020). Yet, there is no consensus on the definitions of either of these constructs. Current frameworks highlight the relatively complex and multidimensional structure of school climate as comprising of different indicators. School climate has been defined as the beliefs, values, and attitudes shared between students and school staff that shape their mutual interactions as well as individual perceptions of moral, relational and institutional aspects and acceptable behavior and norms of school life (Grazia & Molinari, 2020; Kuperminc, Leadbeater, Emmons, & Blatt, 1997). Besides these indicators, student and teacher behavior, instructional quality, teacher support, autonomy or student participation in decision-making, instructional improvement, student motivation, parental involvement, professional development and school leadership are also used as measures of school climate (Rohatgi & Scherer, 2020; Wang & Degol, 2016).

Similarly, classroom climate represents a multidimensional concept comprised of several perspectives and indicators (Pianta &

Hamre, 2009; Wang, Hofkens, & Ye, 2020). Classroom climate has been defined as the sum of all group processes in the interactions between teachers and students, as well as among students in a classroom (Schmuck & Schmuck, 2001; Wang, Degol, et al., 2020). Classroom social atmosphere (Johnson & McClure, 2004) or social-psychological environment for learning (Fraser, 1994) are constructs that have been used as general descriptions of classroom climate. Despite variety of operationalizations, the importance of school and classroom climate to well-being of youth has been widely demonstrated (Bradley et al., 2018; Dimitrova, Ferrer-Wreder, & Ahlen, 2018; Kashy-Rosenbaum & Aizenkot, 2020; Wang, Degol, et al., 2020).

How do classroom climate and positive development coincide? PD, as a research field is characterized by many allied, yet also in some ways distinct views on what PD consists of, how it works, and develops over time (see Catalano et al., 2019; Lerner, Lerner, Bowers, & Geldhof, 2015; Tolan et al., 2016 for overviews and comparative analyses of several PD theories). PD theory and like-minded conceptual approaches are united in their shared concern for better understanding of predictors and indicators of success, experiences of positive functioning, component behaviors, and capabilities (Tolan et al., 2016). Relatedly, diverse PD perspectives see classroom climate as the setting or ecology of conferring an array of resources to youth, including relational and experiential opportunities. Classroom climate represents an enabling environment (Catalano et al., 2019) or an external asset in the developmental assets model (Sesma, Mannes, & Scales, 2013).

The debate on which environmental resources promote PD suggests overlaps and distinctions on these resources. A synthesis of PYD constructs targeted for change in interventions and enabling environment offer youth opportunities to feel safe and valued, connect with others, get involved and be recognized as competent or leaders in socially valued activities (Catalano et al., 2019; Eichas, Montgomery, Meca, Garcia, & Garcia, 2021; Ferrer-Wreder et al., [this volume](#);

Kaniušonytė & Truskauskaitė-Kunevičienė, [this volume](#); Kozina, [this volume](#); Larsen & Holsen, [this volume](#)).

Classroom Climate: Definition, Measures, and Interventions

In most research, the addressed dimensions of classroom climate are (1) interpersonal relationships (involvement, affiliation, and support); (2) goal orientation (task orientation and competition), and (3) system maintenance and change (order and organization, rule clarity, teacher control, and innovation) (Beld et al., 2018). Kaplan Toren and Seginer (2015) identified classroom social-psychological environment for learning (Fraser, 1994), classroom quality (Pianta, La Paro, & Hamre, 2008), learning environment (Fraser, Aldridge, & Adolphe, 2010), social climate (Allodi, 2010a), and classroom emotional climate (Avant, Gazelle, & Faldowski, 2011) as processes that researchers have focused to study classroom climate. Yet, the literature on classroom climate reveals that there is still a need for a more precise framework that is clear and comprehensive (Rudasill, Snyder, Levinson, & Adelson, 2018).

Due to a lack of consensus on defining classroom climate, there is a little agreement guiding the measurement of classroom climate (Rudasill et al., 2018). Researchers have measured classroom climate and its components using a variety of methods (Rowe, Kim, Baker, Kamphaus, & Horne, 2010). Some using direct observations performed by trained observers (Brophy-Herb, Lee, Nievar, & Stollak, 2007) and others collecting data on teachers' perceptions of classroom climate using interviews (Mucherah, 2003). Several instruments have been developed to measure student perceptions of classroom climate, such as the Learning Environment Inventory (Fraser, Anderson, & Walberg, 1982), the Classroom Environment Scale (Moos & Trickett, 1987), the Constructivist Learning Environment Survey (Taylor, Fraser, & Fisher, 1997), and the Classroom Life Instrument (Johnson, Johnson, & Anderson, 1983).

The majority of the research literature on classroom climate focuses on theory and measurement development, as well as how climate relates to other constructs. There are few interventions explicitly focused on improving classroom climate. Aspects of classroom climate are however used as an outcome variable in some universal interventions. Examples of such studies are the Norwegian evaluation of the School-Wide Positive Behavior Support model, which showed positive effects on classroom learning climate (Borgen, Kirkebøen, Ogdén, Raaum, & Sørli, 2020; Lee & Gage, 2020; Sørli & Ogdén, 2015). Another example is the evaluation of the Happy Classroom Program developed and tested in Spain, indicating that the intervention was associated with an improved classroom climate (Lombas et al., 2019).

In summary, the field of classroom climate is diverse in focus to theory, measurement, and intervention. Although classroom climate has been explored to a lesser extent than school climate, its significance in relation to other key constructs has been widely established. However, advancements in the field are likely to come from greater consensus building and theory development informed by measurement that clarifies the essential elements and processes involved in classroom climate.

What PD Theories and the Field of Classroom Climate Have to Offer Each Other

Some PD theories or approaches encompass the school milieu, including classrooms within the developmental assets framework (Syvertsen, Scales, & Toomey, 2019) and the relational developmental systems model concerning the 5Cs of PYD of confidence, competence, character, connection and caring (Lerner et al., 2015). However, the extant PD research literature is predominated by scholarly attention to the measurement of thriving (e.g., contribution to one's self-development and community; Desie, 2020) and resources or assets of young people (e.g., positive identity, socio-emotional

competence, confidence, character, optimism; Dimitrova et al., 2017; Geldhof, Bowers, & Lerner, 2013; Kosic et al., [this volume](#)). If resources within contexts are measured in a present day PD study, it is typical that the measurement of context is based on the perspective of youth (i.e., youth reported). Observational measures of classroom climate are not uncommon and can provide a head start to empirical efforts to map out ecological resources in PD inspired research. Indeed, it has been noted that further consideration is needed to the assets and developmental opportunities in these contexts in order for researchers to further elaborate the role of ecological features in PYD (Lerner et al., 2015).

Some PD theories such as the 5Cs (Lerner et al., 2015) and the Stage-Environment Fit (Eccles & Roeser, 2009) put substantial emphasis on the relations between unique and changing individuals and their unique and changing environments paired with the recognition of bi-directional influence between persons and contexts as well as the possibility of pairings or fit between persons and contexts. Youth are more likely to experience positive outcomes when the environments they develop in respond to their changing needs (Lerner et al., 2015). Thus, some lessons learned from PD theories that emphasize person-context fit can be especially suited to where young people are at in their development. Such development may also depend on what structural challenges or privileges youth are afforded in their culture, as well as the particular configuration of young people's strengths and experiences or exposure to risk and harm (Tolan et al., 2016).

The implication of person-context fit as a way to understand PD for the study of classroom climate is that the benefits for students in a classroom may have shared commonality or experience but can also have aspects aligned to what students need (i.e., non-shared or child specific benefits; Tolan et al., 2016). For example, some children may particularly benefit from a sound student-teacher relationship, while others may respond to and especially thrive when they have the opportunity to engage in a supportive

and safe peer culture (e.g., children with prior experiences of frequent social withdrawal or bullying victimization). Other children may experience a cumulative benefit for a relatively well-structured, safe, and caring classroom climate (Huskins, Sanborn, Jackson, Skelton, & Thorius, 2020).

An Illustrative Case: Measuring Classroom Climate in Sweden

In order to demonstrate how PD theory and the study of classroom climate can intersect, a specific illustration of an ongoing research program conducted in the Swedish elementary school context is given here. The Swedish national curriculum for compulsory school emphasizes the creation of the best conditions for student development, thinking, and acquisition of knowledge (Hansson, Hansson, Juter, & Redfors, 2020; Skolverket, 2018a). Furthermore, the school's role of fostering students' sense of security and self-esteem is stressed (Barbareev & Nikova-Cingulovska, 2020). The curriculum also highlights schools' function to convey culturally important norms and values such as the equal rights of all individuals and the importance of empathy (Skolverket, 2018a).

Equity is a basic principal for the Swedish school system. Education and all related activities should not in any way generate costs for the students' family. Equal access to education for all children has been fundamental to the educational system. Even so, over the last decades, the educational policy has been strongly influenced by the principles of the New Public Management (NPM), which promotes strategies and practices for effective results. NPM is characterized by management models that emphasize decentralization, standardization, management by objective, documentation, control, and competition. This focus on technical managerial and economic values may have weakened the prerequisites for teachers to fulfil the core professional values that support children's development and learning emphasized in the curriculum, and had unin-

tended spin off effects on the classroom climate (Allodi, 2017).

The rationale for the implementation of these educational reforms was based on the principles of NPM, and not on children's needs. Thus, these reforms have changed the Swedish educational system fundamentally, making schools less equitable, with marginalization and wider performance gaps of students (Skolverket, 2018b) along with concurrently increasing mental health problems among children and young people (Folkhälsomyndigheten, 2014; Hagquist, 2015; Socialstyrelsen, 2013). In the present day educational system, which is in part a product of these reforms, goals other than the humanistic values of inclusive education and attention to children's needs are valued. Yet, these aspects are not focused upon when evaluating educational outcomes in Swedish schools, and are at risk of being lost.

The lack of a well-established evidence base on classroom climate in Swedish schools underscores the importance of the research program described in the next section. The assessment of different features of learning environments, aligned with the international literature on classroom climate and PD theory, as done in the present research program, can contribute to make more evident the humanistic values and goals that still exist within Swedish classrooms, even when schools must contend with wider societal goals for education, sometimes rooted in contradictory NPM principles. The relevance of research focusing on socio-emotional aspects of the educational context is also confirmed by the impact of teacher relational competence on students (Aspelin, 2012) and classroom climate on bullying (Thornberg et al., 2018; Thornberg, Wänström, Pozzoli, & Hong, 2019).

A Research Program on Classroom Climate with Multiple Perspectives: GAVIS

An ongoing research program called Attuned Learning Environments Responding to Needs, over the course of many years, has specifically

focused on Swedish classroom climate from multiple vantage points based on several complementary PD theories. The project is guided by a conceptual model of classroom climate called Goals, Attitudes, and Values in School (GAVIS). GAVIS refers to conceptualization and measurement tools conceiving social climate in the classroom as shaped through relationships among students and between teachers and students. The social climate in the classroom is also regarded as important to students' self-concept, motivation, and achievement. In the relationships within the class, students experience emotions that modulate how they experience school, which can be important to their well-being and learning. GAVIS is further operationalized as having ten dimensions of creativity, stimulation, learning, self-efficacy, safety, control, helpfulness, participation, responsibility, and influence (Allodi, 2010b). This model has been employed to evaluate the social climate and strengthen the work with the social and emotional aspects of learning in classrooms.

GAVIS was developed by analyzing written texts (Allodi, 2002) produced by students who were asked to write "all about your school", a task employed previously by Jones (1995). In a study conducted by Allodi (2002), 185 participants from 38 classrooms in 16 schools and 10 municipalities (90 had special educational needs) completed this task. Age range of participants was 7 to 17 years with the majority between 8 and 13 years. The texts were analyzed with narrative approaches to gather a picture of the student's experiences and of what they were willing to tell.

The text analyses identified relevant values by looking at what was evaluated positively and ways of solving problems. Because some problems and values were presented exclusively in texts of participants with special educational needs, a reflection was that it is important to gather views of different experiences, when the aim is to identify ecological resources and shortcomings in classroom and school contexts. Indeed, some key features may be experienced only by a few students, but are still of importance. The approach to capture diverse students' experi-

ences is consistent with PD theories emphasizing the unique person-context interactions as well as the notion of developmental fit (Tolan et al., 2016).

Themes identified in this study were compared with the theory of universal human values, which defines values as desirable goals reflecting basic human needs and inspire human actions and choices (Schwartz, 2012). Ten values are structured in a quasi-circumplex model around four poles. Self-transcendence is opposed to self-enhancement and openness to change is opposed to conservation. Self-transcendence is represented by the values of benevolence and universalism. Self-enhancement is represented by hedonism, achievement, and power. Openness to change is represented by self-direction; stimulation and conservation are represented by security, conformity and tradition. This structure seems to capture recurrent features with which to look at an array of social human activities such as the focus on individual and/or on the group, the appreciation of stability and/or of change (Schwartz, 2012).

In summary, the theoretical and empirical research surrounding GAVIS, aims to identify and validate relevant content of students' experiences to strengthen existing resources within classrooms and the wider school climate. In essence, GAVIS is a product of empirical input, that is, the experience and views of students with relevant theories of human needs, values, and what is known about the creation of developmentally appropriate contexts for learning (Allodi, 2002). This parallels the importance in the PD field of lifting up young people's voices and valuing their contributions to themselves and others.

On the basis of Allodi's (2002) study of school experience descriptions, the GAVIS conceptual model was further developed and operationalized with a proper student questionnaire (Allodi, 2007). The questionnaire was tested in a sample of 644 students from 42 classes in 17 schools. A series of confirmatory factor analyses supported the model with the hypothesized ten factors and three higher-order correlated factors, named self-expression, self-affirmation, and sociality. The three higher-order-factors structure mirrored the

basic needs and sources defined by the self-determination theory such as autonomy, mastery, and relatedness ([SDT]; Ryan & Deci, 2020). The contents of the questionnaire were largely similar to those of other instruments, with some components (i.e., creativity, stimulation, influence) that can be viewed as innovations. These pertain to the higher-order-factor defined as self-expression, which contents corresponded to the notion of autonomy as proposed in the SDT. These components may be less natural to emphasize in the school context, because educational goals may tend to direct and constrain the development of students in a certain and predetermined direction. Yet, components, such as stimulation, creativity and influence may emerge as vital and positive, consistently with PD theories emphasizing ecological resources (e.g., constructive use of time and creative activities in the developmental assets and the 7Cs models of PYD; Dimitrova, Fernandes, et al., [this volume](#); Sesma et al., 2013).

Further studies operationalizing the GAVIS model posed the basis for a line of inquiry on the development of a teacher reported questionnaire focused on the measurement of the same ten GAVIS components (Allodi, 2007). The teacher questionnaire has been piloted in several smaller scale studies (Allodi, Bredwad, & Wikman, 2018; Allodi, Sundbom, & Yrwing, 2015). Current work with the GAVIS model is focusing on the development of a new classroom observation in Swedish primary schools. The strength of this line of research aims to promote GAVIS as a basis of student's experiences of value also consistent with PD theories that emphasize youth agency and the 5Cs of PYD that are anchored and further developed in light of relevant and empirically tested theories.

It is important to note that classrooms can be a rich and potent enabling context for PD from a global standpoint. Classrooms exist all over the world. The relational importance of classrooms and their potential to inspire creativity and constructive use of time (Sesma et al., 2013), as well as providing opportunities for youth to feel supported and connected (Catalano et al., 2019; MacLeod, Yang, & Shi, 2019) are likely to be

universal in their importance. This chapter presents a Swedish empirical example of the GAVIS model. This model is in part developed in a particular historical and cultural moment within Sweden, marked by substantial recent structural changes to the schooling system. Such changes in the aims and resources for schools may not generalize to other school systems and nations where the NPM principles have not deeply taken root.

Implications for Research, Policy and Practice

There is a need for greater attention to theory development, measurement, and systematic promotion of ecological resources for PD. This chapter is novel because it is one of the first to illustrate the promise of multidisciplinary research to make more intentional use of the natural intersections between PD theory and traditional education research on classrooms and schools as illustrated by the GAVIS model. Researchers can benefit from this chapter as it provides support for being informed and take into consideration intersections with PD theory in empirical studies of classroom climate. The application of the approach suggested in this chapter further advances the understanding of person-context fit in the PD research literature.

An organizing metaphor for this chapter is that of equifinality usually applied in reference to how individual lives or trajectories of individual development can come together from different starting points. In developmental psychopathology, equifinality is a principle of development referring to ending up a similar state or life outcome (e.g., being incarcerated, completing higher education), but reaching that outcome from very different beginnings (Cicchetti & Rogosch, 1996; Schwartz et al., 2020). We use the equifinality here more metaphorically applied to theories and ideas and not individual lives or lines of human development. Like individual lives, different scientific fields also have unique origins, aims, concerns, methods, and pathways that lead to knowledge advancement and multiple disciplinary lines of research addressing complex and per-

sistent challenges and questions (Stirling, 2014). A final implication for research is that this chapter provides an illustration of what can be gained from reflecting on disciplinary synergy in one particular area of inquiry (i.e., classroom climate), but this synergy is likely to apply widely to a diversity of important constructs in PD theory.

In Sweden, as in many other countries, school policy has been strongly influenced by the New Public Management (NPM). From this perspective, evaluation of economic efficiency, standardization and objective management is emphasized. Documentation, control and competition become a central aspect of the educational system. Based on these principles, NPM rather than the basic values of the curriculum can be assumed to become the guiding and organizing principle for the educational system. Thus, the approach presented here offers to policy makers an alternative theoretical starting point that emphasizes the child, classroom climate and teacher's professionalism, rather than financial principles. For policy makers, the multidisciplinary research approach as well as GAVIS, offer multiple perspectives on the complex organization of schools. In terms of practical implications, these perspectives can also provide an alternative view on the development of evaluation strategies.

PD theory and educational research on classroom climate have relevant impact on practice. For practitioners, the approach presented in this chapter serves as a theoretical starting point by offering applications for daily school activities focusing on student's strengths and resources within the classroom climate. We believe these concepts and their integration, as introduced in the chapter, can provide a more detailed vocabulary for teachers and students to be able to name what they need. In addition, these concepts highlight the psychological and social benefits that can come from a supportive classroom and school (Acosta, Chinman, & Phillips, *this volume*; Bradley, Ferguson, & Zimmer-Gembeck, *this volume*). As noted by Allodi (2007), if the characteristic of a learning environment is assessed by tools based on common-sense, subjective or intuitive feelings, there is a risk that this will lead

to arbitrary or inconsistent evaluations. In their work, teachers need to be supported by a definition of a good learning environment that is refined and discussed on the basis of relevant theories and cumulative knowledge (Allodi, 2007).

In conclusion, doing right for young people in terms of their education and development is an intricate, complex, and longstanding global challenge that will always take more than one scientific discipline and community of practice. What it means to reframe or to rededicate one's work and professional practice to take an explicit and intentionally positive approach to child and youth development is incrementally being felt across a variety of fields, such as educational research. Opportunities exist for a better convergence of knowledge and coordinated action across fields of education, special and health education, public health, school psychology, counselling, positive youth development, prevention and intervention science to foster health, welfare, and education in school and classroom ecologies.

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Youth Participation in the Dream School Program in Norway: An Application of a Logic Model of the Six Cs of Positive Youth Development

Torill Bogsnes Larsen and Ingrid Holsen

Abstract

School is a crucial setting for stimulating Positive Youth Development (PYD). The Dream School program in Norwegian upper secondary schools aims to improve the psychosocial learning environment and promote mental health through greater student involvement, and foster an inclusive culture as a whole. By applying a logic model of PYD to the Dream School program, this chapter describes the theory behind the six Cs of PYD, and the impact and challenges of involving youth as peer mentors in the program. The peer mentors experienced positive feelings of helping other students, and developed social and leadership skills in the classroom and in the school premises. Evaluation of the mentoring role indicated that to move beyond merely token participation and involvement, it is crucial for all adults to listen to student voices and see them as a resource that can contribute to a positive learning climate in the schools.

Keywords

Positive youth development · Peer mentors · Dream school program · Youth participation · Norway

Empowering young people through Positive Youth Development (PYD) is an important goal for future societal development, as well as for young people themselves. However, descriptions of youth development programs are often brief, and mainly concern the effects of the program rather than the theoretical foundations and the process of empowering young people. The novel contribution of this chapter is to provide a thorough description of a Norwegian PYD program (the Dream School) and its impact presented in a logic model. The model includes the program elements, the pedagogical methods, and the practical application of the six Cs of PYD with a particular focus on the experiences of being a peer mentor in the program. Thus, the first part of the chapter presents the Norwegian context and school setting, the Dream School program, followed by qualitative findings of the impact of the

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program on peer mentors' contribution. We then outline implications for research, policy and practice.

The Norwegian Context and School Setting

Norway, situated in Northern Europe, is a small but rich country in the global context with approximately 5.3 million people, a Growth National Product (GNP) per inhabitant 50% higher than the European Union (EU) average, and an unemployment rate of 3.9% (Statistics Norway, 2018a). Currently, there are approximately 450,000 youth aged 13–19 years. The proportion of immigrants in Norway is 14%, or 750,000 people of whom approximately 30,000 are aged 16–19 years (Statistics Norway, 2018b).

Norway is a unitary state with well-developed welfare services and benefits system, characterized by a social democratic welfare state model (van Kersbergen & Metliaas, 2020). Compared to other countries, Norway should have robust conditions for positive development owing to its fundamental welfare state ideas, but the country has also been at the forefront in recognizing international conventions on humanitarianism, solidarity, equal rights and opportunities, and justice (Aadnesen & Hærem, 2007). The Norwegian school system secures equal rights for every child, independent of social class, gender, age, religion or ethnicity. These core values are based on the UNESCO's Salamanca Declaration and the UN Convention on the Rights of Persons with Disabilities, ratified in Norway in 2013 (Danielsen, 2017). Since 1994, all students have been granted free entry to upper secondary schools, and nearly all youth in Norway attend upper secondary school. This makes upper secondary schools an important context for stimulating positive youth development. Nevertheless, interventions addressing positive youth development in Norway at this level are rare, and recent reports indicate a need for such interventions in light

of high school dropout rates, increasing mental health problems and school stress (Eriksen, 2020; Thomas & Hennem, 2020; Vedøy, Anderssen, Tjomsland, Skulberg, & Thurston, 2020).

The School Setting Is Important for Empowering Youth

Given the strong link between education, health, positive development and success in life, schools are one of the most important settings for stimulating positive development (Ginner Hau, Ferrer-Wreder, & Westling Allodi, *this volume*; Larsen, 2016). Engaging young people's own resources can enhance their sense of motivation and belonging to their schools, which can improve their well-being and prevent school dropout (Bradley, Ferguson, & Zimmer-Gembeck, *this volume*; Scales et al., 2016; Upadyaya & Salmela-Aro, *this volume*). Relatedly, schools in Norway aim to promote a good psychosocial environment, where students can experience participation, autonomy, security and social affiliation (The National Education Act, 2017).

Yet, many secondary school environments, especially in large U.S. public schools do not respond sufficiently well to adolescents' growing needs for autonomy and capacities for participation and leadership (Ozer & Douglas, 2015). Consequently, this developmental mismatch may result in fewer opportunities for adolescents to participate in the decision making process at school. There are similar findings from Norwegian secondary schools (Lillejord et al., 2015), where protective factors for youth (e.g., opportunities for prosocial involvement in school and the community and interactions with prosocial peers) were found to decrease in middle school, but increase upon transition to high school, when the students again become the youngest in their schools (Kim, Oesterle, Catalano, & Hawkins, 2015). The evidence base in Norway has emphasized the importance of providing opportunities for involvement such as leadership and participation in meaningful activities to avoid decreased engagement, and to allow

for continued building of protective factors. The Dream School program is one promising approach that aims at empowering young people by providing social and leadership skills to contribute in meaningful ways in the school (Holsen, Torill, Tjomsland, & Servan, 2015).

The Dream School Program Enables PYD

Forty-two upper secondary schools across Norway use the Dream School program. The program aims to improve the psychosocial learning environment and enhance positive mental health through greater student involvement as well as foster an inclusive culture in a school as a whole. The Dream School emphasizes an optimistic view of youth and their development in that all young people can thrive when their unique personal strengths are aligned with the resources and opportunities afforded by their contexts (Lerner, von Eye, Lerner, & Lewin-Bizan, 2009).

The Dream School is intended to facilitate and nurture the development of the five Cs of competence, confidence, character, connection and caring through peer and teacher support, and through participatory learning activities that involve social skills training. A program logic model illustrates the application of the five Cs in accordance with the various key elements of the program (see Fig. 1). Activities take place in the classroom and the school premises. Older stu-

dents are trained as peer mentors to facilitate the program. They work in close collaboration with teachers and a resource group. A sixth C, contribution (ability to contribute to school, family, community, society), is expected to develop as a result of the five Cs, meaning that youth feel that they are competent, confident in themselves, have good morals and a sense of belonging, and they can receive and provide care (Lerner et al., 2005). The Dream School achieves its goals through four main elements referring to the Dream Class, the peer mentors, the resource group, and the teachers.

The Dream Class All new classes in the first or second week go through the Dream Class (1) which consists of a 3 h sessions facilitated by the resource team and the peer mentors. A follow-up of the Dream Class (2) takes place in January in the spring (i.e., second) semester. The students and teachers are active participants. The Dream Class aims to provide the teacher and the class with tools to establish a good psychosocial environment, characterized by safety, belonging, positive communication and good relations between the students and the teacher, and to develop an action plan for the class to use throughout the school year. The teacher has a special responsibility to follow up the action plan. Central questions raised in class are “*What would a good class environment look like? What can we do to create such an environment in class?*”

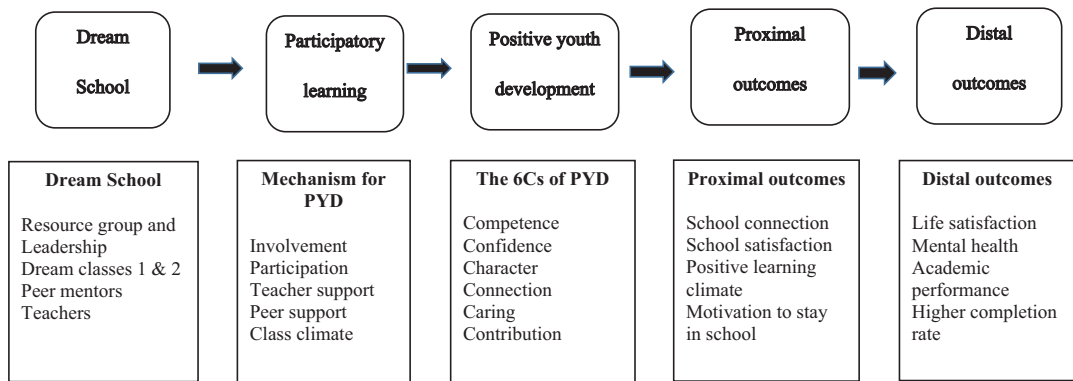


Fig. 1 Logic model for the dream school program in Norway

Peer Mentors Peer mentors are older students trained to facilitate the program and to mentor the new classes. Students are invited via posters, school newspapers and school webpages to apply for the role as peer mentors. The school seeks to recruit students who are engaged and motivated to do something for other students. The resource group interviews and selects the students who will become peer mentors. The aim is to select motivated peer mentors with credibility among other students. They represent a heterogeneous student group in terms of gender and academic performance. They receive 2 days of training (outside school premises) by a Non-Governmental Organization (NGO) named Adults for Children in how to be a good peer mentor, and how to lead activities in class and at school. The NGO also brings the students and resource groups together during the school year to share experiences. The resource group supervises the peer mentors throughout the year. In addition to participating in the Dream Class, two or three peer mentors are responsible for following up their assigned class (mentor class) during the school year, and for creating activities that are open to all students on school premises.

The Resource Group The resource group includes representatives from the school management, staff and student council, and acts as a broad anchoring of the program in the whole school. The resource group is trained at the same time as the peer mentors and followed up by members from the NGO. The resource group has a special obligation to facilitate the Dream Class sessions alongside the peer mentors and to follow up the peer mentors throughout the school year.

The Teachers The teachers receive half a day of training by the NGO Adults for Children. They are introduced to their role in the program, which is to participate with the students in the Dream Class session and to be responsible for following up the action plan throughout the school year. The action plan is the product of the

Dream Class session, and it specifically states what the class will work on to become a dream class. The teachers are important collaboration partners for the peer mentors in their work with the class. They initiate collaboration by inviting the peer mentors to take part in sessions where the class discusses the action plan.

In the Dream School program, participatory learning activities (PLAs) and solution-focused methods are used at all levels of training. These methods emphasize the active involvement and participation of all students. The methods focus on the development of communication skills, making one's own choices and interacting with others. Teachers and peer mentors apply these methods when implementing the program at school. In the program, students are trained to increase their understanding of the importance of their own and others' well-being. In addition, they are enabled to initiate psychosocial measures, such as Hug day, Waffle day, Halloween or discussion groups (e.g., topics on how to be a good friend) in the school environment, and through such measures, they can gain experience in leadership, helping and giving something to others.

The Dream School and the Six Cs

The PYD framework proposes the five Cs of competence, confidence, character, connection and caring which in turn lead to a sixth C of contribution (Lerner et al., 2009). These Cs are important for enabling PYD based on the underlying notion that building strengths in these Cs will lead to positive development (for an expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). In such perspective, development is seen as an interaction between individuals and their contexts; thus, the environment (such as a school) can either nurture or hinder this interaction (Eichas, Montgomery, Meca, Garcia, & Garcia, [this vol-](#)

ume; Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#)).

Competence is a central factor in self-regulation and a basic psychological need according to the self-determination theory (Ryan & Deci, 2020). Stimulating students' basic needs for competence and giving them mastery experiences are particularly relevant in the school context, as academic achievement together with connection is a strong predictor of dropping out of school (Battin-Pearson et al., 2000; Kotic, Wiium, & Dimitrova, [this volume](#); Reschly, 2020). Connecting one-year-older peer mentors with new students can provide a good and safe start for new students and create a supportive, inclusive class and school environment.

Confidence relates to an internal sense of general positive self-esteem and mastering expectations (Birkeland, Breivik, & Wold, 2014). Good self-esteem is one of the strongest predictors of psychological well-being (Coffey & Warren, 2020; Schimmack & Diener, 2003). A large-scale study in Norway found that peer acceptance had a protective effect on global self-esteem among youth (Birkeland et al., 2014). In the Dream School program, the peer mentors can help to stimulate social interaction by planning events to make the students more connected and included in the school environment, and through this help, to build acceptance among students to strengthen their sense of confidence in the relationships with peers. In addition, peer mentors themselves increase their confidence through leading activities and helping others.

Character is about perceptions of right and wrong, values, respect and integrity (Geldhof et al., 2015). An important part of character building is the feeling of having influence over decisions and co-determination in one's own life. In the Dream School, students creating their own rules for the classroom environment can help them to comply better with these rules, and the democratic process of formulating rules can support the students' sense of autonomy and responsibility. Relatedly, the use of peers in planning, implementing and evaluating health promotion at school have been found to be associated with better health and relationships among students

(Griebler, Rojatz, Simovska, & Forster, 2017). Positive effects of peer mentoring (e.g., altruism, helping others, leadership and communication skills) were also reported globally (Douglas, Jackson, Woods, & Usher, 2018) and in Norway (Holsen et al., 2015).

Connection concerns building positive relationships between people and institutions where both parties contribute to the relationship (Geldhof et al., 2015). This is the most influential factor in the PLA methods and the actions in the program. Feeling connected is strongly linked to subjective well-being (Abubakar & Dimitrova, 2016; Liu, Carney, Kim, Hazler, & Guo, 2020). For example, being connected and accepted by fellow students is crucial for young people's positive development such that those who are not socially integrated are more likely to have mental health problems (Arslan, 2020; Beeson, Brittain, & Vaillancourt, 2020). Therefore, it is crucial to facilitate the experience of belonging right from the start of the school year. As further noted by Hattie and Yates (2013), one of the most important factors to succeed in school is making at least one friend during the first few weeks. Another factor is concerned with the student being noticed by a teacher or another adult, and being told that the adult was looking out for them as a student. In line with this, the peer mentor's primary task is to welcome students to the school, and to work with the teachers to create an inclusive class and school environment. In the Dream Class, the teachers and the students explore the meaning of a dream class and make an action plan on how to act to fulfil their goals for becoming a dream class. In addition, the peer mentors are trained to watch out for those who seem to drop out of social activities at school especially during recess time. As indicated by relevant scholarship in Norway, using older students to mentor the younger ones is an empirically supported measure with a proven effect in preventing school dropout (Lillejord et al., 2015).

Caring refers to both caring for others and being cared for by others and is closely linked to a sense of belonging and being connected (Geldhof et al., 2015). Caring is important for the individual's mental health and overall well-being

(Lavy & Naama-Ghanayim, 2020). Teachers as well as peer mentors act as caregivers for the new students. Moreover, this provides the peer mentor with a sense of caring for others, which in itself is important for motivation and meaning in life (Holsen et al., 2015).

Contribution to others and to the society is a relevant in supporting healthy human development arising from the five Cs of PYD when opportunities for giving to others are present within the context of young people (Lerner et al., 2009). Contribution can thus be seen as both an input and the overall aim of the Dream school program. By giving students and peer mentors the possibility to influence and build a school environment that supports well-being for all students, the Dream School program stimulates the feeling of contribution to others. The Dream School program helps young people to develop leadership and critical thinking by giving them a voice in decisions that affect them. In the Dream Class, students themselves are given the opportunity to contribute as they can express what they think is important for them, to feel safe and to thrive in the class. For positive development to occur, schools need to provide opportunities for empowerment by facilitating joint decisions with teachers and students to stimulate increased confidence and respect for each other's ideas (Griebler et al., 2017; Ozer & Douglas, 2015). Furthermore, when young people share their experiences with peers and learn about differences, they break down stereotypes and prejudices (Holsen et al., 2015). The Dream School program aims to influence all six Cs of PYD, enabling students to reach high levels of the five Cs and become active contributors to their broader social context.

Finally, it is important to stress that all six Cs of PYD are intertwined in a dynamic interaction and may be mutually reinforcing. As young people spend almost half of their time at school, it is obvious that the quality of their relationships with their teachers and fellow students will influence their experience of well-being (Twum-Antwi, Jefferies, & Ungar, 2020). Thus, PYD programs need to be dynamic, build positive relationships and address all of the six Cs.

The Impact of the Dream School Program on Youth Participation

The Dream School takes a strength-based approach and proposes that students themselves are capable and want to take responsibility for their own lives and cooperate in helping others. This implies that students can and should be given the opportunity to take responsibility and make decisions regarding their own learning environment. The aim of the program is twofold: to stimulate the sixth C, that is, the contribution of all students in the school, and to add a more practical stimulant for the six Cs among peer mentors. In the following sections, we describe the methods applied and the findings from a qualitative investigation of peer mentors' experiences of being a mentor and facilitator in the program.

As part of a pilot study of the Dream School program (2014–2016), we conducted nine focus group interviews in three large upper secondary schools. The focus groups included 45 peer mentors from the second and third grades (ages 17 and 18), which would make the mentors 1–2 years older than the new students. The semi-structured interview guide included questions in relation to experiences of being a peer mentor in the classroom and school, challenges, and advice for new peer mentors. The interviews lasted for approximately 1 h, and were conducted in groups in the schools. The analysis of the qualitative data was theory driven, involving a search for meaning units related to PYD using the six Cs as the categories and dimensions. This procedure is a hybrid analysis combining techniques of inductive and deductive thematic analysis (Fereday & Muir-Cochrane, 2006). More precisely, we applied the six Cs as themes in the deductive thematic analysis while allowing themes to emerge directly from the data using inductive coding (Fereday & Muir-Cochrane, 2006).

There were four analytic steps. First, the interview transcripts were read and re-read to gather a basic impression of the data. The formal analysis began with a breakdown of the informants' responses into thematic themes or units of analysis or meaning units (e.g., experiences of being a peer mentor). This step followed an inductive

approach. Second, having identified meaning units in each interview, the next step involved a deductive thematic analytical process of interpreting each interview and the meaning units identified in relation to the six Cs. Third, the meaning units expressing each C were combined with other Cs based on apparent relations in the data (e.g., competence and character). Fourth, similarities and differences at each step of the analysis were discussed to ensure common understanding and valid interpretations.

Overall, many positive experiences emerged from the stories about the peer mentors' perceptions of their role as a mentor, and their experiences of learning and developing as a person. The analysis also revealed that the six Cs are intertwined, and that some Cs seemed more closely connected to each other in the peer mentors' experiences than others did. Therefore, the main findings are presented as four subthemes of competence and character, caring and connection, confidence as well as contribution as separate subthemes.

Competence and Character

In the interviews, the peer mentors spoke of learning much about being a mentor in areas, such as taking responsibility, showing respect for and being aware of others. One peer mentor talked about experiences in a manner that showed awareness of responsibility *"Ehm, because it's good to say, 'I'm a peer mentor and I have ... responsibility for people doing well."* Learning to respect people for their differences was another theme *"You are also learning a lot about yourself as a peer mentor. You gain a little more respect for everybody ... for who they are"*.

Almost all peer mentors mentioned that they had learned more about how to talk to others with respect *"I have learned how to talk to different types of people... We are not all the same. You cannot talk ... in the same way to everyone"*. Peer mentors recounted becoming more aware of the well-being of others. Several stated that this was their first thought when asked about what they had learned from being a student mentor.

Caring and Connection

Promoting well-being among students came across all interviews as an important task. Peer mentors described the activities they conducted in the classroom and school as trying to ensure that everyone would have a good time and thrive. One reported that he was keen to be there to make others feel comfortable *"Make people feel comfortable at school; they should not feel like outsiders or something"*. Several mentors were concerned that the students who arrived at school should feel safe, and it was their responsibility to contribute to this *"It's very rewarding and there's something about it ... helping to create a safe environment. Because it's so crucial for both the learning environment and mental health that you have someone to be involved with and that you feel safe at school"*.

Across the interviews, the peer mentors also noted that they felt it was important for mentors and students to be about the same age, which could make it easier for the students to talk to them about any difficulties *"And then there was also something slightly like that ... As if it was difficult to say something to an adult then. Someone was a little closer ... closer to you, a person who was easier to talk to"*.

The peer mentors felt that they could easily recognize who might need some extra care in class *"... maybe to notice all ... Because we are in that environment, in a way ... the teenage environment, and we know what it's like and seeing the person when we go into a classroom. You are very likely to see who gets a lot of attention and stands out very well, and those who might be sitting in a corner are a bit quieter. I think that as a peer mentor we see it a little better than the teachers"*.

Related to the peer mentors' efforts to make students feel safe and secure is the feeling of connection to others and to the school. The peer mentors' perception of contributing to the psychosocial environment also concerned making contact with and approaching students. Several of them commented that students who often sat alone should have somebody to talk to. Another important objective for mentors was to ensure

that students felt a connection to their class *“When we came in, we started to split them up a bit, and put them together with people they did not know ... and so on, [the cliques] were completely broken up. So that the class is really just one big group now ... all together”*.

Confidence

The peer mentors found that being a mentor had given them more confidence, especially as they were challenged to plan and lead activities for the class and the school *“Peer mentoring has positively influenced my ability to lead others”*. They also claimed that the training received gave them confidence in their own abilities *“Being a peer mentor has given me enough knowledge and competence to teach new student mentors”*.

Contribution

The peer mentors' experiences of contribution in school provided an opportunity to influence the psychosocial environment and become role models. However, their contribution and influence were mostly related to the choice and content of activities. At the same time, several peer mentors expressed the view that they lacked the authority to make meaningful changes. Some said that their suggestions for changes were not always passed on to the administrators or leaders of the schools, giving a feeling of tokenism.

There were also other challenges in the work of being a mentor, such as a lack of understanding from other students. One peer mentor believed that *“people actually wondered what a peer mentor was”*. Another mentioned how their mentor class *“looked at us strangely”* when they presented themselves as peer mentors. Other challenges reported involved dealing with students who did not dare to interact with others or had difficulty speaking with them.

Peer mentors talked about how time and communication could be a barrier to their work as mentors. The lack of time with their mentor class was central, and this could partly be attributable

to having different days for internships (during 2nd grade students in the vocational programs worked outside school as part of their practical training) or different hours for examinations. Some peer mentors found it challenging that the time they had with the mentor class was too short to do what they wanted, which was to contribute more. Time was also required for coordinating meetings. However, it appeared from the interviews that the peer mentors considered meetings with the resource group and other student units to be too infrequent *“We try to make these arrangements, so it is sometimes incredibly difficult to find a date when everyone is at school”*... *“For my part, at least, there has been little time... We have often been in internships. Then, we are at school once a week. And the hours we have then are quite important”*.

Mentors stated very clearly that they experienced a lack of support, especially from the contact teacher of the mentor class. Many expressed a wish to contribute more to their mentees and found that the contact teachers did not make good use of their potential *“We discovered, when we were there last time, that there were very many things that, in a way, could work and develop in that class. But it did not seem like someone was taking note of our ideas ... Yes, and so, the teachers should be a bit more engaged in relation to, like, inviting us, maybe... Because then, it's a bit more like that, um ... especially in a class with a lot of challenges and such things, you do not necessarily feel very welcome... then it would have been easier if, like ... the contact teacher had contacted us then”*.

In collaboration with the contact teacher, the peer mentors also found that teachers took over the management of the Dream Class, and they reported not being allowed to lead the Dream Class as they wanted *“It doesn't really work out, as she [the teacher] really cares about this, and she takes control and ... doesn't let us do it our way”*.

In summary, the peer mentors experienced positive feelings while contributing to their fellow students and to the school environment. However, there were also some doubts regarding their feeling of being seen as important contribu-

tor by other stakeholders, such as the teachers, which gave rise to concerns about how to make use of students as contributors in the school. Overall, the present findings supported the use of peer mentors in the program both for the mentors themselves and for other students in the school. Nevertheless, evaluation of the peer mentor role emphasizes that it is crucial that all involved actors support them and see them as a resource to avoid the feeling of tokenism.

Implications for Research, Policy and Practice

The peer mentors involved in the Dream School program reported gains in social and leadership skills, and most of them felt empowered in their role as mentors and facilitators. Future research needs to include the voices of young people when planning interventions designed to meet their developmental needs in diverse settings and cultural contexts. One promising research approach is the integration of youth voices as applied in Youth Participatory Action Research (YPAR). Ozer and Douglas (2015) argue that YPAR represents a way forward to incorporate youth expertise, engagement and empowerment into efforts to increase adolescents' health and well-being. YPAR also allows adults to learn from and with young people about important developmental phenomena that can be difficult for researchers to access.

Relatedly, policy should aim to integrate youth voices in any actions affecting young people's lives. A good example of such actions is the 2016 European Framework for Action on Mental Health and Well-Being (Barbato, Vallarino, Rapisarda, Lora, & Caldas de Almeida, 2016). The framework emphasizes the importance of empowering young people, fostering social inclusion and developing their active citizenship. Fostering a robust and healthy generation of young people that is ready to meet societal challenges is immensely important. Based on the evidence reported in the current chapter, both

European and global policy need to foster children and youth through building positive developmental environments and be able to keep a future welfare society (Dimitrova & Wiium, [this volume](#)).

As to practice, this chapter provides relevant examples from a process and method of empowering young people in Norwegian schools. Student participation is not merely a requirement according to The National Education Act (2017) which applies to all schools in Norway, but also a goal in itself, as the development of autonomy and self-efficacy is a key to education and training. Students who feel empowered to influence and participate in decision-making in schools are more likely to develop a stronger intrinsic motivation for attending school, which may positively influence their academic achievement, well-being and successes in later life (Danielsen, Samdal, Hetland, & Wold, 2009). An important task for schools is to prepare students for their future roles of asserting and practicing active citizenship (Jarkiewicz, 2020). In this endeavor, the use of PYD programs, such as the Dream School program to develop human resources, a positive learning climate, and a culture for student participation is an important step forward.

In conclusion, by applying the logic model of PYD to the Dream School intervention in upper secondary schools in Norway, this chapter has presented the theoretical reasoning based on the six Cs, as well as the positive empirical impact and challenges of involving youth as peer mentors. However, in Norway and presumably in school settings in other countries, empowering students (and peer mentors) implies that teachers have the willingness to yield control and facilitate real participation. As the Dream School intervention demonstrates, it can be difficult for adults to surrender control. Yet, if students are allowed to participate and contribute to their own environment, there are many gains. Consistent with prior evidence, this chapter highlighted the need for teacher support and guidance for student participation to have a positive influence on other students (Griebler et al., 2017; Holsen et al.,

2015). Seeing students as genuine resources requires that we move beyond tokenism and allow for real influence. Developing students' skills for meaningful contribution to their environment through universal programs like the Dream School, is as an important step to teach young people to become active citizens in the society in the future.

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The Cultural Adaptation of Interventions to Promote Positive Development: The Preschool Edition of PATHS® in Sweden

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Abstract

This chapter is a commentary regarding advances in the intervention cultural adaptation research literature, particularly as it concerns positive development (PD) interventions.

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An overview of research on PD interventions is provided. Thereafter, the chapter focuses on the implementation of PD interventions cross-nationally, highlighting the importance of cultural adaptation in this process. The Planned Intervention Adaptation (PIA) protocol is used along with a case study, as an illustration of steps that can be taken in the cultural adaptation of interventions and to highlight issues that can be at stake when culturally adapting PD interventions. The case is an overview of the cultural adaptation of the preschool edition of PATHS®. PATHS® is an American (U.S.) developed, school-based teacher implemented intervention designed to support young children's social emotional competence and to change schools' climate in ways that foster social emotional learning. Social emotional competence is an important expression of PD. This chapter provides an overview of how specific aspects of culture and context were considered in a PATHS® effectiveness trial. This chapter concludes with a summary of lessons learned from this case and the need to culturally recast some concepts in the process of translation, as well as a consideration of promising approaches to advance the development, impact, and spread of adaptable culturally relevant PD interventions.

Keywords

Interventions · Culture · Adaptation · Positive development · Sweden

This chapter provides an overview of research on Positive Development (PD) interventions and thereafter focuses on the much less researched cultural and cross-national adaptation of PD interventions. The Planned Intervention Adaptation (PIA) protocol (Ferrer-Wreder, Sundell, & Mansoor, 2012) is explained and presented as a generic model to guide the cultural adaptation of interventions. Next, a case study based on a Swedish effectiveness trial of the pre-school edition of Promoting Alternative Thinking Strategies (PATHS®) is used to illustrate the recommended steps in the cultural adaptation process of a PD intervention focusing on social emotional learning (SEL). Thereafter, a summary of lessons learned from the cultural adaptation of PATHS® is described, along with conclusions and implications for research, policy, and practice.

Positive Development Interventions

Because the core features and processes involved in positive development (PD) are themselves moving theoretical and empirical targets (i.e., not yet determined definitively from a global perspective), interventions in this field are likewise diverse. PD interventions vary in terms of theory. Key frameworks include social competence, social emotional learning, positive youth development, and positive psychology (see Tolan, Ross, Arkin, Godine, & Clark, 2016 for a comprehensive overview). These interventions can also differ in terms of who originates the intervention (i.e., scientists or non-scientists – adults or youth themselves), as well as vary regarding where and when the intervention is staged and what outcomes will be changed for the better (Eichas, Montgomery, Meca, Garcia, & Garcia, [this volume](#); Hull, Ferguson, Fagan, & Brown,

[this volume](#); Kaniūšonytė & Truskauskaitė-Kunevičienė, [this volume](#); Kozina, [this volume](#); Larsen & Holsen, [this volume](#)). Despite such diversity, PD interventions share the ambition of putting one or more aspects of positive development at the forefront. Thus, in a PD intervention, one's intervention aspirations should extend beyond only disease or deficit reduction (Tolan et al., 2016).

Another facet of PD interventions involves the built in adaptability of an intervention and how change is thought to take place. As noted by Tolan et al. (2016) some PD interventions are designed to have a great deal of adaptability on a participant by participant basis. This type of PD intervention is exemplified by interventions in which youth gain better access to asset rich settings and experiences (e.g., recreation, clubs, community service; Tolan et al., 2016). What the young people gain from those settings is in keeping with youths' unique profile of strengths and what a particular context has to offer (Tolan et al., 2016).

Asset rich settings are not meant to be one size fits all, but arguably there are elements of a universal intervention approach in that the context is thought to be rich enough (i.e., a diverse array and abundance of assets and possibilities) to provide a benefit to most youth. In asset rich settings, the focus is on the fit between the person and context as well as understanding how agency is exercised by the young person in that context (Tolan et al., 2016). In other areas of intervention science there is a parallel interest in interventions that can be effective in the context of individual variability or reflect a design that allows for inbuilt flexibility (Mejia, Leijten, Lachman, & Parra-Cardona, 2017).

Other PD interventions are more specific in how change should come about for all youth. However, even in these more universal PD approaches there is some degree of adaptability built in and there is usually recognition of the importance of participants' culture(s). For example, universal school-based social emotional learning (SEL) interventions often have room to have input from participants and stakeholders with the chances for adaptation being most likely

during program adoption and implementation (Taylor, Oberle, Durlak, & Weissberg, 2017). Yet, it is clear that most universal PD interventions aim to boost an individual's skill level and competencies in general (e.g., structured explicit skills and competence training) or to foster positive dispositions, such as optimism (Tolan et al., 2016). Here, people can always raise the level and integration of their skills and competencies or positive dispositions, in that there is always room for improvement (Taylor et al., 2017).

Empirically, the PD intervention research literature focusing on SEL is well supported. For example, Taylor et al. (2017) conducted a meta-analysis of 82 school-based (kindergarten to high school) universal SEL interventions ($N = 97,496$ youth, 46% implemented outside of the United States). The majority of these interventions had a structured group format and most were tested in a randomized controlled trial (63%) using SAFE (Sequenced, Active, Focused and Explicit) practices (Taylor et al., 2017). The meta-analytic results showed significant beneficial effects of SEL interventions at follow up (ranging from approximately one year to three years post intervention) on SEL skills and attitudes, positive social behavior, and academic performance with significant declines for conduct problems, emotional distress, and drug use (Taylor et al., 2017). These intervention benefits were evidenced regardless of participant demographics and irrespective of where the intervention was implemented (in or outside of the U.S.; Taylor et al., 2017). Some individual studies in the meta-analysis that had relevant data also showed significant lifetime cost savings; for example, in terms of completion of a college degree (approximately one million dollars saved per degree) or not being diagnosed with conduct disorder (approximately 3.9 million dollars saved per event). In summary, the potential of universal school and evidence-based SEL interventions is promising, given that there is sufficient implementation support (Taylor et al., 2017).

Another meta-analysis relevant to PD interventions of a different type is also important to take note of, but in this case the meta-analysis concerned voluntary PD interventions imple-

mented outside of school time with young people ($N = 23,258$ children and adolescents in 24 studies, only randomized controlled trials were included; Ciocanel, Power, Eriksen, & Gillings, 2017). Common types of interventions here included community service, mentoring, recreation, social skills, academic training, and sexual education. Significant pre to posttest intervention-related benefits were found for self-perception and academic achievement as well as reduced emotional distress with these benefits being more likely for youth considered to be at low/mixed risk rather than those at high risk (Ciocanel et al., 2017). The interventions included in this meta-analysis were more likely to be the type that involved increasing young people's access to asset rich settings. Although noteworthy positive intervention benefits were found for these PD interventions in general, how youth may have benefited from these more person/context fit oriented PD interventions may have not been fully captured by a traditional outcome evaluation approach (Tolan et al., 2016). For these types of setting-oriented PD interventions, idiographic, pattern-oriented or dynamic systems-based intervention outcome evaluation approaches maybe important to examine *in addition* to outcome evaluation approaches based on investigating mean level changes between groups over time (Tolan et al., 2016).

Looking across these two meta-analyses (Ciocanel et al., 2017; Taylor et al., 2017), school-based SEL interventions and after school setting-oriented interventions (i.e., adaptable PD interventions – mentoring, community service, recreation) were *both* associated with reduced emotional distress and improved academic performance/achievement. This thereby shows how a diverse set of PD interventions holds promise as useful intervention approaches for these outcomes. Interventions in these meta-analyses also tended to confer benefits across ethnic subgroups and in the case of the SEL meta-analysis (Taylor et al., 2017) across international implementation sites although this did not appear to be tested in the after school PD meta-analysis (Ciocanel et al., 2017) due to a minority of interventions (17%) being tested outside of the

U.S. However, these meta-analyses differed in that more benefits were documented for SEL interventions (Taylor et al., 2017; seven outcomes including those with a problem focus on conduct problems and drug use) relative to the meta-analysis that focused on after school PD interventions (Ciocanel et al., 2017, three outcomes).

Unlike the fields of prevention science and mental health treatment, less systematic attention has been given to the cultural adaptation of PD interventions. Several hard-won lessons have already been learned in the former two fields of intervention science, such as embracing the complexity of implementation and culture, as well as having the field wide aspiration to not only show intervention benefits on a limited scale, but to work to spread benefits in a sustainable and on a potentially global basis (Fendt-Newlin, Jagannathan, & Webber, 2020). If such lessons are integrated into the future development of PD interventions, these types of interventions could be advanced at a much more rapid pace (quicker and accurate knowledge development as well as improved global reach and impact) relative to the history of other allied fields, such as prevention science.

Intervention Cultural Adaptation Field

As Evidence-Based Interventions (EBIs) in prevention science and mental health treatment field have been increasingly implemented and tested across cultural and national contexts, there are the beginnings of a coalescence around best practices and needed innovations (Barrera Jr., Berkel, & Castro, 2017; Gonzales, 2017; Owens & Waters, 2020). However, it would still be fair to say that this remains a hotly contested field without a set of evidence-based guidelines. As Bernal and Adames (2017) note, cultural adaptation of prevention and treatment interventions are coming of age with a substantial increase in the number of published documents related to these topics in recent years. An important motivation to advance the intervention cultural adaptation field comes from the desire for intervention science to

have a substantial global impact on reducing health disparities and to promote well-being and health in a much more profound way than what has yet been achieved (Gonzales, 2017; Mejia et al., 2017; Zubieta et al., 2020).

A question that the prevention and mental health treatment fields have long wrestled with is whether it is necessary to adapt an evidenced-based intervention in the first place, and if so, what practices and concepts are vital to a successful adaptation (van Mourik, Crone, de Wolff, & Reis, 2017). Take an intervention that has shown benefits on a given outcome in one context with a particular sample. If that intervention is implemented and tested elsewhere, does it need to be adapted in order for it to yield similar benefits or to improve aspects of implementation or sustainability? Early on in the scholarly consideration of this question, there was advocacy and some evidence presented in favor of maintaining intervention fidelity to the core or active ingredients of an intervention and hesitation about what adaptation would ultimately yield (Elliott & Mihalic, 2004). Typically, at this time intervention active ingredients, also coined core components or intervention deep structure (Resnicow, Soler, Braithwaite, Ahluwalia, & Butler, 2000) were more likely to have been posited theoretically rather than empirically demonstrated. Intervention deep structure refers to the theory of how benefits should be achieved through specific intervention actions and in relation to what is known about probability markers (e.g., risk and protective factors or assets) and intervention outcomes/benefits (Resnicow et al., 2000). Intervention surface structure relates to acceptability of an intervention (e.g., language or images; Resnicow et al., 2000). While there is still valid concern about the lack of evidence for intervention core components or deep structure (Bernal & Adames, 2017), arguably more interventions at present than in the past have evidence to show how they work (i.e., how change comes about as part of the intervention and its implementation) and under what conditions. Such evidence is critical in that it would let those implementing an intervention in a new context know more precisely what should not be altered

unless absolutely necessary (Barrera Jr. et al., 2017). Also, in recent years it is more widely anticipated that some form and type of adaptation will take place with each intervention implementation (Barrera Jr. et al., 2017; Gonzales, 2017; Sundell, Beelmann, Hasson, & von Thiele Schwarz, 2016).

What evidence is there in favor of the cultural adaptation of EBIs as they are transported across national and cultural contexts? The answer to this question varies depending on the type of intervention considered and evidence available in different areas of intervention science. Research about cultural adaptation involves importing an EBI to a completely new national and cultural context, but it also concerns an examination of how culturally adapted and generic interventions work across different cultural or ethno-cultural groups within the same country (van Mourik et al., 2017). One area of prevention science where this type of comparison has a long history is parenting training interventions (Parra-Cardona et al., 2020; van Mourik et al., 2017; Waters, 2020). Early work in this area found that for ethnic subgroups in the U.S., the culturally adapted edition of the Strengthening Families Program evidenced better retention and recruitment relative to a generic edition of the intervention (Kumpfer, Alvarado, Smith, & Bellamy, 2002). This field has grown in recent years, resulting in an important meta-analysis of parent training interventions (a review 18 studies; van Mourik et al., 2017). What sets this meta-analysis apart from many other prior meta-analyses in this area is that the type and extent of cultural adaptation (intervention surface and deep structure changes; Resnicow et al., 2000) could be coded from the primary research studies and included in the meta-analysis. Several prior relevant meta-analyses, while informative, have largely been limited due to a lack of reporting about what cultural adaptations were made or not made in the primary research studies. In other words, the comparison in prior meta-analyses has been that of an intervention implemented with an undocumented and unknown degree of adaptation versus a control/comparison group in a new cultural setting and population. Here, one can examine if the

intervention worked or not in this novel situation, but the answer to the question of whether cultural adaptation added or detracted value in realizing intervention benefits or by improving implementation remains largely unaddressed.

Although not without its own limitations, the meta-analysis by van Mourik et al. (2017) breaks new ground in that the extent and type of cultural adaptation was included in the meta-analysis (see also Sundell et al., 2016). This meta-analysis included outcome evaluations of imported and domestic parent training programs but was focused on interventions implemented with predominantly ethnic minority participants in various countries (i.e., Norway, USA, the Netherlands and Australia). Most of the interventions were adapted to some extent (89%) and the results indicated that, as a whole, the interventions (relative to a comparison/control condition) evidenced significant benefits in terms of parent and child behavior and parental perspectives. The parental behavior intervention benefit was significantly moderated by the degree and type of cultural adaptation, so that the greatest benefits were for interventions that reported deep structure adaptations (this type of deep adaptation appeared to mostly involve culturally relevant content, adding extra time to discuss cultural issues related to parenting) relative to surface adaptations and no changes. The intervention benefit on parenting behavior was also moderated by the study sample size in that it was more likely to have a larger effect in studies with a sample size of less than 35 participants per condition. While this meta-analysis may foreshadow a next generation of information about the relative advantages and problems associated with the cultural adaptation of interventions, it is still not yet an established scientific practice to report the process of cultural adaptation in detail when an intervention is used with a new setting or population.

Generating outcomes and benefiting people are a primary reason why people are motivated to get involved in interventions in the first place. For intervention science to advance and in order for it to have the societal impact and reach that it should, there needs to be greater value placed on implementation in general. This includes a con-

cern for documenting cultural adaptation of interventions, particularly when transported and tested in a new country or when implemented with a new population (Barrera Jr. et al., 2017; Castellanos et al., 2020). Another important type of study that promises to transform what is known in the intervention cultural adaptation field regards differential cultural adaptation research designs (Parra-Cardona et al., 2017). This design calls for a comparison within the same intervention trial of a culturally adapted versus not adapted or less culturally adapted edition of an intervention versus a control/comparison group (i.e., a three-armed intervention trial). These types of studies are few in number in different areas of intervention science but are important to advancing intervention science.

Even though the empirical evidence in favor or against the effectiveness of culturally adapted EBIs varies by type of intervention examined and the particulars of how meta-analyses and differential cultural adaptation research designs are conducted, many intervention scientists recognize that careful and planned adaptation of an existing EBI to improve its cultural or contextual fit does not have to be inherently in opposition with intervention fidelity. On the contrary, it has been argued that fidelity and adaptation can co-exist and that adaptation is a facet of implementation just as fidelity is (e.g., Barrera Jr. et al., 2017; Berkel, Mauricio, Schoenfelder, & Sandler, 2011; Durlak & DuPre, 2008; Gonzales, 2017).

In the intervention cultural adaptation field, there is also an effort to unpack what an adaptation to an intervention actually is and to systematically investigate how particular types of adaptation (their timing, what they involve, what motivated them) relate to intervention benefits (Barrera Jr. et al., 2017). This is important as not all adaptations may be the same and it may depend on who is making the adaptation (Barrera Jr. et al., 2017; Durlak & DuPre, 2008). Some types of adaptations modify an intervention action that already exists, some adaptations involve adding new and novel intervention content/actions, while other adaptations entail not implementing particular intervention activities/actions, and furthermore adaptations can be

planned or spontaneous (Barrera Jr. et al., 2017; Durlak & DuPre, 2008).

Over the past 20 years, several systematic approaches as opposed to accidental or ad hoc approaches to the cultural adaptation of EBIs have been put forward (e.g., The Ecological Validity Model; Bernal & Adames, 2017 or The Adaptation Model; Barrera Jr. & Castro, 2006). These intervention cultural adaptation approaches can be broadly categorized based on model characteristics, such as the extent of adaptation guidance as well as programmatic and population specificity (see Ferrer-Wreder et al., 2012 for an overview). Commonly, the various approaches to intervention cultural adaptation involve *at least* two steps: (1) an assessment of EBI fit within the new cultural context and intervention development of the EBI informed by that assessment and (2) an empirical test of the adapted EBI relative to a control or comparison group.

The first step, which concerns assessment of intervention fit, can occur in many ways. For example, Resnicow et al. (2000) proposed in their highly influential model of intervention Cultural Sensitivity (CS) that both an empirically-based assessment of fit as well as an assessment of an intervention's face validity with the new participant group is important. In their approach, the generalizability of an intervention from one cultural group to another would be based on assessment of etiologic profiles of participant groups and feedback from potential participants in regards to the likely levels of acceptance of the intervention.

The assessment of etiologic profiles and/or face validity as part of the formative stage of intervention cultural adaptation can also be found in other intervention cultural adaptation approaches as well (Ferrer-Wreder et al., 2012). This first step of intervention cultural adaptation may also include such activities as research reviews (Barrera Jr. & Castro, 2006), coalition building among program stakeholders (Harris et al., 2001), psychometric tests of evaluation tools (Rodríguez, Baumann, & Schwartz, 2011), and assessment of community readiness. Adaptions to EBIs are then made based on the fit assessment of the EBI to the new culture. The

next stage of adaptation may include for example a pilot test or trial of the “new” adapted intervention (Barrera Jr. & Castro, 2006) in comparison to both a non-adapted version of the EBI and a control or comparison group (Ferrer-Wreder et al., 2012). The results of which are used to inform further adaptation, refinement and testing efforts. It is also important to note that many of these models do not assume that the implementation context is mono-cultural or experienced in a universal manner by individuals of the same cultural group (Bernal & Adames, 2017).

An Illustrative Case: A Cultural Adaptation of PD Intervention Preschool PATHS®

In order to demonstrate how the PD intervention and intervention cultural adaptation fields can inform and advance each other, a specific illustration using key principles from both of these approaches is provided here. The preschool edition of PATHS® (Promoting Alternative Thinking Strategies) is a PD intervention with its conceptual basis in social emotional learning.

PATHS® is based on several complementary SEL and educational theories (e.g., emotional intelligence, eco-behavioral systems, the Affective-Behavior-Cognitive-Dynamic Model; Domitrovich, Cortes, & Greenberg, 2007). The program includes a curriculum with 33 interactive lessons covering the main components of the program such as promoting a positive preschool climate, emotional understanding, self-regulation, and problem solving. The lessons involve stories, puppets, role play, and other activities (e.g., giving and receiving compliments, use of a self-calming technique, use of feeling faces, take home activities, generalization/extension activities). PATHS® lessons are designed to be implemented weekly across the school year. Lessons last 10–15 minutes and can take place during circle time. Teachers are also encouraged to integrate SEL and PATHS® into their everyday practice. Typically, the program is implemented by trained teachers as a universal intervention (Domitrovich

et al., 2007). The preschool edition of PATHS® was developed and tested in the U.S. and up to the present date has been implemented globally (Kusché, 2020) and in several countries outside of the U.S. such as Croatia (Mihic, Novak, Basic, & Nix, 2016), Pakistan (Inam, Tariq, & Zaman, 2015), and the United Kingdom (Hughes & Cline, 2015).

At the time of considering the preschool edition of PATHS® for an effectiveness trial in Sweden, two trials of preschool PATHS® had been published with implementations in the U.S. and had evidenced promising intervention benefits (Bierman et al., 2008a, Bierman, Nix, Greenberg, Blair, & Domitrovich, 2008b; Domitrovich et al., 2007). One of the trials tested parts of preschool PATHS® intervention deep structure (the REDI trial; Bierman et al., 2008a, 2008b) and in short highlighted the importance of executive functioning as a key intervention target for change that was important to yielding beneficial changes in other social emotional competencies and behaviors.

The effectiveness of trial of PATHS® was conducted in preschools located in three municipalities of a large Swedish city. Sweden is located in the Nordic region of Europe, with approximately ten million inhabitants. In the three largest cities in Sweden, a substantial minority of inhabitants (27% in 2017) were born outside of Sweden (Statistics Sweden, 2018), which makes large urban centers of Sweden increasingly multicultural. Within the Nordic region including Sweden, Denmark, Finland, Iceland, Norway, the three autonomous regions of the Faroe Islands, Kalaallit Nunaat (Greenland) and Åland, many values, practices and laws are shared (Nordic Council of Ministers, 2006). Central to the Nordic welfare model are substantial investments in children and social services (Hakovirta & Eydal, 2020), many of these services are consistent with a strengths-based view of children. The emphasis on children and social welfare is clearly reflected in how Swedish preschools are available and affordable for the vast majority of families, and enrollment rates are high (Ferrer-Wreder et al., 2020). According to the Swedish National Agency of Education (2016), 94% of the four to

five-year olds attend preschool, which is an age group appropriate for the preschool version of PATHS®. The curriculum that is guiding Swedish preschools is based on democratic values and it offers guidelines for preschool activities which promote the acquisition of these values (Swedish National Agency of Education, 2010).

The cultural adaptation of the preschool edition of PATHS® to an urban, multi-cultural preschool context in Sweden was guided by an intervention cultural adaptation model called the Planned Intervention Adaptation (PIA) protocol (Ferrer-Wreder et al., 2012; Sundell, Ferrer-Wreder, & Fraser, 2014). PIA is generic in regards to the type of intervention to be adapted and it is geared towards the cultural adaptation of EBIs that are imported to a new national and cultural context. PIA is an international extension of the Cultural Sensitivity (CS) model of Resnicow et al. (2000). It makes use of the CS model's contention that a useful way to view an intervention is to consider its surface structure and deep structure. The preschool edition of PATHS® was suitable for PIA because there was prior evidence in support of the intervention's deep structure in the U.S. and the preschool PATHS® program developers were willing to consult on and support the use of the PIA protocol in the Swedish effectiveness trial. This was important because PIA calls for a collaborative approach between program developers and new intervention stakeholders in order to inform the cultural adaptation process.

PIA consists of two phases, the first of which includes program selection, coalition building around the new intervention and effectiveness trial, and formative research studies that provide a basis for the cultural adaptation process. The second phase of PIA calls for an intervention trial of the adapted intervention, and if warranted by the formative research, a differential cultural adaptation research design can be used (e.g., Parra-Cardona et al., 2017). After reviewing the evidence on preschool PATHS® and consulting with preschool stakeholders in Sweden and PATHS® program developers in the U.S., we selected preschool PATHS® as an intervention that warranted development and testing in Sweden. We collaborated prior to and throughout

the intervention trial with the original program developers of preschool PATHS® regarding for example intervention materials, program training, implementation strategies as well as surveys and other instruments to be used for outcome evaluation and implementation.

After securing funding for an effectiveness trial of preschool PATHS® and after negotiating a contract with the publishers of the PATHS® curriculum, an initial translation of the preschool PATHS® curriculum was conducted and Swedish as well as American developed measures relevant to the intervention were selected and translated as needed. We used a variation of the committee approach to translation (Furukawa, Driessnack, & Colclough, 2014; International Test Commission, 2017). In our case, the committee approach involved several researchers with expertise in psychology and human development who were fluent in both Swedish and English having ongoing discussions and working collaboratively throughout the translation process to refine the translations (program materials and assessment tools) with the aim of attaining translation equivalence. This approach has the advantage of working well in cultures where collaboration and consensus is valued over overt public disagreement (Furukawa et al., 2014).

Other steps in PIA's phase one involved conducting formative research studies with participants who are similar to the intended population. In our case, our first formative research study (study A) tested outcome evaluation measures to be used in the intervention trial (the tasks that the children would complete with research assistants, teacher reports of children, observation of children in a structure play by research assistants) with a sample of preschool children (4 and 5 year olds) in the three municipalities that we would later test the intervention ($n = 76$). Study A was cross-sectional and study measures were tested for their psychometric properties and practical feasibility. Some modifications were made in instrumentation, primarily consisting of the removal of some survey items, which did not add to the consistency of the measurement scales. In addition, pictures of emotional expressions were pilot tested and a smaller number of pictures

were selected to represent clear emotional expressions. Another adjustment was the adoption of an open-ended response format rather than a forced-choice format in a child task measuring responses to fictional social conflict scenarios.

The next formative study involved another cross-sectional analysis with the outcome evaluation measures but with a new group of children (Study B, $n = 56$). Here, analyses focused on testing the psychometrics of the revised study instruments. We examined whether the cross-sectional findings from Study A and B ($N = 132$ children, on measures unchanged after pilot testing) were conceptually consistent with findings described in the REDI trial (Bierman et al., 2008a, 2008b). The results from the Study A and B datasets showed expected relations, such as inverse significant relations between indicators of problems and social emotional competencies, as well as expected associations between executive functioning and other indicators of social emotional competence. Because Studies A and B were cross-sectional, mediational analysis which would have provided greater insight into the generalizability of the preschool PATHS® deep structure could not be conducted. However, the cross-sectional associations in Studies A and B were consistent with what was known about preschool PATHS® intervention deep structure at that time.

It is important to note that teachers in expert schools were trained in PATHS®, implemented PATHS®, and consulted with the research team throughout PIA phases one and two. Expert schools did not participate in the PATHS® intervention trial, but were located in the same municipalities as schools that were in the PATHS® intervention trial. The children in Studies A and B either attended the expert schools or were an earlier cohort of children in the intervention trial schools (studies A and B took place prior to intervention trial randomization) and the children who participated in studies A and B would age out of the preschools by the time the intervention trial began.

Other steps in PIA's phase one involved focus groups (Study C) with preschool teachers who had taken part in an initial training in preschool

PATHS® and were in our expert schools. The training was led by one of the preschool PATHS® program developers. After this initial training, a focus group was conducted with teachers with the intention of obtaining first impressions of PATHS® and the training. After the focus groups, teachers in our expert schools were given a selection of provisionally translated lessons from the curriculum, which were identified by the program developers as central to the program, and were asked to use the lessons at their school. Approximately 6 weeks later, the expert teachers were invited back to participate in focus groups to discuss the relevance and appropriateness of the PATHS® materials. Although not formally called for by PIA, the majority of PATHS® training sessions for teachers during the intervention trial were followed by inviting teachers to participate in focus groups aimed at understanding the appropriateness of PATHS® and issues related to implementation from the perspective of teachers. PATHS® also involved a booster training midway through an academic year, and after this booster, focus groups with participating teachers were also typically conducted.

The final step in PIA's phase one involved compiling all information generated by the formative research studies and this guided which adaptations were relevant to make prior to an intervention trial of PATHS®. Based on formative study results, we concluded along with the program developers that one minimally adapted edition of PATHS® versus a control group would suffice to go forward with the intervention trial. The cultural adaptation in our case involved changes in language in the curriculum, namely from English to Swedish. It also involved some adaptation of the PATHS® teacher training, such as building in time for more discussion in Swedish, given the fact that most of the PATHS® training for teachers was in English, as well as reframing the function of compliments in PATHS®, and other adaptations that were more of a surface structure nature. We elaborate more on the specific changes in the next chapter section.

This concluded the formative phase of the PIA. Thereafter, an effectiveness trial was carried out and constituted the next phase of PIA. The

trial was conducted in two waves, each comprising one academic school year, with an intervention group with the adapted edition of preschool PATHS® and a waitlist control group ($N = 285$ four and 5 year old children). Schools were the unit of assignment and the study was a randomized controlled trial with pre and posttests (e.g., outcomes measured by child tasks, teacher reports, and child observations). Implementation data were collected (e.g., fidelity ratings, qualitative logs of adaptations made by teachers) and an intervention supporter model was used as part of the intervention.

Lessons Learned

Even though what resulted from the PIA formative research studies was not dramatic in nature with regard to changes in intervention deep structure, we provide some sample results from the focus groups with teachers to demonstrate the substantial value of conducting this type of participatory formative research. In essence, this entails learning from professionals who are experts in their work setting and in child development, i.e., preschool teachers (Vaughn, Wagner, & Jacquez, 2013) to inform intervention cultural adaptation. The examples given here concern documenting potential adaptations made by teachers after they had experienced implementing PATHS®, either from PIA's phase one - expert teachers who had participated in the first PATHS® training (Study C) and tried out a few lessons – or half way through the intervention trial. Focus group questions concerned teachers' descriptions and experiences regarding the implementation of PATHS®. In particular, the results relevant to the cultural adaptation aspect of the implementation of PATHS® are presented below.

From the focus groups, we were made aware of some cultural differences in terms of terminology used in one aspect of the lessons. This was the use of compliments. This concept in the program refers not only to giving compliments with respect to physical appearance, but also, in its progression throughout the program and with increasing age and competence of the children, compliments should move from the external fea-

tures to the behaviors and qualities of people. The broader scope of this term conveyed in the English language was somewhat lost in translation into Swedish.

We therefore nuanced the lesson on compliments to reflect this broader definition and included phrases, such as “showing appreciation for others” in the description. One further issue related to this specific lesson on compliments was the part recommending teachers to send home a “compliment list” to the caregivers of the children. This was reported to be somewhat problematic for some teachers, in that the received compliments could vary a lot, both in quantity and quality, between children. It may be difficult for parents to give compliments freely, in that it is not seen as necessarily “natural” in a Swedish context. The term “compliments” in the Swedish language also tends to have a somewhat more narrow definition than in English, referring perhaps more to physical appearances, and thus more superficial. The same clarification of the definition (i.e., showing appreciation) was included in the information to caregivers. However, we suggested that the teachers should find their own way of expressing the concept to make it more natural for them. This activity with giving and receiving compliments was in several cases reported by teachers to be a positive experience for everyone, including caregivers. It was well accepted by the children, who in several cases learned to generalize this behavior quickly, as seen in their tendency to give spontaneous compliments in various situations at preschool. A lesson learned in the cultural adaptation process was that there may be concepts which at first may appear as lost in translation and of potentially less value, but with guidance from stakeholders can be recast to have a better fit with important but differing cultural understanding and values.

In our case, another cultural aspect that may have importance in terms of implementation and acceptance of an intervention is the practice of working with manual-based programs. This may not be as common in a Swedish preschool context and thus may have been an obstacle for some teachers, in order to make the concepts in the intervention a natural part of their pedagogy. The suggested detailed dialogue that is a part of each

lesson in PATHS® may thereby be seen as very helpful or overly steering. On the other hand, teachers also expressed an appreciation for the structure provided by the manual-based program. At any rate, it was conveyed in the focus groups, that for some teachers it took quite some time before the lessons became part of their regular practice. Working with puppets was reported to be a challenge for some teachers, with the more reserved, less performance oriented mainstream culture possibly contributing to this difficulty. However, teachers also reported that children responded positively to the interactive parts of the program with puppets and stories.

One further aspect that required adaptation was that many of the suggested books and songs (for extension activities) are culture and language specific and are not readily translated as part of the imported intervention. This lends more freedom to teachers to choose appropriate extra books and songs material, but may also leave some teachers with too little guidance. Teachers mentioned the use of own material such as books and photographs for use in some lessons, and reported that a motivation to adapt PATHS® came from a desire to personalize the lessons in line with their own pedagogical practice and sense of themselves as individuals. In addition, teachers found that adjustments had to be made in order to simplify language sometimes, especially for children who recently immigrated to Sweden. In summary, one would never know in advance what particular aspects of a complex intervention like PATHS® are likely to need attention in order to improve its fit and implementation. Invaluable information can be gained through the formative research process and such information is likely to benefit the development of the intervention, which can add to its long-term value across implementation contexts.

Conclusions

This chapter is unique in that it is one of the first examinations of what may be gained by integrating essential ideas and practical lessons learned from the intervention cultural adaptation research field into the design and testing of PD interven-

tions. PD interventions are as diverse as the theoretical models and histories of intervention development that are at their foundations. Yet, there are commonalities in that there is a growing evidence in support of the promising results that can be achieved by the use of PD interventions (e.g., gains in academic achievement and reductions in emotional distress, life time cost savings from less need for treatment for conduct disorder and more college degrees; Ciocanel et al., 2017; Taylor et al., 2017).

Investing substantial research attention to empirically documenting how aspects of culture are important to achieving benefits from the use of PD interventions in a wide variety of settings and with culturally diverse youth is likely to provide one of several needed catalysts that will accelerate the spread and benefits associated with PD interventions globally. Participatory research methods conducted as part of formative research prior to the implementation of an imported intervention can be a useful way to recast and in some cases adapt intervention actions in ways that are culturally acceptable and user friendly, while still actualizing the intended benefits of PD interventions. Because there are already several evidence-based adaptable PD interventions available (i.e., asset rich setting interventions, such as community service, mentoring, recreation) such interventions may be particularly suitable for cultural adaptation research studies. While issues of implementation and cultural adaptation are likely to be important as these types of interventions are imported cross-nationally, the types of issues and considerations in cultural adaptation may differ from more universal, but also more structured PD intervention approaches. This is an important empirical question well positioned for future research and if addressed is likely to advance *both* the PD intervention and interventional cultural adaptation fields.

In terms of universals and cultural specifics, some aspect of culture is likely to be important to achieving intervention benefits and high quality intervention implementation in all intervention settings. No intervention context, intervention facilitator or participant is without culture. Yet, decisions about what particular aspects of culture are important to attend to when implementing an

evidence-based PD intervention with a new population are unlikely to be accurate or useful in the absence of dedicated research attention into the role of culture in a particular intervention context. There are several intervention cultural adaptation models that are available to guide us through this process (e.g., Bernal & Adames, 2017; Ferrer-Wreder et al., 2012; Resnicow et al., 2000).

Presently, there is not clear evidence that one adaptation model is advantageous over another, but what does appear to be the case is that the implementation process, which includes a consideration of cultural adaptation, should be anticipated and planned for prior to intervention implementation and that the process be documented. Because the descriptive research literature on positive development is still in the process of gaining more evidence as to what features and processes in positive development are universal and what may be more context specific. PD interventions tested in varied cultural contexts can lend insight and empirical examples in regards to how positive development works and is expressed in different cultural contexts and thereby contribute to the creation of a *culturally salient* empirically based PD model (Tolan et al., 2016).

Implications for Research, Policy, and Practice

In terms of advancing research, there is a need for more meta-analyses of PD interventions, and interventions in general, that are able to include the form and degree of cultural adaptation in the meta-analytic results. Such studies will be able to address the longstanding debate about the value of adapting or not adapting different types of interventions for new populations and contexts. There is also a need for more empirical documentation of intervention core components or intervention deep structure in various cultural settings.

Relevant to policy, it is vital to recognize that PD interventions can take the form of a policy

change. For example, this could take the form of a city government making an asset rich context more accessible to young people (e.g., improving recreational facilities and opportunities). Policy-oriented PD interventions are also likely to be advanced by dedicated research efforts (that include participatory research approaches) to examine the importance of culture to achieving desired outcomes.

In terms of practice, this chapter offers a commentary on the state and future directions of PD interventions as they relate to implementation science and the intervention cultural adaptation research literature. To illustrate the complexity and importance of this work, we gave a brief overview of our experience implementing a U.S. developed PD intervention called PATHS® in an urban multi-cultural Swedish preschool context. In our experience with PATHS®, cultural considerations included but also went well past issues of translating materials and finding pleasing images. Our best partners in helping us find a way through these issues were preschool teachers. Thus, facilitators and stakeholders in an intervention have a vital role to play and their professional expertise and development are essential to consider in the implementation of PD interventions more generally.

The emphasis of this chapter has been on the value of planning for possible intervention adaptation prior to the implementation of an intervention with a new population. However, PD interventions are also likely to be advanced by careful studies of what happens in terms of adaptations once facilitators use the intervention. A final ground breaking change for the future, is that PD interventions that are designed to be adaptable (i.e., assets rich environmental interventions) may spur on alternative intervention outcome evaluation approaches in the field of intervention science. Such methods would allow for a deeper understanding of how individual youth take what they need from an intervention experience in order to foster their own development (Tolan et al., 2016).

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Another Way Out: A Positive Youth Development Approach to the Study of Violent Radicalization in Québec, Canada

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Abstract

Violent radicalization is the result of a multi-dimensional process determined by a complex interplay among cultural, social and individual variables. However, empirical evidence on the risk and protective factors involved in the process of violent radicalization is still scarce. Even less is known on early determinants in terms of primary prevention. In the present chapter, we argue the importance of a Positive Youth Development (PYD) approach to the study of violent radicalization, aimed at fostering youth strengths across multiple levels of functioning. In support of our argument, we present findings from a broad quantitative project on the determinants of sympathy for violent radicalization among youth in Québec (Canada). The findings suggest that supporting connection (e.g., social support, plural group identities and religiosity) and confidence (e.g., positive future orientation) represents an effective way of providing youth with valid alternatives to violent radicalization.

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Keywords

Violent radicalization · Positive youth development · Prevention · Québec · Canada

Violent radicalization acts are the result of political, economic, social and psychological processes, which are often associated with increasing support for violence seen as a legitimate mean to reach a specific goal (Emmelkamp, Asscher, Wissink, & Stams, 2020; Ozer, 2020; Schmid, 2013). This goal can be political (e.g., far-right, far-left), or based on religious fundamentalist beliefs (Verkuyten, 2018). It is important to underline that not all forms of radicalization are violent, and that radicalization of opinion may also lead to the emergence of social solidarities and to non-violent social transformation processes. There might be another way out by other non-violent outcomes of radicalization processes (Rousseau, Hassan, & Oulhote, 2018; Rousseau, Miconi, Frounfelker, Hassan, & Oulhote, 2020). Indeed, some people develop radical beliefs. Among them, only a few develop sympathy for violent radical actions, and even fewer become actively engaged in terrorism and violence (Verkuyten, 2018).

Terrorism and violent radicalization acts are now considered traumatic for their effects on direct victims of attacks and their families,

friends and witnesses (Koehler, 2020). Indeed, terrorism shatters the functioning of individuals and societies by provoking a fear, which is disproportionate to the real danger that it constitutes, as a way of attacking governments and undermining core values of democracy. For these reasons and given the growing number of people involved in violent radicalization acts worldwide, at present, countering violent radicalization represents a global public health concern (Weine, Eisenman, Kinsler, Glik, & Polutnik, 2017; Weine & Kansal, 2019). Although most governments in recent years have invested on profiling and individuating measures to address and deal with violent radicalization, few efforts have been done from a primary prevention perspective (Eisenman & Flavahan, 2017; Rousseau et al., 2018; Sklad & Park, 2017; Stephens & Sieckelinc, 2020; Stephens, Sieckelinc, & Boutellier, 2019). Current approaches have mostly aimed at targeting individuals at risk of committing terrorist acts, neglecting to study risk and protective factors in the general population (Bhui, Warfa, & Jones, 2014; Ellis, Miller, Schouten, Agalab, & Abdi, 2020).

This field of research may benefit from the adoption of a Positive Youth Development (PYD) approach aimed at fostering youth strengths across multiple levels of functioning (Burkhard, Robinson, Murray, & Lerner, 2019; Dimitrova & Wiium, *this volume*; Wiium & Dimitrova, 2019). PYD would allow a public health approach to the study of violent extremism centered on a prevention and resilience-based perspective bringing healthy development as a core component for preventive programs and policies. This would promote a shift from a dominant secondary and tertiary prevention approach to a primary one, in order to decrease the harm stemming from the increase in profiling that is still too commonly associated with programs in the field of violent radicalization.

In this chapter, we first provide an overview of the available literature in the field of violent radicalization. Second, we apply the PYD approach to the study of violent radicalization, focusing on a primary prevention effort to empower youth and provide them with non-violent means to

reach their goals in life. Third, we contextualize an empirical research example by describing the actual social and political context in Québec (Canada). Fourth, we describe a broad research project on the determinants of violent radicalization in Québec youth and summarize the main findings. Last, implications for research, policy and practice are discussed. We argue that the guiding principles of PYD should be applied to the field of violent radicalization prevention, research, policy and practice and present preliminary empirical evidence in support of our argument.

What We Know About Violent Radicalization

Since 9/11, worldwide terrorism has increased fivefold and the focus on terrorism has become central to governments around the world (Felton, 2004; Institute for Economics and Peace, 2019). Over the last years, Europe and North America have witnessed an unprecedented wave of terrorist attacks. A recent report identified 51 successful attacks throughout Europe and North America from June 2014 to June 2017 (Vidino, Marone, & Entenmann, 2017). Of these, 63% were in Europe and the remaining 37% in North America. These attacks as well as the profiles of perpetrators were extremely heterogeneous and led to 395 deaths and 1549 physical injuries among civilians. Besides terrorist attacks, around 5000 European volunteers left for Syria in the first months of 2015 to join the Islamic State forces (Europol, 2018). This phenomenon was observed at the same time in the North American context. These events have fueled heated public debates over immigration and diversity across many countries around the world. Populist extremist right-wing parties and rising anti-immigrant sentiments have become part of the political scenario, and alienated discrimination, racism and exclusion in a growing climate of xenophobia (Institute for Economics and Peace, 2019). This context of social polarization fuels different processes leading to the legitimization of inter-group violence, which may justify violent extremism acts. Thus,

violent radicalization represents a serious threat globally, and should be understood as a public health issue (Weine & Kansal, 2019).

Violent radicalization is a complex and multi-dimensional phenomenon (McGilloway, Ghosh, & Bhui, 2015; Misiak et al., 2019; Verkuyten, 2018). Although after 9/11, academic interest in violent radicalization has increased exponentially (Vergani, Iqbal, Ilbahar, & Barton, 2018), there is still a lack of empirical research on the topic. This is especially true for what concerns the study of early processes and pathways to violent radicalization. The scarcity of empirical research is due to several reasons, such as issues of confidentiality and engagement, as well as suspicion from both authorities and extremists (Bhui, Hicks, Lashley, & Jones, 2012; McGilloway et al., 2015; Misiak et al., 2019).

Recent systematic reviews on studies investigating processes associated with radicalization and extremism concluded that the only common feature among terrorists is that there are no specific features distinguishing these individuals (McGilloway et al., 2015; Misiak et al., 2019). A broader scoping review on the topic identified 148 empirical studies on violent radicalization across the globe from 2001 to 2015 (Vergani et al., 2018). The included studies were predominantly focused on jihadist radicalization in Western countries and were mostly qualitative in nature. Overall, the literature emphasizes that radicalized people are generally late adolescents or young adults and most often males (McGilloway et al., 2015; Schmid, 2013; Verkuyten, 2018). Nonetheless, there is a general trend that sees an increasingly active presence of women (Vidino et al., 2017).

The evidence on the role played by religion and immigrant status is somehow more controversial. The public rhetoric often associates religion (especially Islam) and immigration to higher risks of violent radicalization. However, mounting evidence suggests that most terrorists and violent radicalized groups are “home-grown” (i.e., second generation immigrants and beyond; Verkuyten, 2018), and that religion can be protective (Simon, Mommert, & Reininger, 2018).

Up to now, evidence shows that there is no specific psychological profile of radicalized individuals suggesting that violent radicalization is the result of a complex interplay between contextual and personal variables, and that the interaction between risk and protective factors results in different pathways to violent radicalization (Misiak et al., 2019; Rousseau et al., 2018; Rousseau, Hassan, Rousseau-Rizzi, et al., 2018; Vergani et al., 2018; Verkuyten, 2018). In line with a socio-ecological framework (Bronfenbrenner, 2005), risk and protective factors can be found at macro-level (e.g., socio-political climate, intercommunity tensions), meso-level (e.g., internet groups, communities, schools and universities), and micro-level (e.g., perceived discrimination, identity issues, mental health, personality). This framework stresses the importance of identifying multiple levels of preventive action. As the model suggests, such multidimensional processes are influenced by local dynamics, national history and social policies, indicating the importance of being cautious in generalizing research findings from one context to another (Rousseau et al., 2018).

Most literature on risk and protective factors for violent radicalization comes from theoretical papers. Empirical evidence on this issue is still scarce, and often leads to controversial findings, partly linked to the wide heterogeneity of measures and samples used. From the available literature, it appears that feelings of uncertainty, perceived hostility and perceived injustice are associated with a greater risk of endorsing violent radicalization (Verkuyten, 2018). A recent quantitative review through a series of meta-analyses examining risk factors for radicalization in youth, yielded significant effects for 15 out of 17 risk domains. Medium positive effects emerged for activism, perceived in-group superiority and perceived distance to other people, while small effects were found for gender, personality, delinquency and aggression, lower educational level, negative peers, in-group identification, perceived discrimination, perceived group threat, perceived procedural injustice, and perceived illegitimacy of authorities (Emmelkamp et al., 2020).

Further evidence shows that experiences of discrimination and violence are linked to higher levels of depressive symptoms and higher risks of violent radicalization (Bhui, Silva, Topciu, & Jones, 2016; Bhui, Warfa, & Jones, 2014; Frounfelker, Frissen, Vanorio, Rousseau, & d'Haenens, 2019). Such experiences may compromise youth path to adulthood producing a negative impact on developmental milestones, such as the construction of a stable identity and envision of a positive future. Indeed, social psychology researchers have associated the distress stemming from identity uncertainty with support of violent radicalized actions (Hogg, Kruglanski, & Bos, 2013; Vergani et al., 2018).

In terms of protective factors, preliminary evidence suggests that the possibility to count on a strong social support decreases the likelihood of becoming involved in violence and violent radicalization acts (Bhui, Everitt, & Jones, 2014; Zinn, Palmer, & Nam, 2017). A recent systematic review of quantitative studies investigated protective effects against extremism and radicalization as well as qualitative evidence on factors that contribute to disengagement from radical groups (Lösel, Bender, Jugl, & King, 2020). The results indicated thirty different protective factors with significant effects against violent radicalization (i.e., self-control, adherence to law, acceptance of police legitimacy, illness, non-deviant significant others, positive parenting behavior, good school achievement, non-violent peers, contact to foreigners, and a basic attachment to society).

In a nutshell, violent radicalization is a complex and multidimensional process that needs to be situated in a socio-ecological framework. Empirical findings indicate that experiences of discrimination and violence, depression and being a young man are all risk factors for violent radicalization. As regards protective factors, the available literature suggests that the possibility to count on social support networks and on a positive identity may protect youth from becoming involved in violent radicalization processes. The relevance of these factors has been further addressed in this chapter with an empirical example and related argumentation.

Positive Youth Development and Violent Radicalization

To account for group and individual differences in youth support for violent radicalization across contexts, we need to investigate it in a multilevel context (Bronfenbrenner, 2005). The interest in the interaction between environment and the individual, as to identify strengths amenable of intervention at both personal and contextual levels, is in line with the PYD framework (Burkhard et al., 2019). This framework postulates that the alignment of strengths and resources across contexts and developmental stages is the key for youth successful adaptation and transition to adulthood. One of the most influential PYD models has been operationalized as the 5Cs (Geldhof et al., 2015) comprised of competence (skills in domain-specific areas), confidence (internal sense of self-efficacy), character (capacity to behave accordingly to societal and cultural norms), connection (positive bonds with significant others and institutions), and caring (sense of empathy and sympathy for others). The 5Cs contribute to a sixth C, namely contribution to family, community, and institutions in civil society (for an expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)).

Of importance, youth specific assets and person-context relations promoting a positive development vary across social-cultural settings and historical times. Indeed, our global world is changing, and societies are shattered by terrorism, wars and growing xenophobic sentiments. In such a changing context, it is important to learn more about how to align youth strengths and their ecological contexts as to promote their thriving through institutional democratic systems. However, in today's world of increasing diversity, many institutions are unable to guarantee basic pillars of democracy for all citizens and episodes of discrimination and violence are on the rise, as well as involvement in violent radicalization groups. In many cases, youth discontent and rebellion can be seen as legitimate attempts

to transform society and resist to social inequalities (Reuter, Marien, & Harries, 2020). Hence, it is important to reflect upon new ways to promote positive youth development and civil engagement as alternatives to violence (Crocetti, Erentaitė, & Žukauskienė, 2014). Focusing on the promotion of different paths of positive development may shed light on new ways for youth to contribute and develop a sense of belonging to their society. In addition, the promotion of PYD paths would promote a form of empowerment, which engages these youth in personal and social transformation, reducing the risk of feeling impotent and desperate and disengage from violent radicalization.

For these reasons, it is critical to consider youth voices to adjust public policy and community actions to the present societal changes and challenges as to support youth in finding new ways of positive development in their ecologies. Re-conceptualizing radicalization in a PYD approach, as a phenomenon concerning the general population, would provide new insights into the study of youth capacity to channel their discontent in other avenues than violent extremism. This will contribute to a shift from a dominant secondary and tertiary prevention approach to a primary one, aimed at minimizing the causes of violent radicalization and providing alternative channels of expression rather than dealing with its late consequences (Eisenman & Flavahan, 2017; Rousseau et al., 2018; Weine et al., 2017; Weine & Kansal, 2019).

The Situation in Québec, Canada

Québec is one of the largest Canadian provinces (nearly eight million inhabitants) with a demographically and culturally diverse society. A total of 375,518 immigrants were present in Québec in January 2019 with a particularly high presence of immigrants born in the West Indies, followed by those from Africa, Europe and Asia. Among the top 30 countries of birth of immigrants in Québec are Haiti, Algeria, Tunisia, the Philippines, Moldova, the Democratic Republic of Congo, Syria, Morocco, Côte d'Ivoire, Cuba and Mexico

(Ministry of Immigration, Francization and Integration, 2020).

Because of its status as the only francophone province in Canada, Québec represents a distinct society within the Canadian reality. Although Canada promotes a multicultural society, Québec developed its own model to deal with cultural diversity and immigration, known as interculturalism (Imbert, 2020). The Québec society positions itself in between multiculturalist and assimilationist societies, and values both majority and minority cultures while recognizing the primacy of the French-origin Canadians (Bouchard, 2012).

Mirroring the global rise in anti-immigrant, xenophobic sentiments in Europe and the rest of North America, right-wing movements are growing in Québec (Gagnon, 2020; Perry & Scrivens, 2015). The public opinion is divided around the cut on immigration and the enforcement of secularism in the society by banning, for example, the use of religious symbols, such as the Muslim hijab or the Jewish kippah for public servants in positions of authority (Kagedan, 2020). Extremist positions are also held by a diverse set of political and religious movements (e.g., Christian, Jewish, Sikh or Buddhist fundamentalism; national and independent movements; extremist left-wing parties) (Geoffroy, Dagenais, & Palmer, 2020).

In this general climate, the field of violent radicalization prevention has obtained increasing attention in the last decade, as is the case in the rest of Canada (O'Halloran, 2020). Terrorism and lone actors' attacks are a feared and vivid reality in the Canadian society, after the attacks of Saint-Jean-sur-Richelieu and Ottawa in 2014, the tragic mass shooting at the Islamic Cultural Center in Québec City in 2017, and the car attack in the center of Toronto in 2018 (Bastug, Douai, & Akca, 2020; Carvin & Tishler, 2020). In light of the preoccupying situation, several initiatives have been put in place. In 2015, the Québec Government Plan of Prevention of Violent Radicalization was defined to organize intervention and prevention in the province (Ministry of International Relations, 2020). In addition, in 2017 a Canadian Practitioners Network was launched by the federal government to develop

best practices in the field of violent radicalization (Canadian Practitioners Network for Prevention of Radicalization and Extremist Violence, 2020), and in 2018 a chair UNESCO for the prevention of violent radicalization was established among different Québec universities (UNESCO-PREV Chair, 2020).

Risk and Protective Factors for Violent Radicalization: A Study Among Youth in Québec

Given that violent radicalization represents a timely global issue, the study of the complex interplay among risk and protective factors leading to violent radicalization is fundamental as to inform effective preventive efforts and policies aimed at reducing the burden of violent radicalization on our societies (Carthy, Doody, Cox, O'Hora, & Sarma, 2020). Although the relation between violent acting out and support for violent radicalization is not linear, the latter may be considered as an early indicator of risk of involvement in extremist and violent activities later in life, thus representing a potential starting point for prevention research (Bhui & Jones, 2017). For this reason, the Sympathy for Violent Radicalization Scale (SyfoR) (Bhui, Warfa, & Jones, 2014) has been developed as a complementary tool to investigate sympathy for violent radicalization in the general population, showing good psychometric properties (Miconi, Oulhote, Hassan, & Rousseau, 2020). Acknowledging the limitations of existing literature in the field, a research group at McGill University (Montréal, Canada) started a project to promote a systemic vision of violent radicalization processes and empirical evidence for mental health related intervention and prevention programs. Through a national mixed-method multi-site study, the research group was able to document risk and protective factors associated with youth sympathy for violent radicalization, as to understand the associated multilevel (i.e., individual, local, and national) dynamics (Miconi et al., 2020; Rousseau et al., 2018; Rousseau, Hassan, Rousseau-Rizzi, et al., 2018).

The present chapter builds on the above conducted work by reporting a study aimed to obtain a picture of sympathy for violent radicalization and distress levels in a sample of youth in Québec. This is a crucial starting point to describe the phenomenon and contextualize current research findings. In addition, the study focused on risk factors associated with violent radicalization such as depression, perceived discrimination, and exposure to violence, gender and age. Although scholars in the field agree on the potential risks associated with these factors, empirical evidence is scarce and still mixed, especially when it comes to studies involving the general population. The findings are also controversial about the role played by religion and immigrant status in the process leading to violent radicalization. Although the "Muslim immigrant" seems to be at the highest risk for violent radicalization in the public rhetoric, evidence in favor or against this argument is still scarce (Kaya, 2020). For these reasons, the study also aimed to investigate the socio-demographic correlates of violent radicalization and the potential role played by religiosity (Tiilikainen & Mankkinen, 2020). Within the PYD approach, youth strengths at the individual and contextual levels could represent assets for a positive development that reduce the risks of being involved in violent radicalization.

Besides perceived discrimination, exposure to violence and depression, the study also focused on protective factors for potential intervention. As previously reported in this chapter, mounting evidence suggests that uncertainty, a loss of identity and lack of social support increase the chances that youth engage in violent radicalization (Ferguson & McAuley, 2020; Hogg et al., 2013; Rousseau et al., 2020; Zinn et al., 2017). Hence, we argue that a supportive social network, a positive future orientation (i.e., positive attitudes toward the future, aspirations, and hope; Klein & Shoshana, 2020), and a positive collective identity (i.e., individual perception of group identity, attachment and importance of being part of a group; Dimitrova et al., 2017) may all contribute to reduce the risks of violent radicalization by providing youth with feelings of empowerment and support. Religiosity could

also play a similar role by providing young people a sense of purpose and control over their lives, and help to find non-violent alternatives (Simon, Reichert, & Grabow, 2013; Zulkarnain, Mulyadi, Amin, Dali, & Ahmad Walid, 2020).

Based on the above premises, the study reported in this chapter aimed to (1) describe the levels of sympathy for violent radicalization and distress among youth in Québec; (2) investigate how socio-demographic variables are related to sympathy for violent radicalization; 3) explore potential protective (i.e., social support, future orientation, collective identity, and religiosity) and risk factors (i.e., discrimination, depression, exposure to violence) for sympathy for violent radicalization. Within the PYD framework, connection was examined in terms of social support, religiosity and collective identity, whereas confidence was regarded as positive future orientation.

Surveying Youth in Québec

Overall, 1894 youth participated in the study with 1190 providing full data on the measures, which suggests avoidance strategies linked to the delicate subject addressed. The participants answered questions on their socio-demographic background, age, gender, religious beliefs (i.e., Christian, Muslim, Other religions and Non-religious), immigrant generational status (i.e., first, second, third generation and above) and college (i.e., eight Québec colleges identified by a specific number). A detailed description of the socio-demographic characteristics of the sample can be found in Table 1.

Sympathy for violent radicalization was measured with The Sympathy for Violent Radicalization Scale ([SyfoR]; Bhui, Warfa, & Jones, 2014). Participants were asked to rate their degree of sympathy or condemnation of nine acts of protest ranging from non-violent (e.g., taking part in non-violent political protests) to progressively more extreme/violent acts (e.g., using bombs or weapons to fight against injustice) on a scale ranging from 1 (*completely condemn*) to 7 (*completely sympathize*). Items were converted in

Table 1 Sample description (N = 1190)

| Socio-demographic variables | n (%) |
|-----------------------------|-----------|
| Age in years | |
| 16–18 | 435 (37%) |
| 19–21 | 430 (36%) |
| 22–24 | 120 (10%) |
| ≥ 25 | 203 (17%) |
| Missing | 2 |
| Gender | |
| Men | 351 (30%) |
| Women | 839 (70%) |
| Language | |
| French | 832 (70%) |
| English | 63 (5%) |
| Both | 295 (25%) |
| Country of birth | |
| Canada/ North America | 962 (81%) |
| North Africa/ Maghreb | 47 (4%) |
| Subsaharan Africa | 23 (2%) |
| South America | 25 (2%) |
| Asia | 34 (3%) |
| Caribbean | 27 (2%) |
| Europe | 59 (5%) |
| Middle East | 12 (1%) |
| Oceania | 1 (0%) |
| Immigration status | |
| ≥3rd generation | 771 (66%) |
| 2nd generation | 191 (17%) |
| 1st generation | 202 (18%) |
| Missing | 26 |
| Religion | |
| None | 646 (57%) |
| Christianism | 388 (34%) |
| Islam | 63 (6%) |
| Other | 31 (3%) |
| Missing | 62 |
| Colleges | |
| College 1 | 139 (12%) |
| College 2 | 378 (32%) |
| College 3 | 23 (2%) |
| College 4 | 238 (20%) |
| College 5 | 46 (4%) |
| College 6 | 172 (14%) |
| College 7 | 115 (10%) |
| College 8 | 67 (6%) |
| Missing | 12 |

a total score with high scores indicating high support for violent radicalization and showed good internal reliability of $\alpha = .86$.

Perceived discrimination was measured with The Perceived Discrimination Scale (Noh, Beiser, Kaspar, Hou, & Rummens, 1999) exploring the experience of structural discrimination in eight life domains (i.e., employment, workplace, housing, academic, public services, health services, social services and justice system). Participants were asked to indicate experienced discrimination in any of the selected eight life domains in a dichotomous format (yes/no), and assigned in two groups (1) those who experienced discrimination in at least one of the domains (i.e., at least one “yes” response), and (2) those who did not report discrimination in any domain (i.e., all “no” responses).

Exposure to violence was measured with three questions from the project Enquête Santé Québec on Cultural Communities (Rousseau & Drapeau, 2004). Participants were asked to indicate in yes/no response format whether they have (1) witnessed or experienced acts of violence in relation to a social and/or political context; (2) a personal experience of persecution, and (3) witnessed or experienced violent events involving someone close (e.g., family, friend). Participants who answered “yes” to at least one of the questions were categorized as exposed to violence.

Depression was assessed with The Depression Subscale (15 items) of the Hopkins Symptom Checklist-25 ([HSCL-25]; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). Participants were asked to rate how much they were bothered by symptoms of depression during the past week (e.g., sleep, eating difficulty, negative mood) on a 4-point Likert scale from 1 (*not at all*) to 4 (*extremely*). Symptom severity was computed by averaging responses with scores of 1.75 and above indicating severe depressive symptoms. The internal reliability measured by Cronbach alpha for this scale was $\alpha = .92$.

Collective identity was evaluated with 12 items grouped in three subscales from The Collective Self-Esteem Scale ([CSES]; Luhtanen & Crocker, 1992), measuring the individual perception of the importance of group identity in three domains. Importance to identity (i.e., how important the belonging to a social group is for one’s identity), membership self-esteem (i.e.,

value attributed to the self as a member of a social group), public collective self-esteem (i.e., value attributed from others to one’s social group). Responses were rated on a 6-point Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*). The scale showed good internal reliability for importance to identity ($\alpha = .73$), public collective self-esteem ($\alpha = .79$) and membership self-esteem ($\alpha = .62$).

Religiosity was measured with The Revised Religious Orientation Scale (Gorsuch & McPherson, 1989) containing 14 items answered on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). All items were averaged to obtain a total score with high scores indicating high religiosity and showed good internal reliability of $\alpha = .90$.

Social support was measured with the short version of The Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988) to assess perceived social support from family and friends. The response options were given on a 7-point Likert scale from 1 (*very strongly disagree*) to 7 (*very strongly agree*) with high scores indicating more social support and showed good internal reliability of $\alpha = .79$.

Future orientation was evaluated by three items regarding the vision of the future of the world, the community and the self, rated on a 7-point Likert scale from 1 (*not at all*) to 7 (*very much*). A total score was obtained by averaging all items with high scores indicating more positive attitudes about the future and a good internal reliability of $\alpha = .74$.

The study protocol and procedures were approved by the Ethics Committee of the Centre Intégré Universitaire de Santé et de Services Sociaux du Centre-Ouest-de-l’Île-de-Montréal (CIUSSS-CODIM). In addition, the research ethic board of each institution involved gave ethics approval to conduct the study. An online survey was implemented across eight colleges in Québec, guaranteeing anonymity. Participants were eligible to participate if they were registered as full-time students in one of the participating colleges. The study was described as a research project on adaptation to the current social context

in Québec. Participants completed an online survey uploaded on the intranet portal of each college. They could decide whether to complete the survey in French or English and were informed about their voluntary participation and confidentiality guaranty. Response rates varied greatly across colleges, ranging from 2% to 19%. In addition, the quantitative survey was complemented by a qualitative study, involving two focus groups per college with one group of students and one group of teachers.

Analyses and Main Findings

To explore the levels of sympathy for violent radicalization and all related variables, descriptive information was summarized using means and standard deviations for continuous variables and counts and proportions for categorical variables. We used ANOVA and Chi-squared tests to examine differences in sympathy for violent radicalization according to youth socio-demographic characteristics.

To identify potential protective (i.e., social support, future orientation, collective self-esteem, and religiosity) and risk (i.e., discrimination, depression, exposure to violence) factors for support for violent radicalization, mediation and moderation analyses were implemented in R (R Core Team, 2017). Specifically, we used univariate analysis of variance to examine differences in sympathy for violent radicalization according to youth socio-demographic characteristics. In addition, linear mixed-effects models were used to test the contributions of variables of interest on support for violent radicalization, controlling for the relevant socio-demographic variables (i.e., gender, age, immigrant status, religious belief, language), while accounting for the clustered nature of the data (i.e., students nested within colleges).

The first objective was to describe the levels of sympathy for violent radicalization and distress among youth in Québec. Although a present phenomenon among youth, sympathy for violent radicalization was generally moderate, with low average scores ($M = 16.82$, $SD = 9.25$, $Min = 2$,

$Max = 56$). As much as 39% of students scored above the cut-off for depression (i.e., HSCL-25 score > 1.75). This result was in line with statistics reported for youth in this age range (Berthelot & Traoré, 2016). Another 38% experienced at least one episode of discrimination in their life (in 24% of cases at school), and 44% experienced violence at least once in their life. This finding mirrors the growing xenophobia and violence reported in our societies worldwide, as well as in Québec. In addition, it underlines the need to increase efforts to support PYD among young people (Rousseau, Hassan, Rousseau-Rizzi, et al., 2018).

The second objective was to investigate how socio-demographic variables were related to sympathy for violent radicalization. Participants older than 25 and women reported lower sympathy for violent radicalization than younger ones and men, in line with prior findings (McGilloway et al., 2015; Schmid, 2013). Moreover, youth with a religious belief had lower scores of sympathy for violent radicalization than those without a religious belief. In addition, first generation immigrants reported lower scores of sympathy for violent radicalization than non-immigrants and second-generation immigrants (i.e., Canadian born from foreign-born parents). These findings counter common stereotypes in the public opinion which often depict radicalized individuals as part of religious and immigrant minorities.

The third objective was to investigate potential protective and risk factors for sympathy for violent radicalization. Discrimination and exposure to violence were linked to a higher risk of reporting sympathy for violent radicalization (Rousseau et al., 2019; Rousseau, Hassan, Rousseau-Rizzi, et al., 2018), confirming prior evidence (Bhui et al., 2016; Bhui, Everitt, & Jones, 2014). In addition, depression was a significant and important mediator in the relation between social adversity (i.e., discrimination and exposure to violence) and sympathy for violent radicalization (Rousseau et al., 2019; Rousseau, Hassan, Rousseau-Rizzi, et al., 2018). These results further confirm the importance of inclusive and non-discriminatory policies at the educational level (e.g., schools, colleges) as well as

at the broader societal level. The high percentage of students scoring above the clinical cut-off for depression, as well as the strong relation between discrimination and mental health, further confirm the importance of addressing these issues with youth in the present social context, regardless their levels of sympathy for violent radicalization.

The findings also showed that the association between social adversity and sympathy for violent radicalization was significantly lower for youth with higher social support and for those with higher religiosity. This suggests that the religiosity revival observed among many young Muslims worldwide may represent a protective coping strategy to face the challenges of living in a society which seems hostile to their ethnic or religious origins (Rousseau, Hassan, et al., 2019). This does not exclude that religion may become a risk factor when associated with radicalized peers or mentors. However, our findings suggest that religiosity should be considered both in clinical intervention and in prevention programs and that we should fight common stereotypes associating it with an increased risk of being involved in violent radicalization processes.

A complex relation emerged between youth collective identity and sympathy for violent radicalization. Specifically, a significant negative association emerged between public self-esteem and sympathy for violent radicalization. In addition, a significant non-linear increase in sympathy for violent radicalization was observed for youth scoring high on the importance to identity scale (i.e., over 90th percentile; Rousseau, Oulhote, et al., 2019). These results suggest the potential harmful effect of negative public representations of one's group on sympathy for violent radicalization, and the protective role of a moderate sense of belonging, allowing for the expression of different identities rather than for the expression of a single one (Coid et al., 2016).

Encouraging youth in exploring and adopting plural identities may be a key to a positive development (Dimitrova & Ferrer-Wreder, 2016; Dimitrova, Johnson, & Vijver, 2018; Titzmann, Ferrer-Wreder, & Dimitrova, 2018). Social support, religiosity and collective identity can all be

considered part of the connection within the PYD framework, in that they refer to the connectedness experienced by the individual to a larger group or ideology (Abubakar & Dimitrova, 2016; Bradley, Ferguson, & Zimmer-Gembeck, [this volume](#); Kasic, Wiium, & Dimitrova, [this volume](#)). Supporting the connection with one's social network, religious group and other groups of identification seems a promising avenue to promote PYD while also reducing the risks of becoming involved in violent radicalization initiatives.

Another variable that was included as a potential asset, which could prevent youth from being involved in violent radicalization processes was a positive future orientation. After controlling for the socio-demographic variables of interest, as well as for depression and exposure to violence, we found a significant and negative effect of a positive future orientation on sympathy for violent radicalization. This result was stronger for men, and for high levels of reported depression (Miconi et al., 2020). Supporting youth to envision the future with hope and project themselves into the future may be a meaningful strategy to foster PYD (see Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#)) and to consequently reduce the risks of involvement in a process of violent radicalization.

Implications for Research, Policy and Practice

This chapter provides relevant implications for research, policy and practice. In terms of research, the findings reported in this chapter can be seen as a novel application of the PYD framework to the field of violent radicalization. In line with the PYD, positive paths of development for young people are changing to face historical and societal challenges. The growing phenomenon of violent radicalization reflects the hopelessness and helplessness, which lead to a legitimization of violence. This chapter lays the ground for interested researchers to investigate how confidence, competence, character, connection and caring interact to promote new ways for young people to

contribute to family, community and institutions, and how this contribution can address social grievances in ways which can protect against the endorsement of a violent radicalization process.

In terms of policy, this chapter points to the importance of considering violent radicalization as both a public health issue and a social phenomenon to be addressed in terms of prevention to foster youth individual, social and collective resources and reduce the risks of becoming involved in violent radicalization processes. It is fundamental to identify multiple levels of preventive action in this social realm. These include educational, health and social institutions. Violent radicalization has become a way for some young people to deal with the uncertainty and social injustice of our present societies, and this circle of violence can be interrupted by paying attention to youth experience and discontent and by providing them with other ways of positively engaging with institutions and communities. Promoting PYD by fostering strengths across multiple levels of functioning appears as a promising avenue to prevent violence. Professionals and social media should join their forces to improve the public image of all communities and reduce the negative images and messages, which undermine one's public self-esteem. Encouraging and opening a dialogue with youth and promoting non-violent social and political mobilization could provide an alternative way out from the circle of violence for new generations (Stephens et al., 2019; Stephens & Sieckelink, 2020).

In terms of practice, this chapter suggests that sympathy for violent radicalization may be decreased by fostering the development of plural identities as to reduce identity confusion and uncertainty, while avoiding identities that legitimate violence toward out-group individuals. Religious identity needs also to be supported and considered in preventive and clinical efforts. Clinicians need to examine their own prejudices and feelings about religion. They should be aware that identity issues are delicate in the present social context, and therefore should be carefully addressed and included in any psychological assessment and therapy.

In conclusion, the interest for violent radicalization has been criticized by social scientists as an instrumentation of a social-political concept to increase social control and de-legitimize social protest and transformation (Foucault, 2003). By paying attention to the promotion of all conditions fostering youth development, a PYD approach may greatly contribute to shift the gaze, from a perspective which pathologizes youth despair and rebellion, to a quest around what are the sources of social suffering which could explain this deep desire for social transformation. This in turn would contribute to raise important questions in our societies, such as how can we, together with young people, co-construct non-violent ways of building a society where young people feel they have a say in their future in spite of the pervasive uncertainties.

The present chapter reflects a local social reality in Québec and Canada as a peaceful society, with low overall levels of violence and a good enough opening toward migration and cultural diversity. However, the interpretation should be situated in the context of the global upsurge in othering processes and the associated increase in hate discourses, crimes, and populist politics in Europe, North America and globally. The consequences of the current social transformations for youth worldwide are a serious concern, and the present chapter is an invitation to pay close attention to the local forms these transformations may take in specific social contexts, and to address the suffering and distress they may provoke through prevention.

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Engaging Marginalized Youth in Positive Development: The Changing Lives Program

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Abstract

Building effective Positive Youth Development (PYD) interventions for marginalized youth requires understanding what actions, experiences, and relationships—that is, what *group processes*—during the intervention promote positive outcomes in this population. This chapter examines group processes in the Changing Lives Program, a group-based PYD intervention designed to empower adolescents growing up in disempowering community contexts in Miami, Florida, USA. After describing the social and historical context for

the program's development, we outline the Changing Lives Program's participatory transformative intervention model. We present narrative case histories to illustrate the group process issues involved in PYD group work with marginalized adolescents, and we examine adolescents' session-by-session assessment of PYD group processes as a mediator of pre-to-posttest changes in positive development and mental health. Finally, we use these findings to discuss the importance of connecting group process with outcome in PYD intervention research.

Keywords

PYD intervention · Critical pedagogy · Youth empowerment · Group process · Alternative schools · Changing Lives Program

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When building interventions for marginalized youth, the Positive Youth Development (PYD) approach represents an important potential alternative to the problem-focused approach. PYD offers a positive vision of youth that is focused on their potential to thrive and become contributing members of society (Burkhard, Robinson, Murray, & Lerner, 2019; Lerner, Lerner, Bowers, & Geldhof, 2015). However, emerging evidence suggests that adolescents who come from low-

income backgrounds, belong to racial or ethnic minority groups, and have low academic achievement benefit less from PYD interventions than other adolescents (Ciocanel, Power, Eriksen, & Gillings, 2017), indicating the need to identify what modifications in existing PYD interventions might be required to extend their reach to marginalized youth populations (Dimitrova, Sam, & Ferrer-Wreder, 2021; Dimitrova & Wiium, [this volume](#)). Understanding how to engage these youth in PYD requires increased knowledge of what PYD group processes—that is, what actions, experiences, and relationships during an intervention (Llewelyn, MacDonald, & Aafjes-Van Doorn, 2016)—to target when working with marginalized youth. Because the knowledge of PYD processes currently lags behind the knowledge of PYD outcomes (Roth & Brooks-Gunn, 2016), research that links process with outcome would help address a basic question of PYD research: what contextual resources at what developmental moment result in what features of PYD (Lerner & Overton, 2008). Translated to the PYD intervention context, the question becomes: what *group processes*, for what youth, at what points in the intervention, result in what features of PYD outcomes?

The purpose of this chapter is to describe the group processes targeted by a PYD intervention for marginalized youth, the approach used for targeting these processes, and an outcome process evaluation model for linking the targeted group processes with outcome. We present the Changing Lives Program, a group-based intervention developed for youth attending alternative high schools in Miami-Dade County, Florida. Students attended the alternative high schools because they had been identified by the school district as at-risk of school dropout. However, we view risk as an outcome of marginalization and will simply refer to these students as marginalized. Drawing on Hall and Carlson (2016), we view marginalization as a process by which individuals and groups are pushed to the periphery of mainstream social and political life, resulting in limited access to resources and physical and mental health risks. A needs assessment conducted in the formative years of the Changing Lives Program

supports this conceptualization. It revealed that many students at the alternative schools were regularly exposed to physical and mental health risks indicative of marginalization, such as daily violence, crime, and substance abuse (see Berman, Kurtines, Silverman, & Serafini, 1996). Specifically, these adolescents reported high rates of having witnessed violent crime (mugging = 87%; stabbing = 64%; shooting = 60%; dead bodies = 67%; suicide = 20%; murder = 42%), having been a victim of violent crime (mugging = 38%; stabbing = 20%; shooting = 11%), and Post-Traumatic Stress Disorder (PTSD) symptomatology (Berman et al., 1996).

Over 50 years ago, Erikson (1968) recognized the importance of intervening in the process of marginalization and proposed providing “endangered” youth opportunities for collaboration with adults and personal confirmation of potential worthiness (Erikson & Erikson, 1957). Like the many PYD programs that have followed Erikson’s advice, the Changing Lives Program sought to provide sustained opportunities for collaboration with adults and peers. However, unlike other PYD programs, the Changing Lives Program drew on models from psychotherapy process research (e.g., Elliott & Wexler, 1994) to make an explicit effort to conceptualize and target collaborative group processes intended to facilitate PYD. By connecting PYD intervention to models of group process, the Changing Lives Program provides a unique lens by which we may understand how programs may engage marginalized youth in PYD. Accordingly, in this chapter we describe the Changing Lives Program, its participatory transformative intervention model for PYD, and based on existing studies, shed light on group processes that may be utilized by PYD programs.

The Miami Youth Development Project: The Changing Lives Program in Developmental Context

The Changing Lives Program was a group-based intervention developed by the Miami Youth Development Project (Kurtines et al., 2008) as

part of an effort to empower youth growing up in disempowering urban community contexts. From a sociological perspective, many of these disempowering community contexts can be described as a by-product of Miami's rapid transformation from tourist resort to complex international city (Portes & Stepick, 1993), whereas others were shaped by the long-term economic consequences of racial injustice (Dunn, 1997). Miami's geographical location at the Southeastern boundary of the United States made it a context of reception for successive waves of immigrants escaping political or economic upheaval in the Caribbean, Central, and South American countries, beginning with an influx of Cuban immigrants in the 1960s and continuing through subsequent waves of immigration from Cuba, Nicaragua, and Haiti in the 1980s. Immigration often followed a particular pattern, with the elites of the country of origin arriving in Miami first, followed by the professional and middle classes, and finally the working class (Portes & Stepick, 1993). When working class families arrived in Miami, they often could not afford to live in middle-class suburbs and instead settled in poor and deteriorating inner city neighborhoods (Portes & Stepick, 1993). These conditions were often exacerbated by a lack of the educational attainment required for upward mobility in the United States. Meanwhile, poverty in some of Miami's historically Black inner city neighborhoods became concentrated as middle class families began to leave those neighborhoods for suburban residential areas in the 1960s (Dunn, 1997). The drain of economic and intellectual resources was accelerated by a crack cocaine epidemic in the 1980s that led to increased neighborhood crime and violence. Local businesses failed as customers moved away, leaving few conventional tracks to success for youth coming of age in those neighborhoods (Dunn, 1997). Outside investors exploited the situation by buying up land for large-scale rental complexes that they did not maintain, contributing to the physical deterioration of those neighborhoods.

As a consequence, local schools faced the challenge of serving youth who were exposed not only to the risks associated with acculturative stress

(e.g., pressure to learn English and retain their heritage language, conflicts regarding preference for American customs, concerns regarding documentation status, etc.; Berry, 2006; Gil & Vega, 1996), but also to the risks associated with low-income, urban community contexts. One institutional response within the community was to develop a program of alternative education aimed at preventing school dropout (Dade County Public Schools, 1986; Kurtines et al., 2008). Starting with a single experimental public alternative high school in the 1980s, this community-level response had, by the 2000s, evolved into a network of voluntary alternative public high schools located throughout greater Miami. The alternative high schools were designed for students with academic, personal, or disciplinary circumstances requiring educational services delivery, either temporarily or permanently, in smaller, non-traditional settings (Miami-Dade County Public Schools, 2007). The aim was to provide students identified by the school district as potential dropouts with an opportunity to continue their education. All students at the alternative high schools met one or more of the following dropout prevention identification criteria used by the school district: (1) retention in the same grade one year or more; (2) three or more grades of "D" or "F" in the previous school year; (3) a cumulative grade point average of 2.0 or less; (4) earning less cumulative credits than what was considered standard for the grade level (i.e., 3 credits per term); (5) not meeting state requirements or district proficiency levels in reading, mathematics, or writing; (6) 15 or more absences during the previous school year and (7) 15 or more absences during the previous semester (Miami-Dade County Public Schools, 2007). A demographic snapshot in October 2006 revealed that 5% of the students in these schools were classified as White, 59% as Black, 35% as Hispanic, and 1% as multiracial. Thus, the schools functioned as a "last stop" for culturally diverse students who had exhibited a range of problems associated with increased risk for dropout, including disruptive behavior, excessive absenteeism, and/or academic failure.

Against this backdrop, and for nearly two decades starting in the early 1990s, the Miami

Youth Development Project created, refined, and implemented PYD programs for youth attending alternative high schools (for details see Kurtines et al., 2008). The main PYD program was the Changing Lives Program, a group-based intervention that was integrated into the ongoing flow of each school's activities as part of the school's counseling program. Students participated in the program if school counselors or teachers requested services for them (and they agreed to participate) and/or if students requested services for themselves. The specific themes of the groups were requested by students and staff within the school, and typically focused on anger management, relationships, alternative lifestyles, self-esteem, substance use/abuse, and troubled families. Groups lasted a semester and included five to eight students; the intervention teams included a facilitator and a co-facilitator (both of whom were doctoral or masters level graduate students) and a group assistant (a trained undergraduate student). Doctoral and masters level students were supervised as part of a counseling training program, and undergraduate students were enrolled in a supervised internship course. Although groups varied by theme (e.g., anger management, relationships, self-esteem, etc.), they shared a common goal, which was to promote positive development, and a common deep structure, which was the use of a participatory transformative intervention model, described below.

Although the Changing Lives Program was developed in a particular setting (i.e., a system of alternative high schools created to prevent school dropout in Miami-Dade County, Florida), it was designed from the outset to be flexible enough for implementation in diverse cultural contexts and with diverse problem foci. The adaptability of the Changing Lives Program is a result of its co-constructivist principles (Kurtines, Berman, Ittel, & Williamson, 1995) and its use of critical pedagogy (Freire, 1983), as discussed below. In keeping with these principles, activities within the Changing Lives Program were developed in response to themes that emerged in the group process and were therefore grounded in local conditions, concerns, and life course events as

experienced by the youth participants. The bottom-up process of drawing on youths' life experiences as a starting point for intervention activities makes the Changing Lives Program flexible for application in a broad array of cultures and settings. Moreover, the intervention activities that have emerged out of this process are adaptable in response to what facilitators, co-facilitators and other participants experience in particular groups and in particular social contexts, and are thus intended to be responsive to culturally diverse settings and conditions.

In the late 1990s, the Changing Lives Program was adapted by a Brazilian research team in Porto Alegre, Brazil in an international collaborative project with the American team in Miami (Milnitsky & Kurtines, 1997). Both teams implemented the Changing Lives Program at local high schools and collected pretest and posttest data from intervention and comparison groups. Although the Brazilian social and historical context was quite different from the context of the program's development, the intervention was implemented successfully, and the results from both sites revealed similar intervention-related gains in critical problem solving (Milnitsky & Kurtines, 1997). These findings suggest that the participatory transformative model described below has strong potential for cross-cultural adaptation. Moreover, findings from subsequent adaptations of the program for college student populations in the United States (Meca et al., 2014) suggest that the intervention model can be used successfully with students pursuing post-secondary education.

A Participatory Transformative Model of PYD Intervention

The Changing Lives Program was designed to empower youth. Its specific intervention strategies were influenced by Freire's (1983) transformative pedagogy for empowering marginalized people through critical discussion, an approach that continues to guide work with marginalized youth within developmental science (Rapa, Diemer, & Roseth, 2020). According to Freire

(1983), using an instructional approach with disempowered students in which students are recipients of knowledge provided by teachers has the effect of distracting the students from the challenge of changing the conditions that disempower them. Freire proposed replacing the teacher-student dichotomy with a problem posing dialogue in which students become co-investigators in dialogue with the teachers and participate in the co-construction of a transformed reality. In the Changing Lives Program, Freire's approach was translated into participatory co-learning processes in which youth, working with their peers and adult facilitators selected the changes they wanted to make in their lives, decided how to go about making them, and attempted to enact these changes.

Implementing the Changing Lives Program intervention involves three phases: (1) *Engagement*, (2) *Participatory Co-Learning*, and (3) *Transformative Actions*. The first two phases correspond to intervention processes that occur in sessions. The third phase corresponds to the actions the individual takes to enact change. The phases are designed to be flexible and open to being adapted to diverse populations, problems, goals, and institutional settings. Phases are not discrete stages, nor are they a prescriptive curriculum for group activities. Instead, they describe hierarchical modes of group work. These modes of group work are described below.

Engagement Processes

In the engagement phase, the focus is on building connections between people in ways that create group cohesion. In youth group work, important connections include both vertical relationships (adolescent \leftrightarrow facilitator) and horizontal relationships (adolescent \leftrightarrow group; Kuperminc & Thomason, 2014). The feeling of *connectedness* is a core PYD outcome that comes from receiving empathy, praise, and attention in the context of a close relationship with another individual or group in which the adolescent feels valued (Karcher, Holcomb, & Zambrano, 2008). Accordingly, facilitators provide empathy, praise,

and attention. They actively listen to what youth say about their lives and allow them to decide what is important for the group to talk about. The shared experience of listening and being listened to and working together to decide what the group will talk about creates cohesion, as well as a sense of ownership of the group.

Although cohesion often emerges organically through experiences of social support, it can also be facilitated intentionally through exercises structured to support sharing. In the Changing Lives program, the Life Course Journal, a collection of journal exercises, is used to facilitate engagement and participatory co-learning (Eichas, Meca, Montgomery, & Kurtines, 2014). In the first exercise (see Table 1), participants take turns sharing where they came from, where they are now, and where they are going in their lives, as well as important life course events and turning points. This exercise helps participants experience giving and receiving support, while also highlighting common ground with other group members.

Participatory Co-learning Processes

As shown in Table 1, group cohesion provides a foundation for participatory co-learning. Cohesion is an ongoing and dynamic process influenced by events both within and outside of group sessions throughout the duration of the intervention. As cohesion strengthens, the focus of group work shifts from engagement to the more differentiated intervention processes of exploration and problem posing. Exploring alternatives involves engaging in critical thinking and critical discussion about life challenges in order to make life choices (i.e., self-construction; Kurtines et al., 1995). Exploring for insight involves attending to the feelings that arise when an activity or choice resonates with the true self, leading to the discovery of personal strengths and potentials that can guide life goal development (i.e., self-discovery; Waterman, 2014).

In the Changing Lives Program, group members use problem posing (Freire, 1983) to explore life challenges and life goals. Problem posing is

Table 1 Interweaving and layering changing lives program intervention strategies, objectives, and exercises

| Phase | Objective | Strategy | Journal exercise |
|---------------------------|---|---|--|
| Engagement | (1) Group cohesion (2) Facilitator-student rapport | Cohesion-building activities Joining/Establishing alliance | Identify important life course events and turning points and co-construct their life stories taking turns sharing with the group. |
| Co-participatory learning | (1) Knowledge of self | Exploration for insight through emotion focused problem posing | Identify and share transformative life goals, activities essential for achieving these goals, and explore their emotional reactions to engaging in the activities. |
| | (2) Critical understanding | Exploration of alternatives through critical problem posing | Identify and share life change goals, envision how the group would be different if members accomplished their life change goals. |
| | (3) Realization of one's potentials | Problem posing (identifying the right problem rather than a solution for the wrong problem) | Create a path towards life change goals by co-constructing potential alternatives for accomplishing the life change goal and critically evaluating these alternatives. |
| Transformative activities | (1) Personal empowerment (2) Proactive participation in self and community | Student-directed transformative activities (toward self, school, or community) | |

the process of identifying the right problem to solve, whether the problem is within oneself and requires action directed at changing the self or in the school or community and action directed externally. Freire emphasized problem posing as a foundation for action because he recognized that problem solving alone does not ensure effective action. Problem solving must be directed at a problem that, if solved, will produce desired results. Problem solving directed at a problem that, if solved, will *not* produce desired results effectively deflects or distracts efforts at change, thereby maintaining an undesirable status quo. Consequently, problem posing involves critical examination of the understanding of *what* is a problem—in this case, by identifying the right life challenges and life goals to pursue.

Participatory co-learning is facilitated through both intentionally structured journal exercises (see Table 1) and opportunities created by group members when they bring ongoing life challenges to the attention of the group. The second Life Course Journal exercise focuses on the relation between participants' most important life goals and their personal strengths. Participants

collaborate with the group to identify their most important life goal, to break down the life goal into activities essential for achieving the goal, and to explore their emotional reactions to engaging in the activities. In the third exercise, group members conceptualize the changes they want to make in their present lives and share them with the group so they can envision how the group would be different if members accomplished these life *change* goals. In the fourth exercise, group members create a path towards their life change goals by co-constructing with the group potential alternatives for accomplishing the life change goal. With help from the group, they critically evaluate these alternatives.

More often, however, participatory co-learning happens organically when opportunities present themselves in real time. When a participant brings to the group a difficult challenge they face at home, in school, or in their relationships, the facilitator introduces a tool called ICED to facilitate problem posing. ICED is an acronym for Identify the Problem, Create Alternatives, Evaluate Alternatives, and Do Something. ICED exemplifies the tradition of critical theory (Freire,

1983; Habermas, 1984) in which the group is encouraged to engage in critical discussion as well as critical thinking. Critical thinking and discussion translate to communicative processes in the group. Essentially, the facilitator says:

One constructive way for dealing with a difficult problem is for us to talk through the problem until we get to the point where we have a shared mutual understanding of it. This means that everyone agrees on the issue, and no one is forced to agree. We can understand the problem just by talking it through, but we have to talk in a special way. When we talk through a problem, each of us has to do four things: we have to be willing to (1) be open-minded about what the issue is (*Identify the Problem*), (2) honestly consider all points of view in the problem (*Create Alternatives*), (3) evaluate all points of view, including our own (*Evaluate*), and (4) not use power, lies, or manipulation to get others to agree with us. The first three things are what we *do* to understand the problem, while the fourth thing is what we *do not do* (Kurtines & Montgomery, 2016, p. 13)

Transformative Actions

The selected solutions that emerge from problem posing and critical problem solving, whether they were generated through engagement in structured journal exercises or as real-time responses to life challenges, represent potential transformative actions. Transformative actions are a subset of the broader concept of critical action, which has been defined as individual or collective action to change aspects of society perceived to be unjust (Rapa et al., 2020). Transformative actions are critical actions youth take to solve problems and overcome challenges created by unjust conditions (e.g., exposure to community violence, lack of community or school resources, etc.). During the Transformative Actions phase, the ICED procedure connects participatory co-learning (exploration and problem posing) with action. Youth are challenged to implement the “*Do Something*” alternative they created during the group’s critical discussion of their problem, and then to report back to the group. If necessary, unresolved problems are recycled for further group discussion. Thus, throughout the duration of the group, facil-

itators seek to empower youth by fostering their support of each other in critical problem solving. As youth experience the process of self-directed change, they become more conscious, both individually and collectively, of their potential to create rather than endure the circumstances of their lives, their community, and themselves.

Group Processes in the Changing Lives Program: Research

As noted, research on PYD processes is relatively sparse (Roth & Brooks-Gunn, 2016), and knowledge about group process in youth interventions in general is limited (Kuperminc & Thomason, 2014). Therefore, we consider the exploratory PYD group process research described below to potentially contribute not only to knowledge about PYD interventions for marginalized youth specifically but also more generally to knowledge about group-based adolescent interventions. First, we present two brief narrative case histories of the use of the ICED procedure to facilitate transformative action. Second, we present a quantitative analysis of relations between targeted group processes and developmental and mental health outcomes. All data come from the Changing Lives Program archive, which includes process data used to track implementation quality. The dataset was comprised of 236 adolescents (143 females and 93 males) aged 14–19 who attended at least four group sessions between 2003 and 2008. Of the participants, 42% were African American, 41% were Hispanic, 9% were White/Non-Hispanic, 0.5% were Asian, 0.5% were Native American and 7% identified as “other” or bi-ethnic. With regard to the socioeconomic characteristics of the sample, 76% had at least one parent who completed high school, 27% had at least one parent who completed a bachelor’s degree, 56% had at least one parent who was born outside of the United States, and 37% had two parents who were born outside of the United States. In addition, 28% of the participants reported annual family incomes below US\$21,000; 39% reported incomes between US\$21,000 and US\$51,000; 11.6% reported

incomes over US\$51,000; and 21% reported they did not know their family income.

Narrative Case Histories: The ICED Procedure

A Challenge at School “Jessica” (names and minor details have been changed to protect confidentiality) was a 17-year old female student who was a member of a Changing Lives Program group comprised of six other female students. The intervention team consisted of two graduate students and an undergraduate student. One day, Jessica told the group that a teacher had been making sexually inappropriate comments to her during class, and she felt angry not only at the teacher but also at the school system that allowed this harassment to happen to her and to other students. Four other group members shared that they had experienced or witnessed similar harassment from the same teacher. During an “*Identify the Problem*” discussion, group members revealed that the teacher’s behavior had been going on for the entire school year and that the teacher was a close friend of the school principal. They had not discussed the problem in the group earlier because they thought that nothing could be done to change the situation and there was no point in talking about it. One student, “Pamela” revealed that she told the principal about the problem earlier in the year but that he had not believed her. The principal told her that she needed to focus on raising her test scores first, and after that they could discuss other concerns. Other group members said they believed that the school only cared about their standardized test scores.

The group came to the consensus that the problem to be solved was to convince the principal to believe them about the teacher’s misconduct because the principal had the power to prevent future misconduct. During a “*Create Alternatives*” discussion, group members considered several alternatives, including doing nothing because the school year was almost finished or surreptitiously tape-recording the teacher’s harassment, but they ultimately decided to first

try to “*Do Something*” by writing witness statements that they asked the group facilitators to share with the school counselor and principal. They came to this decision based on the “*Critical Evaluation*” that enlisting credible adults from outside the school system would create pressure for change while avoiding direct confrontation. It would also capitalize on pre-existing relationships among the facilitators, the school counselor, and the principal. However, they remained open to other alternatives if their selected strategy was unsuccessful.

Guided by a clinical supervisor, the facilitators brought witness statements describing the teacher’s misconduct to the school counselor, who arranged a meeting with the principal. In this meeting (as predicted by Pamela), the principal expressed skepticism about the students’ accounts, but he promised to investigate. The next day, the principal individually interviewed each student who contributed a witness statement. Students expressed surprise and anxiety about having to meet with the most powerful person on campus in his office. However, they supported each other and received support from the facilitators and school counselor. All students successfully provided their accounts to the principal. By the next week, though, the principal had taken no action, apparently continuing to disbelieve the students. After this first strategy was unsuccessful, Jessica tape-recorded the teacher’s harassing remarks in class and provided the principal with incontrovertible evidence of the teacher’s misconduct. The week after that, the problem teacher was suspended indefinitely. Subsequent group sessions were used to debrief about the experience and raise students’ awareness of the power they had just exercised.

Discussion What were the participatory transformative processes involved in this intervention? First, the group members trusted the group enough to share what was happening despite previous marginalizing experiences at the school. Students’ interactions with the school can be described as marginalizing not only because of their direct experiences of harassment at the school, but also because their request for help

from a school official was disregarded (i.e., pushed to the periphery; Hall & Carlson, 2016) in ways that exacerbated risk of abuse. Notably, the rationalization for disregarding the request was one of the criteria (academic failure) for attending the alternative schools in the first place. Thus, it was important that the adults on the intervention team gave credence to the students' accounts of harassment to avoid reinforcing the ongoing marginalization process. Second, the group members collaborated with each other and with the facilitators as co-equal partners for change. The facilitators did not solve the problem for the students or dictate to them how to solve the problem. Instead, the group process brought together the students' expert knowledge of their school with facilitator's expert knowledge of adult professional relationships. Most importantly, this co-learning translated into action. Students did more than just talk about their problems—they did something about them.

A Challenge at Home “Didier” was a 17-year old male whose parents had immigrated to the United States from Haiti when he was eight. The concern he brought to the group was that the fights he had with his younger sister, “Sherly” had recently intensified to the point that neighbors had alerted the police. During “*Identify the Problem*” discussion, he told the group how he had become very resentful of the special and lenient treatment his parents gave Sherly while he was being forced to take on the extra responsibility of earning money for the family. He felt that because he was the oldest son, he received all of the blame for the sibling conflicts, which made him very angry with his parents. During the “*Create Alternatives*” discussion, he told the group he had considered running away, or at least moving in with an aunt in a nearby community. The group challenged him to “*Critically Evaluate Alternatives*”, suggesting that a move out would be very upsetting to his parents and would leave his sister without protection in their neighborhood. They also challenged his perspective of his parents' treatment

of his sister, and proposed that he reframe his relationship with her from one as “competitor” for his parents' support to one as “mentor” for all that she would need to learn in high school (which his parents would not know because of their background in another country's educational system). Didier was open to the group's suggestions, considered them, and promised to “*Do Something*” about his problem by attempting reconciliation with his sister and parents. At the end of semester, he reported that he had made progress in transforming his family relationships and was much happier at home.

Discussion The life challenge faced by Didier could only be understood in the context of the social and economic circumstances that influenced his family life. Didier's frustration with his family situation resulted from the need for him to make a financial contribution to the family, which in turn was influenced by the limited economic opportunities available to working class immigrant families who came from Haiti and other nations during his lifetime. However, while the adult facilitators could understand Didier's life challenge and the broader historical circumstances that gave rise to it on an intellectual level, the group members could understand this challenge on an *experiential* level. That is, because the group members came from similar neighborhood contexts and faced similar life challenges, they were able to contribute contextualized expertise grounded in their own life circumstances. On the other hand, the facilitators, who did not live in the same neighborhoods and therefore did not have experiential knowledge of these settings, could not provide this kind of real-life expertise. Instead, they facilitated a participatory transformative process in which the collective expertise of the entire group could be brought to bear on a difficult life challenge. As a result, the group created alternative perspectives on the situation beyond what Didier or the facilitators could think of, helping to raise Didier's awareness of his sister's need for his guidance to navigate a challenging developmental context.

General Discussion In the participatory transformative model, life challenges such as those faced by Jessica and Didier are viewed as teaching moments—opportunities for participatory co-learning and transformative action—for both youth and adults. If the actions youth take to overcome life challenges produce positive change in the way that they understand and feel about their own capacity to determine who they are and where they are going in life, then the actions constitute mastery experiences that promote positive identity development (Eichas et al., 2014). With respect to Jessica and Didier, we can only say that their actions represent *potential* mastery experiences because it is unknown whether or not their actions changed the way that they understand and feel about themselves. However, we theorize that the effects of mastery experiences are mediated by the emotional developmental process of uncovering personal strengths and potentials (self-discovery), and by the critical cognitive developmental process of selecting a course of action from an array of alternatives (self-construction). Outcome evaluation suggests that participation in the Changing Lives Program is associated with positive change in both self-discovery and self-construction, relative to a comparison group, and that self-discovery is linked to life goal development, increased identity synthesis, and decreased internalizing problems (Eichas, Montgomery, Meca, & Kurtines, 2017).

Quantitative Analyses: An Outcome Process Evaluation Model

After each Changing Lives Program group session, the group members assessed the impact of the session using the Youth Development Project Session Evaluation Form (YDP-SEF; Bussell & Kurtines, 1999). The YDP-SEF, which was adapted for an adolescent population from Elliott and Wexler's (1994) Session Impact Scale consists of ten items and four subscales: Group Impact (GI; four items referring to felt group cohesion and connectedness), Facilitator Impact (FI; two items referring to felt connected-

ness with the facilitator), Skills Impact (SI; two items referring to learning useful and relevant skills), and Exploration Impact (EI; two items referring to talking about alternative points of view). All items were rated on a 5-point Likert scale, from 1 (*not at all*) to 5 (*very much*). Confirmatory factor analysis of participants' ratings of the first group session provided support for a bi-factor model that included both specific factors (GI, FI, SI, and EI) and a general Session Impact factor. Reliability estimates ranged from $\alpha = .70$ to $\alpha = .97$.

We evaluated the effect of the intervention process, as measured by group members' average perceived session impact over the entire semester, on pretest (T1) to posttest (T2) change in self-construction and mental health. The outcome-process evaluation model is presented in Fig. 1. Average GI, FI, SI, and EI scores were used as indicators of average session impact. Indicators of self-construction were items from the Personal Responsibility Measure (Ferrer-Wreder et al., 2002) that elicited participants' ratings of their sense of control over and responsibility for decisions and actions for attaining self-selected life change goals, as well as the outcomes and consequences. Participants rated these items on a 5-point Likert scale ranging from 1 (*none*) to 5 (*total*).

Indicators of mental health were subscale scores for emotional well-being, social well-being, and psychological well-being from the Mental Health Continuum-Short Form (Keyes, 2005). Participants rated items on a 5-point Likert scale ranging from 1 (*almost never true*) to 5 (*almost always true*) with high scores reflecting high levels of mental health. Finally, session attendance and semesters of program development were included as predictors of average session impact. Semesters of program development were derived from the student's semester of participation. The variable was scaled to start at zero and increase by 1.00 with each subsequent semester in order to reflect the experience gained by the Youth Development Project with each semester of activity.

As shown in Table 2, average session impact was positively associated with change in mental

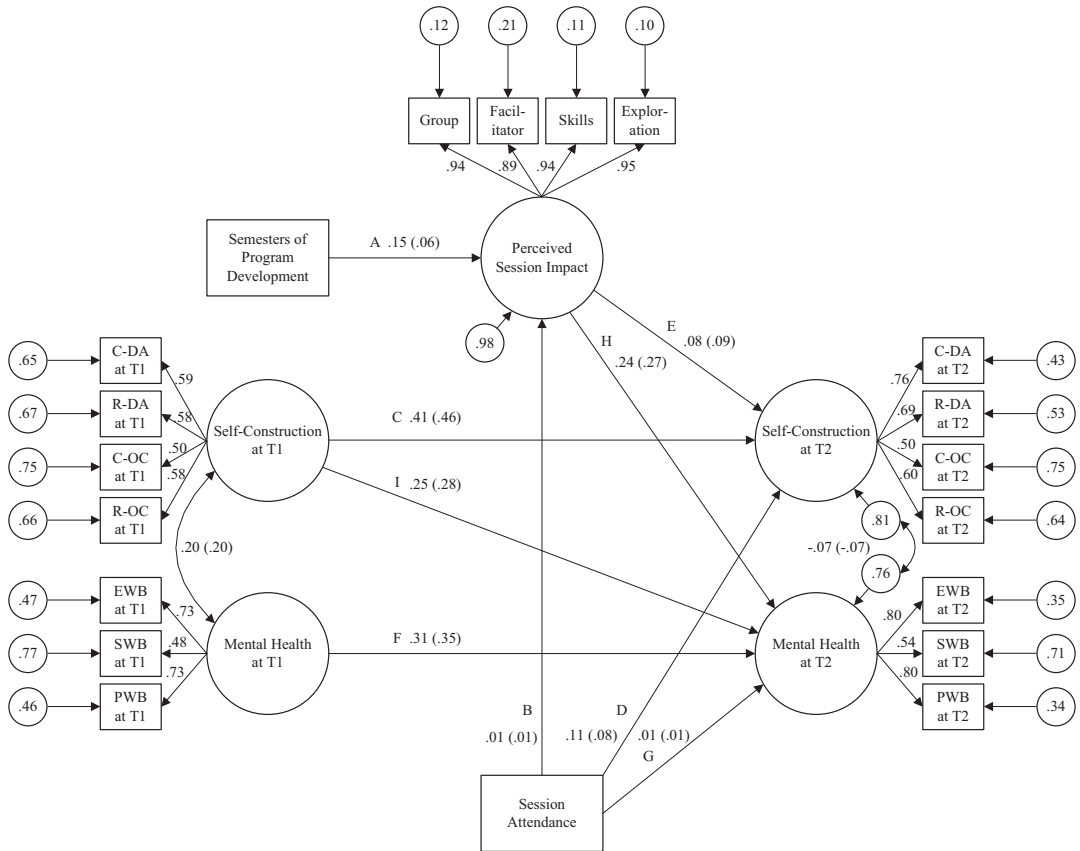


Fig. 1 The outcome process evaluation model (Note: Rectangles are observed variables; circles are latent variables. Small circles represent residuals. Single-headed arrows are hypothesized paths; double-headed arrows are covariances/residual covariances. Standardized estimates are presented; unstandardized estimates are in parenthe-

ses. Numbers in small circles are the percentage of variance not explained by the model. *EWB* = Emotional Well-Being; *SWB* = Social Well-Being; *PWB* = Psychological Well-Being; *C/R-DA* = Control/Responsibility for Decisions and Actions; *C/R-OC* = Control/Responsibility for Outcomes and Consequences)

health (path H) but not change in self-construction (path E), suggesting a positive general effect on mental health but not a specific effect on self-construction. Conversely, session attendance was positively associated with change in self-construction (path D) but not mental health (path G). This finding provided support for gains in self-construction consistent with previous comparative outcome analyses (Eichas et al., 2017) but revealed that these intervention gains worked through processes different from those measured by the YDP-SEF.

Further, each additional semester of program development was associated with a small increase

in average session impact (path A). However, average session impact was not associated with the number of sessions attended (path B). An indirect effect (path A * path H) suggested that perceived session impact might mediate the effect of program development on mental health. Finally, self-construction at T1 was positively associated with change in mental health at T2 (path I). Thus, a half-longitudinal indirect effect suggested that self-construction might mediate the effect of session attendance on mental health (path D * path I), under the assumption that longitudinal linkages between variables are stable over time (Little, 2013).

Table 2 Parameter estimates, outcome process model

| Model parameters | Est. | 95% CIs | Std. Est. |
|--|------|-------------|-----------|
| Measurement parameters | | | |
| Session impact → Group impact | .56 | [.50, .63] | .94 |
| Session impact → Facilitator impact | .59 | [.49, .68] | .89 |
| Session impact → Skills impact | .65 | [.59, .72] | .94 |
| Session impact → Exploration impact | .64 | [.57, .71] | .95 |
| Self-construction at T1 → C-DA at T1 (a) | .60 | [.45, .75] | .59 |
| Self-construction at T1 → R-DA at T1 (b) | .55 | [.42, .69] | .58 |
| Self-construction at T1 → C-OC at T1 (c) | .56 | [.40, .73] | .50 |
| Self-construction at T1 → R-OC at T1 (d) | .58 | [.44, .73] | .58 |
| Mental health at T1 → EWB at T1 (e) | .64 | [.53, .75] | .73 |
| Mental health at T1 → SWB at T1 (f) | .44 | [.33, .55] | .48 |
| Mental health at T1 → PWB at T1 (g) | .57 | [.44, .70] | .73 |
| Self-construction at T2 → C-DA at T2 (a) | .60 | [.45, .75] | .76 |
| Self-construction at T2 → R-DA at T2 (b) | .55 | [.42, .69] | .69 |
| Self-construction at T2 → C-OC at T2 (c) | .56 | [.40, .73] | .50 |
| Self-construction at T2 → R-OC at T2 (d) | .58 | [.44, .73] | .60 |
| Mental health at T2 → EWB at T2 (e) | .64 | [.53, .75] | .80 |
| Mental health at T2 → SWB at T2 (f) | .44 | [.33, .55] | .54 |
| Mental health at T2 → PWB at T2 (g) | .57 | [.44, .70] | .80 |
| Structural parameters | | | |
| A. Semesters of program development → Session impact | .06 | [.002, .12] | .15 |
| B. Session attendance → Session impact | .01 | [−.08, .09] | .01 |
| C. Self-construction at T1 → Self-construction at T2 | .46 | [.23, .68] | .41 |
| D. Session attendance → Self-construction at T2 | .08 | [.04, .11] | .11 |
| E. Session impact → Self-construction at T2 | .09 | [−.14, .32] | .08 |
| F. Mental health at T1 → Mental health at T2 | .35 | [.03, .67] | .31 |
| G. Session attendance → Mental health at T2 | .01 | [−.03, .04] | .01 |
| H. Session impact → Mental health at T2 | .27 | [.07, .48] | .24 |

| Model parameters | Est. | 95% CIs | Std. Est. |
|--|------|---------------|-----------|
| I. Self-construction at T1 → Mental health at T2 | .28 | [.02, .55] | .25 |
| Indirect effects | | | |
| Path A*Path H | .02 | [-.0003, .04] | .04 |
| Path D*Path I | .02 | [.001, .05] | .03 |

Note: *Est.* = Estimate; *CIs* = Confidence Intervals; *Std. Est.* = Standardized Estimate; *EWB* = Emotional Well-Being; *SWB* = Social Well-Being; *PWB* = Psychological Well-Being; *C/R-DA* = Control/Responsibility for Decisions and Actions; *C/R-OC* = Control/Responsibility for Outcomes and Consequences. Lower case letters in parentheses indicate factor loadings constrained to equality. Monte Carlo confidence intervals are reported for indirect effects

Implications for Research, Policy, and Practice

One of the implications of this chapter is that PYD researchers should conceptualize and evaluate group processes to better understand how to engage marginalized youth in PYD. As noted by Roth and Brooks-Gunn (2016), few researchers have empirically tested associations between process and outcome in youth development programs. Consequently, the development of PYD group process research may require drawing on models and methods from the group psychotherapy research literature. Reviews of this literature reveal that group processes are influenced by imposed and emergent group structures and interpersonal exchanges among group members and between members and group leaders (Burlingame, Whitcomb, & Woodland, 2014). In addition, a number of factors shared by all group interventions (i.e., common factors) have been identified, including cohesion. However, studies have produced mixed results possibly because of the considerable variability among their conceptual definitions and operational measures (Burlingame, McLendon, & Yang, 2018) or because of the dynamic nature of these processes (Chapman & Kavlighan, 2019). This suggests that when examining the relations between the group process and outcome in PYD intervention research, it is important to consider multiple aspects of the group process. Even less is known about how experiences of marginalization may influence efforts to promote supportive relationships between youth and adults in PYD interventions. The exploratory research presented here suggests that although specified group processes were associated with gains in mental health, the group processes that promote self-construction have yet to be empirically detected.

In addition, there are potential policy implications for the type of services that should be delivered in schools to youth who have been identified as high risk. As noted, risk is linked to marginalization both conceptually (Hall & Carlson, 2016) and empirically (Berman et al., 1996). Keeping this link in mind may help explain why school-based interventions aimed at reducing external-

izing problem behaviors (substance use and conduct problems) have shown little effectiveness or even produce iatrogenic effects in low-income urban youth (Farahmand, Grant, Polo, Duffy, & DuBois, 2011). Problem-focused interventions may not work for these youth the way they do for others because problem-focused interventions do not address the underlying process of marginalization. As suggested by Freire (1983), when problem solving is directed at the wrong problem, it effectively deflects efforts at change, thereby maintaining an undesirable status quo. Thus, there should be increased support for developing empowerment-focused school-based interventions that address the underlying process of marginalization.

With respect to practice implications, this chapter highlights the importance of ensuring that intervention efforts are sustainable over the long term. The findings suggested that the Changing Lives Program became more effective at facilitating targeted intervention processes with each additional semester of program development. One possible explanation for this finding is that over time organizations that implement youth interventions accrue valuable experience that enhances their effectiveness. Another possible explanation is that organizations accrue valuable credibility in the eyes of the adolescent participants as a result of demonstrating a long-term commitment to serving these youth. Because program sustainability appears to contribute to program effectiveness, PYD practitioners should plan not only program content and activities but also strategy for ensuring long-term service delivery.

In conclusion, the PYD approach offers a potential empowerment-focused alternative to the problem-focused approach for building interventions for marginalized youth. We presented a model of PYD intervention in which youth and adults become co-equal partners in creating a vision of positive change, each bringing with them their own expert knowledge. This model, as implemented in the Changing Lives Program, has demonstrated both long-term sustainability and promising results in comparative outcome studies. However, developing a PYD alternative to

problem-focused intervention requires going beyond outcome studies to refine understanding of the actions, experiences, and relationships that comprise group process and promote desirable PYD outcomes. Future PYD research should use models from psychotherapy process research to identify what group processes, for what youth, at what points in the intervention, result in what features of PYD, thereby shedding light on what processes may be utilized to enhance the universality of the PYD approach.

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Family Processes and Competence in a Positive Youth Development Context: Perspectives for African American Youth

Anthony G. James Jr., Amity L. Noltemeyer, Drewcilla Roberts, and Kevin R. Bush

Abstract

Scholarship on Positive Youth Development (PYD) indicates that when youth are imbued with certain qualities, they tend to thrive in a variety of social settings. Core models of PYD (i.e., the 5Cs and the 40 developmental assets) both see *competence* as a key quality for youth thriving. Thus, understanding the factors that contribute to the development and nurturance of competence is central to youth research, policy and practice. Using the relational developmental meta-theoretical framework as its cornerstone, this chapter addresses the role that family processes have on the development of youth competence, which advances thriving in their social settings. More specifically, we provide a brief overview of competence as a factor in the two aforementioned PYD models in the United States and then discuss how and why competence development serves a differ-

ent purpose for African American youth. Further, by applying the specificity principle, we also examine the relations between family processes and competence in African American youth, particularly in what we deem to be the third historical epoch of this relational context (i.e., African American parent-youth). In so doing, the chapter furthers a discussion on opportunities and constraints related to the transition from parental competence to their offspring as a mechanism solely for survival to a mechanism for both survival and thriving.

Keywords

Positive youth development · African American families · Parenting · Competence · African American youth

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The presence and development of competence has long been of interest to youth development scholars and practitioners, particularly as it relates to the developmental task of decision-making abilities across various contexts (Belita et al., 2020; Bruine de Bruin, Parker, & Fischhoff, 2020; Harter, 1982, 2012; Parker & Fischhoff, 2005). We approach this issue by first reviewing the available literature on how competence has been conceptualized in contemporary theories of

PYD, and the role of families in the socialization of youth competence. This included a literature search using a Boolean approach with core terms (i.e., Black, African American, competence, and knowledge), ancestry (backwards) and treeing (forward) techniques (Scells, Zuccon, Koopman, & Clark, 2020). Then we provide an analysis of why and how competence has historically served a different purpose in the parent-youth relational context of African American families in the United States. In so doing, we apply the specificity principle (Bornstein, 2017) by arguing that competence is not only a critical indicator of PYD for African American youth, but works differently compared to the role of competence in the PYD of other ethno-racial youth (Barbarin, Tolan, Gaylord-Harden, & Murry, 2020; Yu, Smith, & Oshri, 2019). Further, we offer a global perspective on this issue, highlighting how our argument may also be applicable to Black youth in other global contexts. We conclude the chapter with a brief discussion on implications for research, policy and practice.

Competence: Conceptualization and Role in Youth Development

Competence has long been argued as a key ingredient in helping youth successfully transition into, through and out of adolescence. Susan Harter's (1982, 2012) work has been the cornerstone in the United States for relevant models assessing whether and how competence fits into PYD (Benson, Scales, Sesma Jr., & Roehlkepartain, 2006; Geldhof et al., 2015). Harter (1982) first conceptualized competence as an umbrella term, which subsumed several domains (i.e., social, cognitive, physical; see Fig. 1). Across these domains, competence refers to specific knowledge that allows an individual to successfully navigate a given context. Competence as a PYD indicator has been historically a key for survival of Black and African American youth (Barbarin et al., 2020; Johnson & Carter, 2020). African Americans are one of the largest ethnic groups accounting for 44 million out of the nearly 330 million U.S. population

(Statista, 2020). African Americans are largely the descendants of Africans who were brought forcibly to the United States as slaves between 1619 and 1860 generally of West/Central African and European descent, and some also have *Native American* ancestry (Campinha-Bacote, 2009). Yet, this has not been the case for other ethno-racial youth in the United States, such as White youth who lived in a different racial context (Berrey, 2009; Warikoo, 2020). Thus, competence may be a more relevant indicator of PYD for African American youth ability to thrive in a racialized context (see Fig. 2).

While general competence is important, understanding how competence manifests across the variety of contexts in which youth are embedded is a key to ultimately predicting their ability to thrive (Ettinger et al., 2020; Harter, 2012). Thus, it is critical to have a nuanced understanding of various domains of competence. Cognitive competence focuses specifically on youth abilities in academic performance. This domain of competence takes into account the students' perceptions about whether they are good at schoolwork and are smart. Social competence regards youth perception of their likability as well as their ability to make friends. Finally, Harter (1982) conceptualized physical competence as youth perception of their own physical ability in activities, such as outdoor games and sports.

Harter (1982) developed a measure called The Perceived Competence Scale for Children to investigate whether these domains of competence were supported empirically. The scale was designed with four subscales, one for each of the three above mentioned domains of competence and one for perceptions of general self-worth, showing good reliability and validity in the U.S. (Harter, 1982). Yet, further explanation of each domain is necessary as these concepts could be considered the building blocks for current literature concerning youth competence, and how person ↔ environment interactions (e.g., parent-youth) influence the development of competence.

Since Harter's (1982) conceptualization of competence, many other domains of competence have been added to the literature to fully capture

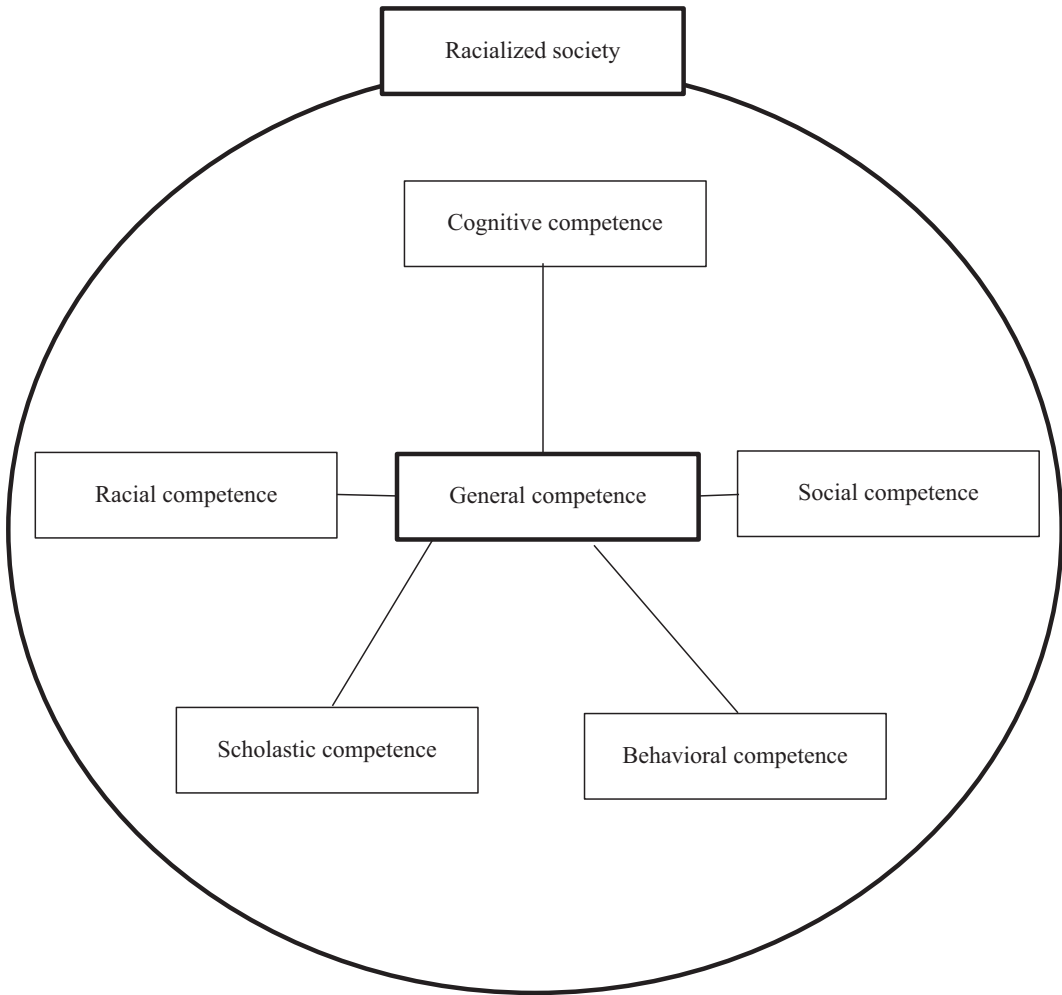


Fig. 1 Competence in a racialized society (Note. Author elaboration based on Harter work on general competence (1982; 2012) adapted to include racial competence and

contextualize competence in a racialized society (Golash-Boza, 2016))

the multiple developmental contexts that youth are embedded and to create a mechanism for assessing their abilities in those contexts. Core PYD models (e.g., the 5Cs and the 40 developmental assets) maintained Harter’s general definitions of competence by enlarging its domains of academic (e.g., attendance, test scores, and grades), health (e.g., nutrition, exercise, and resting), vocational (e.g., career exploration and entrepreneurship) and social competence (Geldhof et al., 2015; Roehlkepartain & Blyth, 2020; Scales, Roehlkepartain, & Shramko, 2017).

The inclusion of competence in leading PYD models provides evidence of its importance to youth ability to thrive in their social worlds.

Competence in a PYD Context

The relational developmental systems (RDS) metatheory is relatively new compared to more established theories of child and youth development (e.g., Piagetian, Erikson, and Freudian). This metatheory has become widely applied in

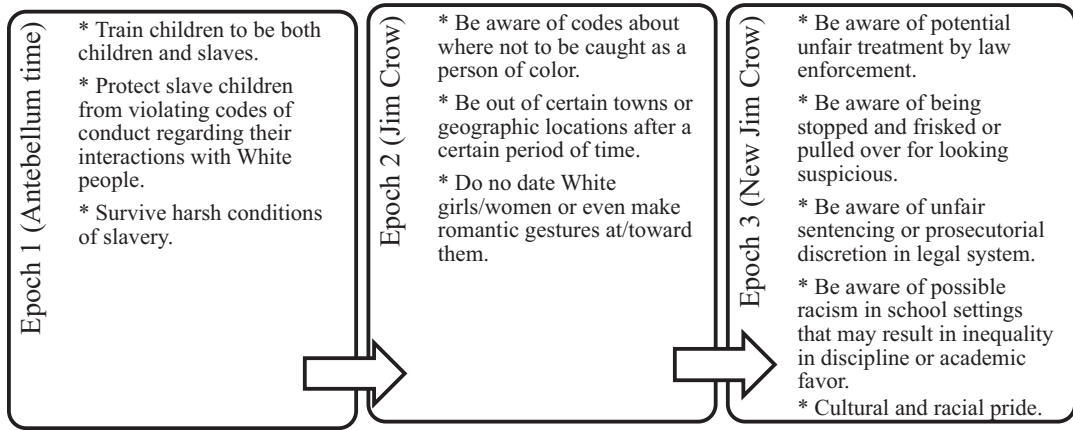


Fig. 2 Parenting and the development of african american children and youth over time (*Note.* This figure represents parental goals of African American children and youth across the three epochs discussed in this chapter. The goals in the first two epochs are about parenting survival, whereas epoch 3 includes parenting thriving.

Relevant scholarship used to create the figure refers to work by Alexander (2012), Berrey (2009), Dotterer and James et al. (2018), Hughes et al. (2006), King (2011), Loewen (2018), Pegues (2017), Stevenson (2015) and the U.S. Department of Education Office of Civil Rights (2014))

developmental science due to its relational, systemic, holistic, dynamic, and process oriented perspective (Bell, 2020). The value of using an RDS lens to discuss how families promote youth competence stems from its focus on intra- and inter-personal interactions as the key process regulating human development (Bell, 2020; Overton, 2015). Although competence is also developed and nurtured in other contexts, given the focus on family processes in the development of African American youth competence, we limit our scope to this particular demographic of children and youth because of their unique history and ways in which parenting goals have shifted over time as further explained in more detail in the chapter. From a RDS metatheory, several perspectives that describe and explain processes influential to youth thriving were derived. For many of these perspectives, competence is considered a critical quality that helps youth to thrive in their social worlds. We review and describe two overarching models of PYD that include competence as a core component.

Competence Within the 5Cs Model of PYD

The 5Cs model of PYD has been developed by several scholars building on one another's work to identify the qualities needed for youth to thrive. Initially, the model comprised 4Cs of competence (literacy, employment skills, ability to contribute), connection (caring human relationships, mentoring, tutoring, counseling), character (values of responsibility, honesty, equity) and confidence (self-esteem and hope) (Pittman, Irby, & Ferber, 2000) supplemented by the 5C of caring (empathy and sympathy) (Lerner, 1995) and the 6C of contribution signifying the need for young people to engage with their communities and the society (Pittman et al., 2000).

The model was subsumed by the RDS metatheory by focusing on systematic bidirectional person ↔ environment interactions that regulate the course of human development. Of note, these interactions do not assume positive or negative developmental outcomes but rather merely regulate developmental processes (e.g.,

stasis, changes; Ford & Lerner, 1992). However, the 5Cs model took an extra step by emphasizing positive developmental outcomes. Specifically, the model argues that when the person ↔ environment interactions are mutually beneficial, *adaptive* developmental regulations occur. Through these adaptive developmental regulations, the 5Cs are developed by youth, which allow them to successfully navigate adolescence and become contributing adults in a civil society (for an expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)).

The 5Cs model has been successfully applied in a variety of samples of young people in the United States (Dvorsky et al., 2019; Geldhof et al., 2015), Europe (Årdal, Holsen, Diseth, & Larsen, 2018; Dimitrova et al., [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Holsen, Geldhof, Larsen, & Aardal, 2017; Kaniušonytė & Truskauskaitė-Kunevičienė, [this volume](#); Kozina, Wium, Gonzalez, & Dimitrova, 2019), Africa (Kabir & Wium, [this volume](#); Wium, Ferrer-Wreder, Chen, & Dimitrova, 2019), Asia (Chai et al., 2020; Chen, Wium, & Dimitrova, 2018; Li, He, & Chen, [this volume](#); Ye, Wen, Wang, & Lin, 2020), Latin America (Dominguez, Wium, Jackman, & Ferrer-Wreder, [this volume](#); Manrique-Millones et al., [this volume](#)), New Zealand (Fernandes, Fetvadjev, Wium, & Dimitrova, [this volume](#)) and the Caribbean (Hull, Ferguson, Fagan, & Brown, [this volume](#); Hull, Powell, Fagan, Hobbs, & Williams, 2020).

Based on the above considerations, this chapter focuses on youth competence because it has historically not only been a factor in African American children and youth thriving, but their very survival as well (Berrey, 2009; Warikoo, 2020). We follow the above scholarship in addressing competence as the positive view of one's abilities in domain specific areas and adequacy to perform tasks in the aforementioned domains (e.g., social, academic, scholastic, cognitive, athletic). Because youth are embedded in multiple contexts, it is important to understand

that these domains are interactive and that thriving requires some level of competency in all of them (Dukakis, London, McLaughlin, & Williamson, 2009).

Competence Within of the 40 Developmental Assets Model of PYD

The developmental assets model focuses on youth strengths with the assumption that increasing those strengths fosters optimal development. There are 40 assets grouped into external (i.e., environmental, contextual, and socializing systems such as support, empowerment, boundaries and expectations, and constructive use of time) and internal (i.e., skills, competencies, and values such as commitment to learning, positive values, social competencies, and positive identity). The developmental assets model has been successfully applied across culturally diverse samples and demographic contexts in Latin and North America, Africa, Asia, and Europe (Adams, Wium, & Abubakar, 2019; Chen, Wium, & Dimitrova, 2019; Desie, 2020; Drescher, Johnson, Kurz, Scales, & Kiliho, 2018; Kaur et al., 2019; Pashak, Handal, & Scales, 2018; Scales et al., 2017; Soares, Pais-Ribeiro, & Silva, 2019; Vera-Bachmann, Gálvez-Nieto, Trizano-Hermosilla, Salvo-Garrido, & Polanco, 2020; Uka et al., [this volume](#); Wium & Dimitrova, 2019; Wium & Kozina, [this volume](#)).

The developmental assets model asserts that as youth develop more of these assets, they are more likely to thrive (e.g., be civically engaged) and less likely to engage in developmentally compromising behaviors (e.g., violence, illicit drug use). This model emphasizes a relational developmental process, arguing that the developmental assets are nurtured through certain person ↔ environment interactions (e.g., access to positive and caring adults, participation in programming with skill-building activities that advance the ethos of thriving). Further, under certain circumstances, some assets may be more important than others, but over the course of youth development, all of the assets are important (Scales et al.,

2017). We focus here on those that relate directly to youth competence.

As previously mentioned, social competence is a critical component of the developmental assets model, as it is one of the four domains of internal assets. The assets model argues for the importance of social competence that young people need to interact effectively with others, cope with new situations and make difficult decisions (Scales et al., 2017). Further, key aspects of social competence are critical to helping youth thrive (i.e., planning and decision-making, interpersonal competence, cultural competence, resistance skills, and peaceful conflict resolution). Of note, cultural competence and decision-making are key assets on the thriving index (Scales, Benson, Leffert, & Blyth, 2000; The Talent Enterprise, 2020) and have been linked to thriving among African American youth (Barbarin et al., 2020; Metzger et al., 2020).

In recent years, scholars have begun to study processes that promote the assets referred to developmental relationships (Pekel et al., 2018). Specifically, the development and nurturance of the assets are more likely when youth experience positive developmental relationships with important people in their lives. Within these relationships, youth can experience many “elements”, such as expressing care (show youth that they matter), challenging growth (push youth to experience continued growth in areas of their life), providing support (help youth complete tasks and achieve goals), sharing power (treat youth with respect and give them some decision-making authority), and expanding possibilities (put youth in networks that broaden their horizons). Pekel et al. (2018) argue that the assets model can work in many contexts (e.g., after school programs), but that the parent-child relationship is often ignored. These authors suggest that as parents incorporate more of this model in the relationship with their children, the likelihood increases for their children to develop the assets needed to thrive (Pekel et al., 2018).

Both PYD models use the RDS theory to describe and explain the factors that help youth thrive. Specifically, both models emphasize bidirectional person ↔ environment interactions that

help imbue youth with a variety of qualities that help them successfully navigate their social worlds. Further, competence is a key factor in the developmental journey for both models. Though these two models provide theoretical grounding for understanding what helps youth to thrive, we still need to discuss specifics about the bidirectional person ↔ environment interactional contexts that produce thriving qualities, particularly related to youth competence. We argue that both models are relevant and meaningful for understanding how children and youth in the United States develop on a positive trajectory, but that the history of African Americans, and their treatment by dominant groups, creates a unique process related to the development of competence for African American children and youth (James, Coard, Fine, & Rudy, 2018). Specifically, we look at how families contribute to this process, providing an overview of how this has been examined in the broader PYD literature.

Youth Competence in the Family Context

Both PYD models reviewed in this chapter have primarily focused on how non-familial actors influence youth ability to thrive (Shek, Dou, Zhu, & Chai, 2019). While it is certainly true that youth are embedded in many institutions (e.g., schools, communities), it cannot be ignored that for most youth, the family is the first and primary institution to which they are introduced. This missing link prompted Pekel, Roehlkepartain, Syvertsen, and Scales (2015) to produce a report on the important role that families play, both directly (through the socialization of youth) and indirectly (through partnerships with schools), in promoting positive youth development. This is not to say that families have not been central in the social science literature seeking to understand child and youth development (see Lerner, Johnson, & Buckingham, 2015 for a detailed overview), but more of a gentle reminder that in both familial and non-familial contexts, caring adults can and do influence PYD. In this section, we focus on the research regarding family fac-

tors, and more specifically, the role of parenting in African American families in the development of competence. First, we provide a brief overview of the broader literature on family context and PYD.

Key Concepts in Family and Youth Competence Literature

Most parents seek to equip their children with the necessary tools to make sound decisions across the various contexts in which they are embedded (Dimitrova, Ferrer-Wreder, & Trost, 2015; Dimitrova, Johnson, & van de Vijver, 2018; Dutra-Thomé & Ponciano, *this volume*; Lansford et al., *this volume*; McKee et al., *this volume*). Relevant PYD models that center on the importance of competence in youth ability to thrive (e.g., the 5Cs and the 40 developmental assets) have renewed the empirical focus on the relations between family processes and youth ability to make competent decisions across contexts, including the ability to develop competencies across multiple domains (Aceves, Bámaca-Colbert, & Robins, 2020; Bush & Peterson, 2013; Lopez & Shen, 2020; Safa, White, & Knight, 2020). Two concepts pertinent to understanding how families influence youth development are family cohesion and parenting styles (Bornstein & Putnick, 2018; Bradley, Ferguson, & Zimmer-Gembeck, *this volume*; Kosic, Wiium, & Dimitrova, *this volume*). Both concepts align with the overarching RDS theory focusing on the relational interactions between parents and their developing youth.

Family Cohesion The concept of family cohesion derives from the general systems theory and explains how families are bounded units of individuals that have structure and processes of interaction (James et al., 2018). Cohesion regards the processes of interaction within a family and refers to the emotional closeness shared within the families systems (Olson, 2000). A subsystem of the family unit is that of the parent-child subsystem. It is within this context that parent-child

interactions occur in that both influence and are influenced by the larger family unit. Several scholars used this theoretical framework to examine how the family influences youth competence. Across variety of cultural contexts, family cohesion has been shown to promote youth ability to develop close relationships with peers (Engels, Deković, & Meeus, 2002), positive adjustment and life satisfaction (Jhang, 2020; Shorter & Elledge, 2020), social competence (Brody, Stoneman, & Flor, 1996; Leidy, Guerra, & Toro, 2012), cognitive competence (Niehues, Kisbusakarya, & Selcuk, 2020), identity formation (Prioste, Tavares, Silva, & Magalhães, 2020), scholastic and academic competence (Fang, 2020; Toyokawa & Toyokawa, 2019). The relation between family cohesion and youth scholastic and academic competence has primarily been linked to social capital and behaviors that help children increase their reading abilities. However, the associations between family cohesion and these two domains of competence have been less strongly correlated, and are likely mediated through other factors, such as quality parenting (Jhang, 2017).

Parenting Styles The concept of quality parenting regards the extent to which parents communicate clearly to their child, spend positive time with their child, use a reasonable amount of control, and express love towards the child (Altenburger & Schoppe-Sullivan, 2020; Baumrind, 1978, 1991). Parenting is embedded within the family system, but moves beyond general closeness among family members and allows parents to interact with their children in ways that socialize them to develop qualities that can promote thriving and competence. Quality parenting closely mirrors Baumrind's (1978) authoritative parenting style represented by the conjunction of high levels of parental warmth and moderate levels of appropriate control and restriction. This parenting style is also responsive to child needs and desires (e.g., autonomy), but within reasonable boundaries (Baumrind, 1978, 1991; Bush & Peterson, 2013).

Relevant scholarship supports the link between quality parenting and the promotion of youth competence (Jeon & Nepl, 2019; Liu, Zhou, Cao, & Hong, 2020; Stein, Mejia, Gonzalez, Kiang, & Supple, 2020). When parents are attuned to their adolescent children's needs, they are better able to interact with them in ways that promote domain specific competence. It is crucial to understand that youth need opportunities to promote their decision-making abilities and parents can promote this type of competence (e.g., cognitive), while also allowing youth the opportunity to make decisions about their lives in appropriate ways (Lerner, 2008). Further, parents who encourage their offspring to reflect on their lives and future careers (see Negru-Subtirica & Badescu, [this volume](#)), and then provide the young person with feedback, aid in the advancement of cognitive abilities (Dowrick, Back, & Mills, 2015). Importantly, these examples of how parents can promote youth competence also reflect parents' understanding of youth need for autonomy (Bush & Peterson, 2013). Such interactions also promote parent-child attachment, which is a key ingredient for an effective parental socialization and youth psychosocial well-being (Bornstein & Putnick, 2018; Dimitrova et al., 2018; Kapetanovic & Skoog, 2020; Lai & Carr, 2020; Titzmann, Ferrer-Wreder, & Dimitrova, 2018).

In summary, family processes have been key factors in the development of youth competence. However, the rationale for why youth need certain competence or knowledge may vary across various ethnic and racial groups (Dimitrova, 2018; Dimitrova et al., 2018; Eichas, Montgomery, Meca, Garcia, & Garcia, [this volume](#); Smith, Yunes, & Fradkin, [this volume](#)). More specifically, we address the importance of competence for African American families and youth.

Applying the Specificity Principle to PYD

Contemporary research in human development, particularly youth development, has suggested the "specificity principle" to contextualize the PYD trajectories of youth (Bornstein, 2017). The

specificity principle is a series of 'what' questions that specify the context to which the findings are relevant (e.g., what features of PYD emerge or are under study that are linked to what individual ↔ context relations; for youth of what demographic characteristics; living in what family, school, faith; at what point in their ontological development; and in what historical time period; Bornstein, 2017). In that spirit, we want to contextualize the process of parental socialization of competence in their adolescent children. Further, this process has historically been a means of survival for African American youth, and only recently a means for thriving. The relevance of this analysis was made clear by recent PYD scholarship, who argued fiercely for more research and understanding about how, whether and which PYD indicators work for youth from culturally and ethnically diverse, under represented, middle and low socio-economic backgrounds (Dimitrova & Wiium, [this volume](#); Lerner, 2017; Scales et al., 2017; Wiium & Dimitrova, 2019).

The competence literature reviewed above has primarily been discussed in the research without much focus on the specificity principle, with the assumption that competence functions similarly across contexts. However, the history of parenting African American children and youth, due to discrimination and segregation, has been uniquely different from that of other American ethnic groups (Cooper et al., 2020). Thus, if the promotion of PYD is the goal for researchers and practitioners, it is important to understand barriers to that promotion across different groups of youth.

Parenting African American Youth across Three Historical Epochs

James et al. (2018) argued that the historical time is an essential ingredient for fully understanding processes within family systems, especially the ethnic and racial socialization of children because the history provides a view into the undergirding goals and motivations for why parents may engage in certain practices. We use this view to explain promises and limitations to contempo-

rary goals of parenting African American youth. In line with the specificity principle, history in the temporal sense is the final component of the “time” principle in the model (Bornstein, 2017). Historical time is important because the same group of individuals may change behaviors or goals based on the circumstances they face in a particular period of time. We outline below how different time periods have changed circumstances of parenting competence in African American families. From a historical perspective, the African American parent-adolescent context can be considered to be in its third epoch. We briefly describe the first two epochs, but focus primarily on the third epoch.

Epoch 1 The first epoch can be considered slavery occurring throughout the seventeenth and eighteenth centuries. In this period, parents of African American children (merely deemed Black at that time) had the role of imparting knowledge to their children of not only how to be a child but also how to be a slave (James et al., 2018; King, 2011). Parents of Black children in that period could not merely allow their children to engage in whatever behaviors were considered typical, normal, or ordinary for (White) children because Black children were being groomed for specific purposes in that society. If parents did not impart such knowledge, and subsequent behaviors, African American children (and their parents) could face brutal whippings or even death, particularly in the Southern United States. Also in alignment with the specificity principle, this statement is only true for those families in slavery. Not all Black people were slaves, so free Black families likely had different parenting goals because they had a different role in the society (Minniear & Soliz, 2019; Moras, Shehan, & Berardo, 2018; Sudarkasa, 1997). In contrast, Black slave families’ knowledge (or competence) was a key ingredient not only for thriving, but actual survival.

Epoch 2 The second epoch can be considered a period of Jim Crow state and local laws that enforced racial segregation in the late nineteenth

and early twentieth centuries (Stevenson, 2015). The signing of the emancipation proclamation freed many Black people from the bondage of slavery and, in theory, put their humanity and legal rights on the same plane as the White population. However, many White people were not so eager to relinquish their place on the social hierarchy or to allow Black people to enter into that space of privilege. Thus, a system of customs and laws sprouted that sought to essentially keep Black people at the bottom of the social hierarchy. This system of codes and laws is referred to as Jim Crow.

During the period of Jim Crow, explicit codes and rules were displayed that told Black and White people where they could eat, whether they could enter an establishment, drink water, etc. When these laws and customs were violated, or perceived to be violated, vigilante mobs and/or official groups (e.g., Ku Klux Klan, law enforcement) would harass, mutilate, torture, lynch, and otherwise berate or harm Black children, adolescents, and adults (Loewen, 2018; Stevenson, 2015). These brutal acts were not just intended to punish the person accused of the infraction, but also intended to strike fear in the hearts and minds of members of the Black community (produce terror, or terrorism) as a means of social control and to reinforce the status quo (Alexander, 2012; Stevenson, 2015). Thus, not understanding these written and unwritten customs and laws had brutal consequences for African Americans. Parents played an important role in making sure their children knew the customs and laws, because without this knowledge, children and youth faced brutal consequences (Ritterhouse, 2006). In other words, parents had to promote a type of competence in their children that would ensure their survival in a world that explicitly stated that their humanity was less than that of other members of the society.

Epoch 3 The current epoch is conceptualized by what Michelle Alexander (2012) calls *The New Jim Crow* era. Though many of the explicit symbols of epoch 2 Jim Crow are erased, more sinister and covert systems of control have replaced

them, which are essentially maintaining the status quo by keeping Black people in situations of marginalization. These systems have led to outcomes, such as racial disparities in juvenile justice, school discipline and achievement, youth unemployment, college entrance and graduation rates (Montagne, 2014; Morris & Perry, 2016; Pettit & Western, 2004; Roderick, Nagaoka, & Coca, 2009). Because there is not a clear cut of historical point marking the transition from epoch 2 to 3, parents of many African American youth, have continually struggled with the burden of trying to help their children not only to thrive, but to survive in a systematically and sometimes overtly racist world (Dotterer & James, 2018). Trying to successfully transition from the harsh parenting of explicit Jim Crow to the more contemporary and subtle New Jim Crow has not been without tragedy. Examples abound, from Emmett Till (a 14-year old African American who was lynched in Mississippi in 1955), Tamir Rice (a 12-year old African American boy killed in Cleveland, Ohio in 2014), George Floyd (an African American man killed during an arrest in Minneapolis, Minnesota in 2020) and many others. Thus, African American parents have had to be very explicit with imparting knowledge to their children in order to keep them safe and alive. This protective and information-parting centric style of parenting explains many of the narratives about how African American parents parent their children and youth (e.g., no-nonsense parenting, authoritarian parenting as adaptive, preparation for bias; Bocknek, Richardson, McGoron, Raveau, & Iruka, 2020; Brody & Flor, 1998; Herman, Pugh, & Ialongo, 2020; Hughes et al., 2006; McElhaney & Allen, 2012).

Contemporary issues that parents have to communicate to their African American children include driving while Black (Meeks, 2010), interacting with law enforcement (Dunbar, Leerkes, Coard, Supple, & Calkins, 2017), and living in a society where the 45th President of the United States had previously participated in the stoking of racism and fears of the super predator myth (Lacey, 2013). For instance, in the 1990s Mr.

Trump advocated for the conviction of five African American and Latino teenagers accused of raping a White female jogger in New York City's Central Park (Duru, 2003). Even after evidence, including DNA and a confession from the actual killer, vindicated the accused teens whose convictions were eventually overturned, he never apologized (Burns, 2016), or had yet to at the time of this writing.

To be sure, all violence against Black youth is not from external sources. The 19th U.S. Surgeon General, Hon. Vivek Murthy, stated that gun violence was a public health crisis that deserves more attention (Hu, 2017). When considering that Black children and youth die at a disproportionately higher rate from gun violence compared to other youth (Weyrauch, 2017), with much of these acts being committed by other Black youth, it becomes essential for parents of these children to include in their parenting, strategies that promote competencies about how to survive and thrive in their very own communities (McWayne, Mattis, & Li, 2020; Metzger et al., 2020).

Empirical Evidence Linking Parenting Processes and Youth Competence in African American Families

Hughes et al.' (2006) body of work on racial and ethnic socialization (RES) of children and youth, found several dimensions in which parents socialize their children referring to cultural socialization (i.e., practices that teach children about ethnic heritage and promote racial pride), preparation for bias (i.e., practices that teach children about racial bias and coping skills to navigate these barriers), and egalitarianism (i.e., practices that focus on individual characteristics and avoid focusing on one race and/or racial conversations altogether). Evans et al. (2012) examined how RES dimensions of African American children are correlated with youth competence and found that cultural socialization was positively linked to competence in several domains (academic, cognitive, general self-esteem). Further, preparation for bias had mixed (positive and negative) link-

ages to academic competence. Egalitarianism was positively related to academic, cognitive, and social competence among African American youth (Evans et al., 2012).

A subsequent study on urban African American youth found that high cultural socialization from home was linked to increased future academic expectations (part of academic competence), even in the face of high perceived discrimination from peers and teachers (Trask-Tate, Cunningham, & Francois, 2014). Additional study among youth from various ethno-racial groups (including African American) found that family cultural socialization was positively related to school engagement (a type of educational competence). Yet, without disaggregated findings, we do not know the extent to which this finding applies solely to African American youth and families (Wang & Benner, 2016).

The research described above has primarily examined how parenting processes influence competence that is adaptive for youth in schools. However, youth are embedded in multiple contexts beyond schools (e.g., after school programs, communities, places of worship, extracurricular activities) and as shown in Fig. 2, these contexts are likely racialized (Alexander, 2012; Golash-Boza, 2016). Thus, in order for youth to thrive, parenting processes have to shift to ensure that youth not just survive these contexts, but also thrive in and across them. However, the New Jim Crow suggests that there are still racial traps that can serve as barriers to African American children thriving, and for many youth to even survive. Thriving is relatively new (Epoch 3) to the African American parent-adolescent relational context. As further discussed, more research is needed due to the mixed findings regarding RES of African American children and youth across the many domains of their social lives. More specifically, additional research is needed on how parents of African American youth do and can best foster the positive development of their children in a racialized society. This is the case when considering that disparities exist in schools (U.S. Department of Education Office of Civil Rights, 2014), communities (e.g., law enforcement practices; Pegues, 2017), and social settings (Dotterer & James, 2018).

The overarching emerging pattern suggests that each competence that African American youth must develop is likely impacted by the racial structure of society. Survival and now ability to thrive are critical to scholarly knowledge on how parents can help their African American youth successfully navigate the social domains of their lives. Parents of these youth have historically, and continue to be, the primary mechanism for imparting this knowledge in their children (Hughes et al., 2006). However, this process is not cut and dry. We must keep in mind that the process of “preparation for bias” does not always bode well for youth (Dotterer & James, 2018), as it can sometimes heighten children and youth sensitivity to bias and result in outcomes, such as increased self-doubt and lower academic achievement (Hughes et al., 2006). Therefore, current PYD models need to be inclusive of the unique experiences of Black children and families.

International Perspectives

Some readers may wonder whether and how parental processes interact with youth competence in this type of parent-adolescent interaction for other Black youth around the globe. Admittedly, the authors of this chapter are American and focus primarily on African American youth. However, a quick view of the literature suggests that Black youth in other global locations also face marginalization that may impel parents to actively engage in parental practices which develop competencies that promote thriving in their Black children. For nearly four decades, Cashmore and Troyna (2013) work has covered some of the unique struggles of Black youth in London, UK. Similarly, Reichmann’s (2010) report details the inequalities in educational opportunities between White and non-White Brazilians. Carr’s (1999) work profiles race-based inequality evident across several social institutions in Canada.

It is possible that similar conversations, warnings and parental fears occurring in the African American parent-adolescent relational context in America may also be occurring in the contexts highlighted above. We however, urge a bit of cau-

tion because we follow the specificity principle (Bornstein, 2017) and do not want to violate it by overgeneralizing to contexts where the same conditions do not apply. Further, though “Black” youth across each of these contexts experience marginalization and racism, its depth, manifestation, and interpretation likely differ, which result in different histories, goals, and motivations for parental practices that can significantly alter family process. In that respect, we agree with Lerner (2017) that more research is needed to fully understand how and whether certain PYD indicators (competence in this case) perform across relational developmental contexts.

Implications for Research, Policy and Practice

Given the unique pathways to PYD for African American youth in the promotion of their competence, we offer some implications for addressing parenting competence in African American families across different spectrums of service to these individuals and families. This chapter opens new lines of research on the contexts that promote African American youth understanding of living in, and successfully navigating, a racialized society. In this chapter, we focused on the familial context because this context has historically been the central institution responsible for training African American children and youth to function in the society. Contemporary research suggests that cultural socialization is a critical tool for the racial and ethnic socialization of children (Cross et al., 2020; Hughes et al., 2006; Wang, Henry, Smith, Huguley, & Guo, 2020). The current chapter promotes future research to explore other factors, such as how parents socialize competence in a racialized society and across domains in their children and youth (see Fig. 2). Similarly, based on the evidence reported in this chapter, interested researchers can also explore how other contexts (e.g., peers, religion and school) help to promote these qualities in youth. America is a racialized society (Golash-Boza, 2016), and due to racial inequalities, developing a plan to help marginalized youth successfully navigate this

context is imperative. We argue that research examining how parents can do this is ideal, but we also acknowledge that other contexts can assist in this process. Further, we believe that qualitative inquiry is well suited to address how parents of African American children foster competence in their children that assists those children and youth with navigating their racialized social worlds.

As to policy, we are unaware of local, state, or national policy that speaks specifically to how parents socialize competence in their youth in America. At most, governing bodies may provide funding to support youth development (e.g., 4-H is the largest youth development program funded via the U.S. Department of Agriculture). Though such programming can have parent engagement components, these are not necessarily dictated by the federal government. Thus, the relation between policy and how parents of African American children and youth can promote competence is an indirect one. Parents of these children may engage in the socialization of certain knowledge and competencies based on their histories and thoughts about how their children will be treated in society (James et al., 2018). Thus, the concepts of this chapter have a few direct governmental policy implications regarding PYD and African American youth.

As to practice, it is important to be aware of the significance of competence in both the survival and thriving of African American youth. If practitioners take an “everyone is equal” or colorblind approach, they are ignoring the race-based injustice that many African American children face in their daily lives and the struggle for them to successfully navigate these barriers. Youth development initiatives can develop programming that works with African American youth and parents using scenarios or vignettes to help them role-play and practice addressing instances of racism or bigotry. This is particularly true in the third epoch of parenting African American children, where surviving and thriving are both expectations of their development, which is a shift from the focus in the previous two epochs (see Fig. 2).

In conclusion, competence has long been thought of as a developmental asset that can assist youth on their successful path to adulthood. However, the competencies that youth need, can vary across ethno-racial contexts because of the racist contexts in which these youth are embedded. Though the historical times (epoch) have changed and the motivations and goals of parents have shifted, the mere act of “being while Black” has continued to carry the potential of brutal and/or lethal consequences (Hutchinson, 2018). Parents of Black and African American children and youth have been met with an imperative need to communicate this knowledge to their children along with skills for avoiding the harsh consequence that could follow.

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Teaching Mothers and Fathers About How Children Develop: Parenting Knowledge and Practices

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Abstract

Parenting knowledge has important implications for Positive Youth Development (PYD) as it is linked to the parenting practices that are promotive of positive child outcomes. This chapter reviews empirical evidence that has demonstrated that parenting knowledge is related to parenting practices, particularly literacy activities, discipline strategies, and family routines. This evidence suggests that parenting knowledge is a meaningful target of intervention. We then describe approaches to intervening on parenting knowledge and introduce a forthcoming intervention, which uses baby books with embedded anticipatory guidance in an effort to increase parenting knowledge and optimal parenting practices and thus promote positive child development.

Keywords

Intervention · Parenting · Parenting knowledge · Mothers · Fathers · Child development · Early intervention · Positive youth development

The Positive Youth Development (PYD) perspective emphasizes that all children and youth possess the capacity for healthy, successful development which is influenced by environmental factors, such as home environments, schools, and communities (Burkhard, Robinson, Murray, & Lerner, 2019; Chen, Wium, Dimitrova, & Chen, 2019; Dimitrova & Wium, *this volume*; Shek, Dou, Zhu, & Chai, 2019; Wium & Dimitrova, 2019). Children develop the language and social-emotional skills they need to succeed when their caregivers provide a stable, predictable, and supportive environment (Bradley, Corwyn, Burchinal, McAdoo, & García Coll, 2001; Wong, Konishi, & Kong, 2020). Parents who know how to support children's development tend to enact recommended parenting practices (e.g., consistent bedtime routines) and are more likely to have children on optimal developmental trajectories. When home environments

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are not supportive, children are at risk for a host of challenges including delayed language and social-emotional difficulties (Evans & Rosenbaum, 2008). Low-income parents in particular may have difficulties providing an optimal learning environment for their children due to limited access to information on child development and the environmental inputs needed for children's optimal growth (Huang, Caughy, Genevro, & Miller, 2005; Leung, Hernandez, & Suskind, 2020; Reich, 2005).

Improving parenting knowledge, defined in this chapter as knowledge about child development and parenting practices, has been the focus of multiple interventions targeted to low-income parents (National Academies of Sciences, Engineering, and Medicine [NAS], 2016; Reich, Bickman, Saville, & Alvarez, 2010). Overall, this literature suggests that interventions targeting parenting knowledge (e.g., Kit for New Parents) have positive effects on parenting such as literacy activities (Neuhauser et al., 2007), safety practices (Reich, Penner, & Duncan, 2011) and are promotive of early child development and language skills (Albarran & Reich, 2014; Piotrowski, Talavera, & Mayer, 2009).

This literature is largely limited to studies examining parenting knowledge that do not include fathers and thus, the evidence of these interventions is based primarily on data from mothers. This is problematic in several ways. First, excluding fathers may overestimate maternal effects of interventions. Second, children are influenced by two parents even when parents do not co-reside, thus excluding one parent is ecologically invalid. Third, the exclusion of fathers prevents researchers investigating the joint effects of parenting behaviors. Therefore, it is an empirical question whether interventions that target both parents' child development knowledge are more effective than interventions that target one parent. Including fathers in interventions that primarily target parenting knowledge and practices is novel, as they have yet to be systematically included and would contribute to our understanding of how both parents, not just mothers, contribute to children's development (Dimitrova, Ferrer-Wreder, & Trost, 2015).

This family systems approach to intervention would move us beyond current efforts targeting fathering programs and inclusion of coparenting strategies into interventions to programs to actually change parents' knowledge about how to best promote children's development (Cowan, Cowan, Pruett, Pruett, & Wong, 2009; Tomfohr-Madsen et al., 2020). This is a forward direction because parenting knowledge is a promising mechanism through which positive youth development can be promoted (Beckmeyer, Su-Russell, & Russell, 2020). Moreover, including fathers into this type of interventions would be an important step towards integrating fathers, who are motivated to be good parents, into efforts to improve the well-being of children (Pfitzner, Humphreys, & Hegarty, 2020).

This chapter begins with a brief overview of the literature that links parenting knowledge to parenting practices followed by a review of key interventions targeting parenting knowledge. Further, we describe an ongoing intervention study that aims to increase both mothers' and fathers' parenting knowledge (e.g., knowledge about routines, language development, appropriate discipline) and their association with parenting practices, which ultimately are related to children's outcomes (see Table 1). The chapter concludes with relevant implications for research, policy and practice.

Associations Between Parenting Knowledge, Parenting Practices, and Child Development

Child development is conceptualized in terms of the transactions between children and their home environment (Sameroff, 2009). Rooted in ecological theories that state parents are the most proximal influence on their children's development, a large scholarship has focused on parenting (Bornstein, 2002; Dimitrova, 2018; Lansford et al., *this volume*; Neppel, Jeon, Diggs, & Donnellan, 2020). Individual attitudes around childrearing and ideas about what responsibility parents bear toward their children are strong influences on parenting behavior (Belsky, 1984).

Parenting is also influenced by parents' knowledge, assumptions, and understanding of what will work to achieve the outcomes they desire for their children. Knowledge of child development is critical in shaping parenting practices and organizing the home environment. A central aspect of competent parenting is understanding children's capacities, their limitations, and how these capacities change fundamentally over time for child development. When parents understand how children's capacity for emotion regulation and self-control emerge developmentally over time, they respond differently and are more sensitive (Huang et al., 2005; Montgomery, 2020).

Parents with more knowledge about how children grow and develop are more likely to engage in practices that promote the skills in their children than parents without this knowledge (Bornstein, Putnick, & Suwalsky, 2018; National Academies of Sciences, Engineering, and Medicine, 2016; Fig. 1). Understanding how children develop enables parents to be more sensitive to their children's needs and implement specific parenting practices including literacy activities, family routines, and effective discipline strategies than parents who do not (Hess, Teti, & Hussey-Gardner, 2004; Huang et al., 2005; Morawska, Winter, & Sanders, 2009).

In this section, we briefly review the empirical literature linking parenting knowledge to the following central parenting practices: (1) engagement in literacy activities, (2) routines in the home, including mealtimes and bedtime; and (3) discipline strategies. These parenting practices are of interest as they have been established as promotive of children's positive development (Bornstein, 2002; September, Rich, & Roman, 2016).

Given space considerations, we do not include a systemic review of the literature, but rather use

selected empirical studies conducted since 2000 as illustrative examples of the evidence for the relation between parenting knowledge and parenting practices. To locate relevant empirical studies, we used a variety of search terms, including parenting knowledge, knowledge of child development, maternal knowledge, and paternal knowledge in EBSCO Host and Google Scholar. We also reviewed the reference lists of key articles and included studies that were within the scope of this chapter but did not appear in our initial searchers.

Engagement in Literacy Activities

Studies have shown that parental knowledge about general child development (typically measured by the Knowledge of Infant Development Inventory, or KIDI; MacPhee, 1981) is linked to parents' reading practices (Keels, 2009; Sonnenschein & Sun, 2017; Zajicek-Farber, Mayer, Daugherty, & Rodkey, 2014). Two studies, using data from the Early Head Start Research and Evaluation Study, a longitudinal evaluation of the Early Head Start (EHS) program in the United States that included low-income families eligible for EHS (Keels, 2009; Zajicek-Farber et al., 2014), found a significant, but modest, correlation between mothers' parenting knowledge when children were 14 months of age and their frequency of reading at bedtime when children were 36 months. Keels (2009) additionally found that mothers' knowledge had a significant moderate effect (e.g., $ES = .40$ for European American mothers) on how frequently they read to their 24-month-old children in the U.S.

Using data from the Early Childhood Longitudinal Study- Birth Cohort (ECLS-B), a nationally representative dataset of babies born in

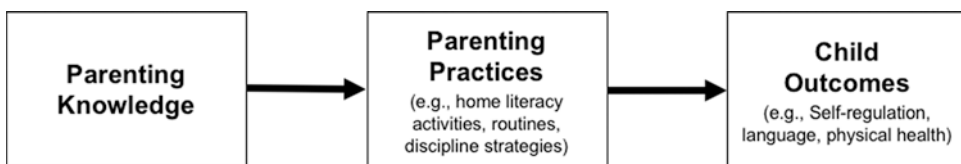


Fig. 1 Conceptual model on the relation between parenting knowledge, parenting practices, and child outcomes

2001 in the United States, Sonnenschein and Sun (2017) conducted a path analysis and demonstrated that maternal parenting knowledge at 9 months of age predicted frequency of literacy activities (e.g., reading, singing songs, and telling stories) in four-year-old children. Although these studies generally reported small to medium effects (ranging from .12 to .49) and did not include fathers in their samples, the findings support the conclusion that parenting knowledge is related to parents' engagement in literacy activities (Bornstein, Cote, Haynes, Hahn, & Park, 2010; Rowe, 2008). This is important since children whose parents frequently read or tell stories to them tend to have higher vocabularies. The ECLS-B results suggest that increasing parents' knowledge of child development may improve children's language abilities.

Routines in the Home

Although studies linking specific routines in the home to specific parental behaviors are sparse (National Academies of Sciences, Engineering, and Medicine, 2016), theoretically, parents who know how children develop and the importance of predictable and supportive environments should be more likely to establish routines, such as bedtime and meal time (Bornstein et al., 2010). However, establishing routines during infancy and toddlerhood proves challenging for most parents (Lowe, Weisner, Geis, & Huston, 2005). A study by Zajicek-Farber et al. (2014) found that maternal parenting knowledge (i.e., KIDI scores) was predictive of bedtime routines. Others have found that increased parenting knowledge of sleep is related to more regular sleep routines (Owens & Jones, 2011; Owens, Jones, & Nash, 2011) as well as safer sleep positioning (Moon, Oden, & Grady, 2004).

Children who grow up in homes that are predictable and structured, as marked by regular routines, have better behavioral and cognitive skills than children who do not. Kelly, Kelly, and Sacker (2013) analyzed data from a longitudinal study of children born in the United Kingdom and found that children with regular bedtime rou-

tines when they were 3- and 5-years-old had fewer behavioral problems at age 7 than children who did not. Moreover, regular bedtime routines had positive, cumulative effects such that behavior problems decreased as the years of having a regular bedtime increased. Having regular routines also seems to concur benefits on later academic outcomes, including vocabulary and math skills (Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002).

Discipline Strategies

In contrast to the study of routines, more research attention has been paid to parents' harsh use of discipline, perhaps because of its deleterious effects on children's adjustment (Amato & Fowler, 2002; Lansford et al., 2005). Overall, studies show that parenting knowledge is related to parental use of developmentally appropriate discipline strategies (Bornstein et al., 2018; Jahromi, Guimond, Umana-Taylor, Updegraff, & Toomey, 2014; Scarzello, Arace, & Prino, 2016). For example, using a nationally representative sample of 681 first-time mothers in the United States, Bert, Guner, and Lanzi (2009) found that mothers who receive high scores on the KIDI also reported more positive behaviors regarding punishment, reduced abuse and neglect, reduced potential for abuse, and reduced authoritarian parenting (e.g., the use of physical punishment). Others have found that increased parental knowledge of alternative discipline strategies (e.g., time out) was related to reduced use of corporal punishment (Chavis et al., 2013; Reich, Penner, Duncan, & Auger, 2012).

A strong and robust body of research has concluded that the use of harsh discipline strategies, such as spanking, is strongly and persistently related to behavior problems throughout childhood (Gershoff & Grogan-Kaylor, 2016). In a study of 292 mothers of 8- to 12-year-old children from six countries, including China, India, Italy, Kenya, Philippines, and Thailand, Gershoff et al. (2010) found that maternal and child reports of corporal punishment were significantly related to concurrent reports of chil-

dren's aggression and anxiety symptoms. Therefore, increasing parenting knowledge to establish positive discipline practices early in development seems imperative.

In summary, parents can promote positive child development across developmental domains through their knowledge of children's needs and the accompanying practices to develop age-related language and social skills. Attention to the development of foundational skills in early development is critical because they scaffold future development leading to mastery of previous developmental skills (Masten & Cicchetti, 2010). However, the literature supporting the relation between parenting knowledge and practices remains limited. Our selected literature review revealed a disproportionate focus on how knowledge of literacy activities and discipline strategies promote development and less focus on other aspects of the home environment, such as family routines, that have been hypothesized to help children develop regulatory behaviors. The few studies that examined routines focused mostly on sleep routines rather than other routines, such as mealtimes. Moreover, none of the studies reviewed here included fathers' parenting knowledge of routines, discipline, or literacy.

Interventions Targeting Parenting Knowledge

Despite the relatively inconsistent body of research linking parental knowledge to parenting practices, there are numerous interventions that specifically target parenting knowledge (Administration for Children and Families [ACF], 2013; National Academies of Sciences, Engineering, and Medicine, 2016). An extensive review of interventions is outside the scope of this chapter; for interested readers, we recommend the report of the National Academies of Sciences, Engineering, and Medicine (2016) and a meta-analysis by Shah, Kennedy, Clark, Bauer, and Schwartz (2016). In this section, we highlight interventions that have been extensively evaluated (Administration for Children and Families, 2013) and fall into two categories: (1)

parenting programs that include an educational component (e.g., Healthy Steps); and (2) education-only anticipatory guidance interventions that exclusively aim to improve parenting knowledge by providing parents with specific information (e.g., Reach Out and Read). Given the scope of this chapter, we focus primarily on interventions conducted with U.S. samples; only Triple P is used outside the United States. Additional work is needed to explore how interventions that increase parenting knowledge operate in other cultural settings.

Parenting Programs

Overall, parenting programs aim to promote positive parenting and child well-being by targeting, in addition to parenting knowledge, varying combinations of influential mechanisms, such as parental well-being (e.g., self-efficacy) and community support (e.g., social support, access to resources; Vogel et al., 2015). These programs are usually designed for the general population and delivered through group classes, center-based programing, or, most frequently, home visiting programs (Vogel et al., 2015). Consequently, these interventions are often cost-intensive and delivered primarily to families thought to have a high risk of maladaptive outcomes, such as families in the child welfare system (National Academies of Sciences, Engineering, and Medicine, 2016). To explore the components of these educational interventions, we highlight three parenting programs that focus explicitly on parenting knowledge and are widely implemented and evaluated (Administration for Children and Families, 2013): Healthy Steps, Triple P- Positive Parenting Program, and Parents as Teachers.

Healthy Steps The Healthy Steps program, implemented in more than 15 health or community clinics across the U.S., was designed for parents of children under three and takes a multipronged approach to intervention. Program components include team-based well-child visits (i.e., both the pediatrician and a Healthy Steps specialist are present), child and family screenings (e.g., child

behavioral screening, screening for family risk factors), connections to community resources, and parent education through either group parenting classes or home visiting (Healthy Steps, 2017). The parent education content was developed using the American Academy of Pediatrics' Anticipatory Guidance (AG) content and included information on developmental milestones (e.g., toilet training) and positive parenting practices (e.g., the use of positive discipline).

A review of empirical evaluations of the Healthy Steps program found the program to be effective at promoting positive parent and child outcomes (Piotrowski et al., 2009). The program significantly increased parenting practices, such as establishing routines, increasing reading, and avoiding harsh discipline (Caughy, Miller, Genevro, Huang, & Nautiyal, 2003; Minkovitz et al., 2003, 2007). Less is known about the cost-effectiveness of the program, which costs approximately \$900 per year per family (Zuckerman, Parker, Kaplan-Sanoff, Augustyn, & Barth, 2004).

While the Healthy Steps program was designed for families (i.e., not specifically for mothers or fathers), the studies reviewed in this section did not include data on fathers' knowledge or parenting practices (Caughy et al., 2003; Minkovitz et al., 2003). Though the program has been implemented in a variety of settings across the U.S., a national evaluation of the program found that participating families were largely White and with middle to high income, and high education levels (Minkovitz et al., 2007).

Triple P- Positive Parenting Program Triple P is a 5-level parenting intervention program designed to promote positive child outcomes and prevent socio-emotional and behavioral problems in children ages 0–12 years by increasing parents' knowledge, skills, and confidence (Triple P-Positive Parenting Program, 2016). The intensity of the program (e.g., the number of sessions) and the severity of the targeted behavioral challenges increase from Level 2 through Level 5. All programs, except Level 1 (a universal, public health intervention aimed at increasing awareness of resources related to child development),

are provided in either group or individual settings and include parent education (e.g., teaching parents about how to reinforce children's behavior) and parenting skills training (e.g., ways to manage misbehavior). Levels 3–5 also provide skill rehearsal and evaluation (e.g., a parent role plays appropriate rule setting with a Triple-P practitioner who provides feedback; Triple P-Positive Parenting Program, 2016). Sessions are intensive, ranging from 2 to 3 h over 12–20 weeks and take place in a variety of settings (e.g., schools, home visits; Triple P-Positive Parenting Program, 2016).

A meta-analysis of the efficacy of Triple P, which has been implemented worldwide, found it significantly improved parent outcomes, such as decreases in harsh discipline and improvements in the quality of the parent-child relationship (Nowak & Heinrichs, 2008). In one study of Triple P that included 44 mothers and 47 fathers in the United States, the Level 4 program was found to increase parenting knowledge (as measured by the Knowledge of Effective Parenting Scale; Morawska, Sanders, & Winter, 2007) and decrease dysfunctional parenting (e.g., use of verbal or physical force; Winter, Morawska, & Sanders, 2012).

Parents as Teachers The Parents as Teachers (PAT) program uses a combination of home visiting, group courses, and developmental screenings to promote parenting knowledge and support child health and school readiness in families with children ages 0–5 years (Administration for Children and Families, 2013). The program includes a minimum of 12 home visits annually for at least 2 years and has been implemented in all U.S. (Administration for Children and Families, 2013). PAT aims to increase parenting knowledge and children's school readiness, while preventing child abuse and neglect. Some studies have shown PAT to modestly increase parents' literacy activities (e.g., how often they read to their child) in a representative sample of low-income families in Missouri (Zigler, Pfannenstiel, & Seitz, 2008), and parents' knowledge of health-related child development (e.g., child dental care)

in a diverse sample, primarily of mothers (Carroll, Smith, & Thomson, 2015). Overall, evaluations of PAT have yielded mixed results, with no consistent effect on parenting knowledge or child outcomes. Of the 50 studies reviewed by the Administration for Children and Families, only three were found to have a positive effect on positive parenting practices (Administration for Children and Families, 2013). Notably, one report of the effect of PAT in a sample of 50 fathers found no improvements in parenting knowledge (Wakabayashi, Guskin, Watson, McGilly, & Klinger Jr., 2011).

In summary, some parenting programs can be effective in changing parenting knowledge and practices and consequently promoting positive child development. The programs and evidence reviewed in this chapter were largely conducted in the United States, yet the worldwide success of Triple P suggests that parenting programs that increase parenting knowledge may be effective across different ethnic and cultural groups (De Graaf, Speetjens, Smit, de Wolff, & Tavecchio, 2008; Turner, Singhal, McIllduff, Singh, & Sanders, 2020).

This literature has two notable limitations. First, much of the evidence we reviewed examines intervention effects on either parenting knowledge or parenting practices but falls short of specifying the mechanisms that link increased knowledge of child development with children's outcomes (e.g., Winter et al., 2012; Zigler et al., 2008). Consequently, it is unclear whether it is the increase in parenting knowledge, which then increases positive practices, or other mechanisms (e.g., access to community resources) that drives these effects. Second, despite that the programs were designed for families, almost all the empirical data on these programs are collected from mothers. Further research is needed to identify the operating mechanisms of these interventions and their efficacy with fathers.

Education-Only Anticipatory Guidance Interventions

A significant challenge with the reviewed parenting programs is that the educational information for parents is contained within a larger program that is often time and resource intensive for both providers and families (Magnusson, Minkovitz, Kuhlthau, Caballero, & Mistry, 2017). These programs require multiple, long sessions; necessitate that parents travel; and, are expensive for providers (Caronongan, Kirby, Boller, Modlin, & Lyskawa, 2016; Sanders & Kirby, 2015; Vogel et al., 2015). These challenges limit scalability and may be prohibitive for families (Magnusson et al., 2017; Wasik, Matterna, Lloyd, & Boller, 2013). In lieu of these parenting programs, there is promising evidence suggesting interventions exclusively targeting parenting knowledge that can be promotive of optimal parenting practices.

One of the American Academy of Pediatrics' (AAP) primary interventions is to provide Anticipatory Guidance (AG), that is, knowledge about child development that is age-appropriate for typical child development and optimal parenting practices, to practitioners so they can deliver it to parents during check-up visits. Simply providing parents with AG messages is thought to be promotive of parenting knowledge and practices and, consequently, child development (Hagan, Shaw, & Duncan, 2017). Several efforts have been made to build upon this goal through interventions designed to provide AG information to parents. In this section, we review a selected set of education-only interventions that aim to increase parenting knowledge by providing parents with AG information.

Reach Out and Read A well-known literacy intervention in the U.S., Reach Out and Read, trains doctors to review AG messages and provide children's books to parents during infant well-checks (Zuckerman, 2009), with positive

effects on children's language development and other emergent literacy skills as well as improvements in parents' reading to their children (Pelatti, Pentimonti, & Justice, 2014; Rikin et al., 2015; Zuckerman, 2009). Yet, Reach Out and Read faces similar challenges of other efforts in providing AG during well-child visits: providers spend little time reviewing AG messages and parents typically retain a small portion of the information (Goldstein, Dworkin, & Bernstein, 1999). Additionally, Reach Out and Read is delivered to the parent(s) attending the well-child visit, and most data on parent outcomes (e.g., knowledge, practices) is collected from mothers or a gender-unspecified parent (Rikin et al., 2015).

Milestone Moments The Milestone Moments booklet is a resource developed by the U.S. Center for Disease Control and Prevention (CDCP) and the National Center on Birth Defects and Developmental Disabilities as part of their Learn the Signs/Act Early initiative, of which one aim was to increase public awareness of child development (Center for Disease Control and Prevention [CDCP], 2018). The booklet contains anticipatory guidance information on children's development and age-appropriate activities, and is free on the CDCP website (Center for Disease Control and Prevention, 2018). Graybill et al. (2016) tested the effect of providing Milestone Moments to low-income, ethnic minority parents of children younger than 5 years (80% mothers) using a randomized control trial (RCT) that compared the simple delivery of Milestone Moments to a six-week, home-visiting intervention that reviewed the booklet. The results showed that parents' knowledge of child development increased as a result of receiving Milestone Moments and there was no significant difference between those who received the booklet and those in the extended home-visiting group (Graybill et al., 2016). Unfortunately, parenting practices were not directly measured in this study so the impact of the intervention on practices cannot be determined.

Kit for New Parents California state developed a state-wide program, the Kit for New Parents (KNP), to promote positive child development and parenting practices. The KNP includes videos, a resource book, brochures, and a children's book, and containing information on AG topics, such as child safety, developmental milestones, and nutrition (Neuhauser et al., 2007). Neuhauser et al. (2007) evaluated the effects of KNP with a diverse, low-income sample of Spanish and English-speaking mothers. Mothers who received KNP had greater gains in parenting knowledge, with relatively large effect sizes after 14 months, and were more likely to report positive parenting practices (e.g., frequency of reading) than those in a comparison group (Neuhauser et al., 2007). Notably, the knowledge gains for Spanish-speaking mothers was almost twice that of English-speaking mothers, with a large effect size ($ES = .62$). Though Spanish-speaking mothers had significantly lower knowledge than English-speaking mothers at baseline, Spanish-speaking mothers knowledge gains represented a 40% reduction in the difference of knowledge between the two groups. It is notable that although fathers were not included in the study, 53% of mothers reported sharing the kit with their partner.

Baby Books 1 The Baby Books 1 (BB1) project was an RCT of an intervention which provided new mothers with baby books embedded with AG messages to a sample of low-income, predominantly African American mothers (Reich et al., 2010). The books were designed to be read to children, while the content was AG information for mothers about infant development, safety practices, maternal self-care, discipline, and nutrition. Participants were randomly assigned to receive either an intervention book, non-educational book, or no book. Mothers received their first book during their third trimester of pregnancy, and subsequent books when children were 2-, 4-, 6-, 9-, and 12-months-old (Reich

et al., 2010). Mothers in the intervention book condition showed higher levels of parenting knowledge (measured with the Opinions About Infants Questionnaire; Reich, 2005) and better retention of AG messages than mothers in the control groups (Reich et al., 2010). The intervention books were also found to have positive effects on mothers' attitudes and practices including increased maternal self-efficacy, reduced support for the use of corporal punishment, higher beliefs about reading, and increased safety practices (Albarran & Reich, 2014; Auger, Reich, & Penner, 2014; Reich et al., 2011, 2012). Additionally, children whose mothers received a book had higher language scores than children in the no book control group (Albarran & Reich, 2014). Taken together, the results of BB1 suggest that providing baby books that have AG embedded messages may be a promising, cost-effective way to improve parenting and child outcomes.

In summary, there is significant potential for promoting positive child development through interventions that increase parenting knowledge and consequently parenting practices that promote child development in early childhood. Some parenting programs for mothers that include increasing parenting knowledge have been shown to improve parenting knowledge and/or practices (e.g., Triple-P, Healthy Steps). However, a potential drawback is that these programs are resource intensive for both families and providers (Magnusson et al., 2017; Vogel et al., 2015). Targeted education-only interventions, particularly those that provide AG, have demonstrated promising effects on parenting knowledge and practices and may be less burdensome for families and providers, increasing the likelihood of parents remaining in the intervention for its duration.

Across the programs reviewed, several challenges exist. The stronger effects of education-only interventions for Spanish-speakers as compared to English-speakers found by Neuhauser et al. (2007) suggest there may be moderating factors, such as motivation to participate, home language, or baseline knowledge, that

strengthen the impact of these interventions on parenting knowledge for specific subgroups. Further research is needed to determine whether home language is a moderator for outcomes, or whether it is serving as a proxy for cultural or socioeconomic moderators. Additionally, fathers are largely absent from the literature. Many of these programs are either designed for families or parents generally, but data are largely collected only from mothers. This is a notable omission given the substantial role that fathers play in their children's development (Cabrera, Fitzgerald, Bradley, & Roggman, 2014). Because fathers are not included, it is unclear how each parent contributes uniquely to children's development and whether there are additive or joint effects that might result in more effective interventions when they include both parents. Finally, few of the intervention studies reviewed directly examined the link between parenting knowledge and parenting practices, which makes it difficult to identify the operating mechanisms. Future work should examine the efficacy of targeted educational interventions for both parents, consider the role of potential moderators, and directly test the association between parenting knowledge, parenting practices, and children's outcomes.

Baby Books 2 The Baby Books 2 (BB2) project is an ongoing intervention in the United States that expands on BB1 by including fathers and Spanish-speaking families (Cabrera & Reich, 2017). BB2 is an RCT of a parenting intervention, which provides mothers and fathers with baby books that contain embedded AG messages. BB2 builds upon BB1 in several important ways. First, the embedded messages include AG information about children's socioemotional, cognitive, and physical development as well as appropriate discipline and safety practices. Unlike BB1, it includes information about coparenting and early math skills. Second, BB2 includes both mothers and fathers and is designed to test for the independent effects of each parent, as well as for any additive and/or multiplicative effects of mothers and fathers together. Third, the BB2 books are designed for children ages 9–24 months, an

important period of rapid changes in children’s development, and follows the children up to 30 months of age. Lastly, the BB2 books are bilingual; all content is provided in both English and Spanish. This is particularly important given the growing Spanish-speaking population in the U.S. (Kopack Klein, Aikens, & Knas, 2017).

Baby Books 2 uses a randomized design that includes the following four conditions: intervention books are given to both parents, intervention books for only mothers, intervention books for only fathers, and a control group in which families are given commercially available books. The books are provided when children are 9, 12, 15, 18, and 24 months old. Families are assessed on a broad range of domains through a combination of home visits and phone/internet surveys. In order to be eligible to participate in BB2, the family must have an income that is considered to be low

Table 1 Knowledge domains covered by BB2 and hypothesized parent and child outcomes

| AG knowledge domain | Parenting practices | Potential child outcomes |
|--------------------------------|---|------------------------------------|
| Safety | Appropriate baby-proofing | Reduced preventable child injuries |
| Discipline | Use of appropriate discipline (e.g., time out) | Improved self-regulation |
| Co-parenting | Healthy relationship modeling | Improved social competence |
| Cognitive, social, & emotional | Emotion socialization (e.g., labeling) | Improved executive function |
| Physical development | Promotion of physical activity | Improved physical development |
| Media | Limit setting for television watching | Improved attention skills |
| Language | Shared book reading | Improved language skills |
| Math | Use of math-talk during parent-child interactions | Improved math skills |

Note: Child outcomes and parenting practices targeted by specific AG knowledge domains in BB2. *BB2* = Baby books 2; *AG* = Anticipatory guidance

Table 2 Example AG messages in BB2 books: routine domain

| BB2 book | Example content |
|-----------|---|
| 9 months | “To eat, nap, and sleep baby needs routines. Regular daily patterns – the more safe the world seems.” |
| 12 months | “Kids who eat with family, every nightly meal, tend to do well in school, and safer they will feel.” |
| 15 months | “Regular bedtime, a book, and teeth brushing. Our nightly routine has little fussing.” |
| 18 months | “With regular naps and bedtimes too, mommy/daddy knows routines are good for you.” |
| 24 months | “From tickles to stories to family meals you learn how being loved and safe feels.” |

Note: Excerpts from BB2 books that contain AG messages related to routines. *BB2* = Baby Books 2; *AG* = Anticipatory guidance

for families living in the targeted geographic areas, be literate in English or Spanish at or above a third-grade level, and be first-time, co-resident parents. Families are recruited from medical clinics, child-care centers, and community centers in two urban geographic areas in the United States.

The goal of BB2 is to promote positive child development outcomes by increasing parenting knowledge, parent-child literacy activities, and promoting positive parenting practices. In Table 1, we describe the knowledge domains targeted by BB2 and examples of the hypothesized parenting practices and child outcomes. The BB2 books provide developmentally appropriate information at each time-point in order to increase parenting knowledge. In Table 2 we provide an example of the AG content in the books related to the routine knowledge domain.

Culture, Context, and Universal Mechanisms

The strengthening of parenting knowledge as a mechanism to improve parenting and subsequent child development is based on universal aspects of parenting, such as sensitivity and cultural-specific aspects of parenting, such as storytelling. Much of the evidence reviewed in this chapter

was drawn from studies carried out in the United States, which included diverse samples. There needs to be a lot more work to understand culture-specific practices that promote certain developmental outcomes and whether there may be cultural variability in the efficacy of these interventions based on specific outcomes, as there are some culture-specific differences in the importance that ethnic groups give to certain developmental milestones (Bornstein, 2004; Halford & van de Vijver, 2020). Future work should address the universality of parenting knowledge as a mechanism for the promotion of positive youth development.

Implications for Research, Policy, and Practice

There are several implications from the literature reviewed in this chapter. With regards to research, first, studies that aim to understand how parental knowledge matter for child development across cultural contexts must include an assessment of parenting practices that are most effective for specific outcomes at specific points in time and perhaps for specific groups (Bornstein, 2004, 2012). These data are critical to move beyond correlational research to understand the mechanisms through which increased parenting knowledge is promotive of positive development and identifying the most effective points of intervention. Second, as it is characteristic of parenting research, we know next to nothing about fathers' parenting knowledge and whether increasing their knowledge is also related to child development through the same mechanisms as mothers. This state of affairs is striking because research has shown that fathers are involved in their infants' lives in similar, but also in different, ways from mothers and that they play a unique and independent role in promoting their children's development (Cabrera et al., 2014). Finally, applied research should examine the differential effects of education-only intervention as opposed to other modes of intervention, such as parenting programs, to promote positive development in children.

Education-only interventions offer a promising, cost-effective, and less burdensome opportunity to improve parenting knowledge, practices and child outcomes (Caronongan et al., 2016). Future studies need to compare their efficacy to parenting programs and identify the contexts in which educational intervention alone may be most effective.

Although the empirical data in support of promoting parenting knowledge are not as rigorous as they could be, there are enough evidence to suggest that policy should include increasing parenting knowledge for both parents as a cost-effective way to improve positive outcomes for children. As demonstrated by BB1, this would be particularly important for spanking, which is negatively and long-term related to outcomes for children (Gershoff & Grogan-Kaylor, 2016; Reich et al., 2012). Reich et al. (2012) found that providing educational books reduced mothers' support of corporal punishment. We expect to find the same for BB2 for both parents and anticipate that reduced support for corporal punishment will result in the use of more appropriate discipline strategies (e.g., using time out instead of spanking for punishment). This nuanced information is critically important for policymakers who must make cost-based decisions about effective investments and consider whether existing systems might incorporate education-only interventions or if establishing new community programs may work for their community.

Practitioners working with children and families should consider parents' knowledge and what resources may be available to improve it. Additionally, practitioners should be heartened by the evidence suggesting that simply providing parents with information may have a positive influence on parents' practices and their children's development. The BB2 project will also provide valuable information about the effectiveness of providing AG in books designed to be appealing to parents rather than the traditional materials available from pediatricians. Providing AG through baby books could be a cost-effective way to universally teach all parents about optimal parenting and how children develop.

In conclusion, positive child development can be promoted by enhancing mothers' and fathers' parenting knowledge about typical child development and optimal parenting practices. The promotion of parenting knowledge during infancy is of particular importance as early development sets the stage for later development. Interventions that target parenting knowledge have promising results, though remain limited. One intervention, Baby Books 2, may be a promising next step in the efforts to improve parenting and child outcomes by increasing parenting knowledge, particularly because this intervention is targeting both mothers and fathers in a vulnerable population. This approach is novel in several ways: (1) includes both parents, therefore providing a more ecological valid approach to the study of parents; (2) it has the potential to reach all parents by embedding AG into baby books that are meant to educate but also entertain as well as promote intimate shared time between parents and their child; (3) provides important information about the effectiveness of targeting two parents in education-only interventions; and (4) the inclusion of fathers is critically important and this is one of the few interventions that signals to fathers that they, as parents, have a significant role to play in increasing their child's development of the skills needed to succeed. The results of BB2 will have important implications for policymakers and practitioners regarding the utility of providing educational information about positive child development and parenting in baby books, the importance of including fathers, and the overall benefits of targeting parenting knowledge as an effective point of intervention.

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Promoting Positive Youth Development Through Healthy Middle School Environments

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and Andrea Phillips

Abstract

Positive Youth Development (PYD) acknowledges youth as unique and dynamic entities constantly interacting with and influencing their environment, emphasizing multiple supports and services necessary to help youth transition through various stages of their development. School-wide policies and practices that create a supportive environment for youth may be more effective and lasting than a single program. Environments, particularly safety, support, youth interaction and engagement with the school, have significant impact on youth behavior. This chapter reviews evidence for the development and high-quality implementation of multi-level interventions to create a school environment that promotes positive youth development. This includes a review of ongoing research on emerging approaches promoting a restorative school environment, and a discussion of how to apply Getting To Outcomes®, an evidence-based support intervention, to improve implementation of multi-level school-wide interventions. The chapter addresses important research, policy and practice gaps on middle school youth.

Keywords

Positive youth development · Schools · Restorative practices · Implementation science · Restorative justice · Middle school youth · Early adolescence

Early adolescence is a critical time of development. Middle school youth (ages 11–14) experience biological, psychological, and cognitive changes and are exposed to a variety of risk factors that are mediated through their home and school environments as well as adult and peer relationships (Kassebaum et al. Kassebaum et al., 2017; Kelly, Kubert, & Freed, 2020). Middle adolescence can be a time for growth and positive development, but also for poor developmental outcomes such as limited social competency and poor academic achievement, and problem behaviors, including alcohol use, bullying, and disciplinary referrals (DeGue et al., 2020; Estefan et al., 2020; Padilla-Walker, Memmott-Elison, & Coyne, 2018; Sanders, Bierman, & Heinrichs, 2020). Prevention program(s) that address these problem behaviors compete for time and resources with school priorities to meet academic standards.

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Many programs that are delivered in schools, unfortunately, focus only on specific negative behaviors and deficits, like poor decision-making skills, and label adolescents as problems in need of fixing without leveraging the strengths and resiliency of youth (Ashworth et al., 2008; Farrington & Ttofi, 2009; Renkly & Bertolini, 2018). While many prevention programs can be effective at reducing or preventing negative behaviors, mostly in the short-term, they do not tend to improve key developmental outcomes, such as social competency (Lochman et al., 2010). This is in part because these programs are usually delivered as a stand-alone curriculum inserted into the school day and do not address the whole school environment. Transitions from elementary to middle and from middle to high school, place adolescents at even greater risk for engaging in problem behaviors, calling for programs in the middle school years that promote positive developmental outcomes and address the whole school context (Langenkamp, 2010; Madjar, Cohen, & Shoval, 2018; Theriot & Dupper, 2010; Weiss & Baker-Smith, 2010).

Positive Youth Development (PYD) represents a set of ideas that enable youth to be viewed as resources to be developed, rather than problems to be managed (Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#); Koller & Verma, 2017; Wiium & Dimitrova, 2019). PYD acknowledges youth as unique and dynamic entities constantly interacting with and influencing their environment, and as such emphasizes the supports and services necessary to help youth transition through various stages of their development (Ciocanel, Power, Eriksen, & Gillings, 2017; Overton, 2006; for new PYD conceptualizations see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). The strength of PYD programs is that they specifically focus on the developmental milestones of youth, recognizing the heterogeneity and interactive nature of both positive and negative individual and environmental influences. Consequently, PYD programs show promise across a variety of outcomes and youth popula-

tions (see Eichas, Montgomery, Meca, Garcia, & Garcia, [this volume](#); Ferrer-Wreder et al., [this volume](#); Ginner Hau, Ferrer-Wreder, & Westling, [this volume](#); Kaniušonytė & Truskauskaitė-Kunevičienė, [this volume](#); Kozina, [this volume](#); Larsen & Holsen, [this volume](#); Li, He, & Chen, [this volume](#); Wang, Chase, & Burkhard, [this volume](#)). For example, a recent review of universal school-based positive youth development programs found 82 programs, 29 of which improved social competence and 34 programs that reduced problem behaviors, specifically drug and alcohol use, school misbehavior, aggressive behavior and violence (Taylor, Oberle, Durlak, & Weissberg, 2017).

Additional systematic review on the impact of PYD programs in low- and middle-income countries (LAMICs) identified 94 PYD programs with evaluations, of which 35 had at least one experimental or rigorous quasi-experimental evaluation. The results indicated that 60% of the 35 programs with such evaluations demonstrated positive effects on various behaviors (i.e., substance use, risky sexual activity), and/or relevant developmental outcomes (i.e., employment and health indicators) (Catalano et al., 2019). Comprehensive reviews of PYD interventions reported a core set of strategies including building competencies (e.g., moral, social, emotional), increasing healthy bonding with peers and adults and intervening for at least 9 months or longer with programs positively affecting both PYD and problem behaviors (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002). However, many of these programs did not examine whether the positive impact remained after the program end and the mechanisms of such impact were not clear (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004). This work was further extended by meta-analytic or randomized controlled trials of PYD interventions indicating that these interventions can improve academic achievement and psychological adjustment. Of note, meta-analytic work has also suggested that low-risk youth derived more benefit from PYD interventions than high-risk youth (Ciocanel et al., 2017). Therefore, more research is needed to examine whether the positive impact of PYD on problem behaviors

persists over time and to understand the mechanisms through which PYD influences problem behaviors in school-based settings (Catalano, Gavin, & Markham, 2010).

The Present Chapter

The purpose of this chapter was to begin to fill in a relevant research gap by summarizing what is currently known about multi-level and comprehensive PYD approaches that have been used in U.S. school environments. This information is needed to inform an ongoing policy debate about how to maximize in-school supports for PYD, without competing with academic offerings. Additional contribution of the chapter regards the new knowledge provided on comprehensive PYD approaches, challenges and supports needed to implement such complex multi-level approaches with quality.

Approaches to Promote Positive Youth Development in U.S. Middle Schools

Promoting PYD requires interventions at school, peer, and individual levels. The ecological systems theory provides a universal theoretical frame for how PYD can promote positive youth

outcomes (Bronfenbrenner Bronfenbrenner, 2005; Varga & Zaff, 2018). The ecological systems theory shows the individual *youth* as being nested within multiple levels of interaction (Fig. 1). Youth interact with *peers*, who influence them and whom they influence. Similarly, youth interact with *school* environment and staff, which influence both the individual youth and their peers (as shown by double headed arrows). These interactions mediate youth developmental outcomes and problem behaviors. The Restorative Practices Intervention is an innovative new whole-school approach to PYD discussed in detail in this chapter, targeting improvements across ecological levels including peer-to-peer relationships and the school environment (Acosta et al., 2019; Velez, Hahn, Recchia, & Wainryb, 2020; Wachtel, 2016).

Approaches Targeting School Environment and Specific Student Needs

In the last 20 years, schools in the U.S. have adopted multi-tiered systems of supports, such as Positive Behaviors Interventions and Supports and Response to Intervention that aim to identify and deliver proactive interventions to students (Lee & Gage, 2020; Scaletta & Tejero Hughes, 2020; Silva, Collier-Meek, Coddling, Kleinert, & Feinberg, 2020). These multi-tiered systems identify academic, behavior, and social-skills needs of students and then deliver a range of evidence-based

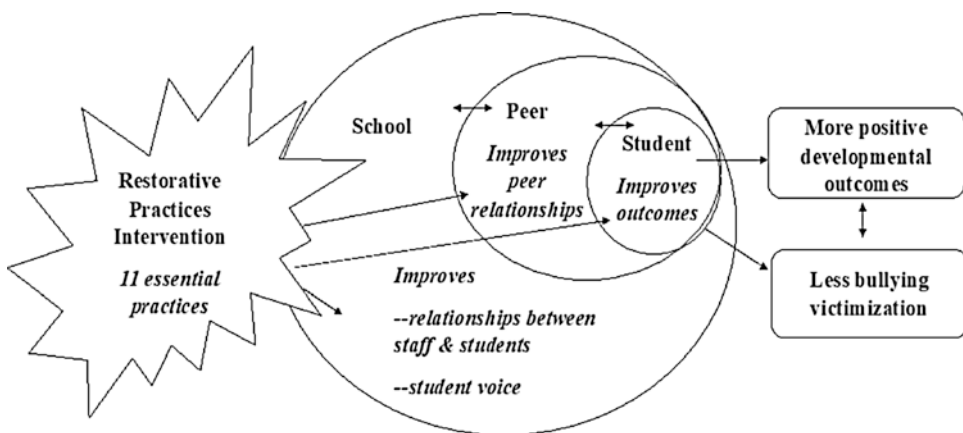


Fig. 1 The influence of restorative practices intervention on school, peer, and student levels of the social-ecological model

interventions to meet such needs (Shogren, Wehmeyer, & Lane, 2016; Stoiber & Gettinger, 2016). These interventions range from universal, school-wide interventions that promote healthy development of all students to more targeted and intensive interventions for students with persistent challenges (Averill, Rinaldi, & Collaborative, 2011; Barrett, Eber, & Weist, 2013; Fletcher & Vaughn, 2009). Together, this collection of evidence-based interventions is intended to improve youth academic, behavior and social outcomes and create a safer and more effective school context (Bradshaw, Mitchell, & Leaf, 2010; Freeman et al., 2016; Horner & Sugai, 2015; Sugai & Horner, 2006).

The Every Student Succeeds Act (ESSA) legislation in the U.S. has furthered national efforts to improve school climate by calling for improved school conditions, enhanced peer interactions, and incorporating practices for relationship-building skills (Education Week, 2016). In the school setting, these are most often referred to as social-emotional and social-emotional learning skills. Social-emotional learning aligns with PYD on enhancing strengths, establishing engaging and supportive climates, and constructive youth interactions (Bradley, Ferguson, & Zimmer-Gembeck, *this volume*; Bradshaw, Bottiani, Osher, & Sugai, 2014; Dimitrova, Ferrer-Wreder, & Ahlen, 2018; Koscic, Wiium, & Dimitrova, *this volume*; Kozina, *this volume*; Snyder & Flay, 2012; Tolan, 2016). ESSA extends the priorities of multi-tiered systems of supports by requiring schools to select evidence-based interventions when using federal funds to purchase materials (e.g., curriculum) or professional development. Though the primary focus of ESSA is selection of evidence-based interventions for academics (e.g., mathematics and reading), it follows the larger trend in U.S. education to implement interventions that are more likely to yield positive results (Richerme, 2020; Slavin, 2020).

Universal Approaches To date, the evidence-base for universal behavior, PYD and social-emotional learning interventions is emerging. The What Works Clearinghouse (WWC) hosted

by the Institute for Education Sciences responsible for the statistics, research, and evaluation of the U.S. Department of Education, provides information by domains about whether an intervention yielded positive outcomes in prior research studies (Institute for Education Sciences, 2020a). Within the behavioral domain, 16 interventions met the WWC evidence of positive (without reservations) or potentially positive (with reservations) effects. However, only six of the 16 interventions were school based with positive or potentially positive effects including students from some middle schools grades (grades 6, 7 or 8) and two interventions including students from all middle school grades. These two interventions were the Functional Assessment Based Interventions and Connect with Kids.

The Functional Assessment Based Interventions have demonstrated potentially positive effects on PYD in terms of school engagement and problem behaviors but are designed for individual youth and problem behaviors, rather than universal or school-wide interventions (What Works Clearinghouse, 2016a). Connect with Kids aims to promote prosocial and positive behaviors of elementary and middle school students by teaching core character values. The intervention includes videos, story summaries, discussions, games, and activities for both core and supplemental character traits (Institute for Education Sciences, 2020b). Connect with Kids was reviewed as part of the 2006 Character Education Intervention Review, that classified interventions with PYD outcomes such as respect, responsibility, trustworthiness, fairness, caring, and citizenship (What Works Clearinghouse, 2016b). Connect with Kids has been found to improve behaviors of middle school students in terms of honesty, kindness, perseverance, responsibility, self-control, and tolerance (Page & D'Agostino, 2005). Finally, other class-wide interventions met WWC standards such as Too Good for Drugs and Knowledge is Power Program (KIPP). Too Good for Drugs is designed to promote life skills, character values, resistance skills to negative peer influence and to the use of illegal drugs, alcohol, and tobacco,

whereas KIPP is a network of charter schools and, as such, not a schoolwide PYD intervention (KIPP, 2020; What Works Clearinghouse, 2006).

The Blueprints for Healthy Youth Development also rates the effectiveness of PYD interventions (Blueprints for Healthy Youth Development, 2020). A search for programs classified by Blueprints for Healthy Youth Development as universal, school-based and early adolescence-middle school with PYD related outcomes, yielded no Promising, Model, or Model Plus rated programs. Model and Model Plus programs showed high ratings of programs that have achieved positive outcomes in several rigorous studies. However, there were Promising, Model and Model Plus programs for PYD outcomes for children in the late childhood, or up to age 11 that were universal and school-based (Blueprints for Healthy Youth Development, 2020).

Grant et al. (2017) conducted a systematic review of universal school-based interventions that have an explicit primary aim of improving student social and emotional competencies. They used ESSA evidence criteria to rate the methodological rigor of each intervention as strong (tier 1), moderate (tier 2), or promising (tier 3) evidence. Of the 40 interventions meeting tiered criteria, 16 had a positive impact on school climate and safety outcomes. Three interventions met the strong evidence criteria for their demonstrated positive impact on school climate and safety (Grant et al., 2017).

When age of the study population is considered, very few of the universal school-based interventions in the U.S. reviewed by the WWC, Blueprints for Healthy Youth Development, or Grant et al. (2017) showing promise (or with studies supporting their effectiveness), focused on middle school aged students (grades 6–8). In the WWC, four school-based universal behavior interventions included students in grades 6, 7, and/or 8 and only one school-based intervention (i.e., Connect with Kids) included students in grades 6, 7 and 8. In Blueprints for Healthy Youth Development, there were two universal interventions for middle schools students, the Olweus Bullying Prevention Program and Raising Healthy Children, which were identified as hav-

ing a promising level of research evidence. Although Grant et al. (2017) found that 33% of the middle-school social-emotional learning interventions had a positive impact on school climate and safety, overall, only one intervention at the middle-school level had strong evidence.

Taken together, there are some rigorous evaluations of universal PYD and social-emotional learning interventions in schools, but few have strong evidence supporting their positive impact on student outcomes. Further, there are more explicit evidence-based interventions for elementary students than for adolescents (Grant et al., 2017; Yeager, 2017). For students in middle school, there are few interventions that demonstrate positive results and very few with strong evidence supporting their positive impact on student outcomes. This is of particular importance in light of recent findings suggesting that educators consider the rigor of evidence, fit of intervention for their school context, and perceived ease of implementation when selecting evidence-based interventions (Hamilton & Hunter, 2020). In general, research on school-based interventions aimed at improving PYD outcomes is emerging. Given the increased national attention on improving student and school outcomes through evidence-based interventions, there is a clear gap in the current PYD and social-emotional learning research. In order to provide educators and policymakers with evidence-based interventions that improve student and school outcomes, more rigorous studies of PYD and social-emotional learning interventions are needed (see Kozina, [this volume](#); Ross & Tolan, [this volume](#)).

Emerging Approaches to Promote Restorative School Environments

The Restorative Practices Intervention is a whole-school approach promoting positive youth development used in schools in the United States and the United Kingdom. Developed in 1999 by the International Institute for Restorative Practices,

Table 1 Eleven essential restorative practices and indicators of proficiency

| Essential practices | Sample indicators of proficiency |
|--|--|
| 1. Affective statements | Use “I” statements; make students aware of the positive or negative impact of their behavior; focus on behavior; encourage students to express their feelings |
| 2. Restorative questions | Reflect standard restorative questions (what harm has been done? How has it impacted you? What needs to happen to make things right?); require a response, written or verbal |
| 3. Small impromptu conferences | Use to resolve low-level incidents between 2 people as soon as possible after the incident has occurred; use the standard set of restorative questions; use affective statements; ask students to conduct a specific activity to repair harm from the incident |
| 4. Proactive circles (comprise at least 80% of circles conducted at a school) | Use to set behavioral expectations (e.g., for academic goal setting or planning, to establish ground rules for student projects, to monitor or build understanding of academic content); use standard set of restorative questions; use affective statements; run by students, after being facilitated 5 times |
| 5. Responsive circles (comprise no more than 20% of circles conducted at a school) | Use in response to behavior or tensions affecting a group of students or entire class; require all people involved to play a role; use standard set of restorative questions; use affective statements |
| 6. Restorative conferences | Use in response to serious incidents or a cumulative pattern of repeated less serious incidents; use scripted approach and trained facilitator; use standard set of restorative questions and affective statements |
| 7. Fair process | Allow students to provide input into decisions affecting them; explain the reasoning behind decisions to the students affected; clarify expectations so students understand implications of the decision, specific expectations for carrying out the decision, and consequences for not meeting expectations |
| 8. Re-integrative management of shame | Avoid labels that stigmatize wrong-doers; discourage dwelling on shame; acknowledge person’s worth while rejecting unacceptable behavior (i.e., separate the deed from the doer) |
| 9. Restorative staff community | Use restorative practices to resolve staff conflicts and proactive circles to build sense of community among staff |
| 10. Restorative approach with families | Use restorative practices during interactions with family members, including proactive circles that focus on intentional communication of positive student behavior and academic achievement |
| 11. Fundamental hypothesis | Maintain high expectations for behavior; do not ignore inappropriate behavior; use the appropriate mix of control/pressure and support; minimize the role of staff facilitators |

Note. Author’s elaboration from Acosta et al. (2019)

the Restorative Practices Intervention involves training school staff on how to enact 11 essential elements (see Table 1). These practices fall along a continuum from informal (e.g., using affective statements that communicate feelings) to formal (e.g., hosting a restorative “circle” in which participants are encouraged to express emotions and form emotional bonds after problematic or disruptive behavior) (Acosta et al., 2019; Weber & Vereenoghe, 2020).

Acting “with” youth and setting high expectations are common threads across all restor-

ative practices. The communication core of the Restorative Practices Intervention is founded on two practices—the use of affective or “I” statements and restorative questions (e.g., What needs to happen to make things right?). Therefore, all school staff members who interact with youth (e.g., paraprofessionals, bus drivers, cafeteria workers) are trained in this core set of restorative practices. Administrators, teachers, and other instructional staff that oversee student education are also trained how to facilitate a *fair and transparent process* with

students and *recognize and manage shame* among students. In addition to using these restorative practices with students, school staff are also encouraged to use the restorative practices to build relationships and resolve issues with each other (*restorative staff community*) and when interacting with parents (*restorative approach with families*).

Circles and conferences are the key mechanisms for how the Restorative Practices Intervention is delivered in schools supported by group meetings between school staff and students. *Proactive circles* can be initiated by students or staff to promote relationship building or establish classroom ground rules. *Restorative circles and conferences* are planned approaches to respond to inappropriate behavior affecting a group of students or an entire class. Low-level conflicts between two people are handled through *impromptu conferences*, whereas more serious or repeated patterns of behavior are handled in planned *restorative conferences* that can also involve parents and administrators. Written guidance describes how schools should use each of the 11 types of restorative practices and what proficiency for each type looks like (Table 1). For example, in schools proficient in the Restorative Practices Intervention, *responsive circles* are expected to make up no more than 20% of all circles implemented to ensure that proactive relationship building is prioritized over approaches that are more reactive.

To learn how to use restorative practices, school staff receive typically 4 days of training over two school years and then engage in ongoing participatory learning groups to build the skills needed to run effective circles and conferences. Additionally, the International Institute of Restorative Practice coaches provide monthly consultation with phone call and two in-person visits over the 2 years. Administrators can also receive a leadership development training focused on promoting a restorative school environment. To sustain the intervention, a small group of school staff becomes Restorative Practices Intervention trainers equipped to train new staff.

Research on the Restorative Practices Intervention

A summary of the evaluation studies by the International Institute of Restorative Practices (2009, 2020) revealed that only three quasi-experimental studies of the Restorative Practices Intervention were conducted. These studies were all conducted within U.S. schools using pre- and post-test survey data, and administrative data showing that schools implementing the Restorative Practices Intervention can positively improve their environment and that the effects diminish only modestly over time. McCold and Wachtel (2002) showed that the length of time students participated in the Restorative Practices Intervention was positively related to significant improvements in both attitude (social competencies and self-esteem) and behavioral measures (delinquency, disciplinary referrals, academic achievement, graduation rates). Hamilton (2008) found that restorative interventions can reduce conflict and improve relationships, both of which aid positive youth development.

To build on these studies, the authors of this chapter conducted the first randomized controlled trial to examine whether the Restorative Practices Intervention influences peer relationships, school climate, and ultimately, youth developmental outcomes (Acosta et al., 2016, 2019). Baseline and two-year post survey data were collected from 2824 students at 13 middle schools. The data was used to test two hypotheses. First, we took a traditional intent-to-treat approach and hypothesized that students in schools randomly assigned to receive the Restorative Practices Intervention would report more school connectedness, better school climate, more positive peer relationships and developmental outcomes, and less bullying and victimization compared to students in control schools. However, prior studies of whole-school interventions have documented a myriad of implementation challenges (e.g., lack of staff buy-in, competition with academic curriculum). Therefore, in the likely event that the intervention was not implemented completely

across the whole school, we assumed that students in the intervention schools, who reported experiencing more restorative practices, would report more positive outcomes. The results showed that the Restorative Practices Intervention did not yield significant changes in the treatment schools (using an intent-to-treat analytic strategy). However, using a dose-response analytic strategy, we found that student self-reported experience with restorative practices significantly predicted improved school climate and connectiveness, peer attachment, and social skills, and reduced bullying and victimization (Acosta et al., 2019).

A second randomized trial was also recently completed in the Pittsburgh Public School System, which serves approximately 25,000 students (Augustine et al., 2018). This trial found similar results for middle school youth. However, this study also examined the impact on suspensions and found that Restorative Practices Intervention reduced suspension rates of elementary grade students, and reduced disparities in suspension rates between African American and White students, and between students from low-income and high-income families. Teachers in schools with the Restorative Practices Intervention also perceived a more positive school climate than teachers in control schools. Both Acosta et al. (2019) and Augustine et al. (2018) documented a number of implementation challenges that could have limited the Restorative Practices Interventions success. These included a lack of time due to competing academic and other similar programming demands, inadequate training and implementation support, and unclear expectations about how much of the intervention is needed to have an impact.

Given that environmental approaches can be longer lasting and address a more complex interaction of risk factors than a single program, more research is required to fully understand the implementation challenges faced by whole-school interventions like the Restorative Practices Intervention and the thresholds for implementation that need to be achieved in order for whole-school change to occur. Understanding more about effective

comprehensive multi-level approaches for middle school students is especially critical to help address the complexity of risk factors that predict adolescent problem behavior and that are mediated through their home and school environments as well as adult and peer relationships. Further research is needed on effective whole-school interventions that can support PYD as youth transition through the significant developmental growth period of adolescence.

Implementing Positive Youth Development Approaches in Schools

As described above, implementation of interventions across multiple levels required for comprehensive PYD approaches can be challenging. Like any approach, PYD programs need to be implemented with quality if they are to achieve the desired effect. What has emerged from decades of research in the U.S. is that communities require assistance to engage in the practices known to be important in delivering any type of program with quality (i.e., goal setting, choosing evidence-based approaches, detailed planning, evaluation, quality improvement, and sustainability). This is because in addition to tangible resources, schools and community-based organizations often lack the capacity, defined as the knowledge, attitudes, and skills needed to carry out all of the programming practices well (Chinman et al., 2012, 2019).

Getting To Outcomes® (GTO) is an approach that builds capacity by strengthening the knowledge, attitudes, and skills needed to choose, plan, implement, evaluate, and sustain any type of program (Chinman, Ebener, Shearer, Acosta, & Hunter, 2020; Herman, Chinman, Ebener, Malone, & Acosta, 2020). GTO first specifies ten steps or sets of activities (see Table 2) that program staff should take, each associated with obtaining positive results across many different program types (Livet & Wandersman, 2005). The first six steps involve planning activities (needs assessment, goal setting, choosing programs, ensuring appropriate capacity and a good fit, and

Table 2 GTO steps (guided by key questions)

| GTO step | Key questions addressed by the GTO step |
|-----------------------------------|--|
| 1. Needs and resources | What are the needs to address? GTO Step 1 provides information about conducting a community needs assessment to help inform program planning. |
| 2. Goals and desired outcomes | What are the goals and objectives? GTO Step 2 has worksheets for creating measurable goals and objectives from the needs identified in Step 1. |
| 3. Best practices | Which evidence-based programs can be useful in reaching the goals? GTO Step 3 offers an overview of evidence-based programming and how to select a program to address the goals outlined in Step 2. |
| 4. Fit | What actions need to be taken so the selected program fits the community context? GTO Step 4 prompts practitioners/program leaders to reduce duplication and facilitate collaboration with other programs. |
| 5. Capacity | What capacity is needed for the program? GTO Step 5 prompts readers to ensure there is sufficient organizational capacity to conduct the selected program. |
| 6. Planning | What is the plan for this program? GTO Step 6 assists with planning the selected program. |
| 7. Process evaluation | How will implementation be assessed? GTO Step 7 assists with conducting a program process evaluation. |
| 8. Outcome evaluation | How well did the program work? GTO Step 8 assists with conducting a program outcome evaluation. |
| 9. Continuous quality improvement | How will continuous quality improvement strategies be incorporated? GTO Step 9 prompts practitioners to reassess the questions in Steps 1–8 after completing the program as a means for improvement. |
| 10. Sustainability | If the program is successful, how will it be sustained? GTO Step 10 presents several ideas to consider when attempting to sustain an effective program. |

planning program details). The next two steps are process and outcome evaluation (Steps 7 and 8). The last two steps involve using data to improve and sustain programs (Steps 9 and 10). To help practitioners complete these key activities, GTO then provides three types of guidance and support: GTO manuals, face-to-face training, and onsite technical assistance. Consistent with social cognitive theories of behavioral change (Bandura, 2004; Fishbein & Ajzen, 1976), exposure to GTO (e.g., from manuals and training) was found to promote stronger knowledge and skills in performing GTO-related activities (capacity). This in turn can lead to enhanced performance of more GTO-related behaviors (i.e., the tasks specified in the ten steps), which supports successful program implementation (Durlak & DuPre, 2008). Important to GTO's capacity-building is allowing practitioners to be more than passive learners, giving them the opportunity to carry out for themselves the various programming tasks GTO specifies. Consistent with empowerment evaluation theory (Chinman, Acosta, Ebener, Malone, & Slaughter, 2015; Chinman, Acosta, Hunter, & Ebener, 2015; Joseph, 2020), practitioners are

given guidance (training) and tools (from the manuals) to carry out these tasks, and then technical assistance providers offer ongoing feedback about what is needed for improvement (Rycroft-Malone et al., 2004; Stetler et al., 2006).

The GTO framework is also grounded in implementation theory. For example, a recent randomized trial showed how GTO operationalizes the Consolidated Framework for Implementation Research (i.e., a conceptual framework to guide systematic assessment of intervention implementation and effectiveness) to ensure that all major domains influencing implementation are considered (Acosta et al., 2013; Damschroder, Reardon, & Lowery, 2020). The GTO framework specifically targets the Consolidated Framework for Implementation Research domain of "implementation process" at both the individual and program level, so that program implementation more closely aligns with empirically based, high-quality processes.

GTO manuals are available for free [on-line](#) in multiple service areas such as substance abuse prevention (Chinman, Imm, & Wandersman, 2004), underage drinking prevention (Imm et al.,

2014), homelessness (Hannah, McCarthy, & Chinman, 2011), home visiting (Mattox, Hunter, Kilburn, & Wiseman, 2013), teen pregnancy prevention (Chinman, Acosta, Ebener, Sigel, & Keith, 2016; Lesesne et al., 2007), air force community actions (Chinman et al., 2020) and emergency preparedness (Ebener et al., 2017). In each manual, the general ten step approach is maintained, but tailored to each area.

For this chapter however, we focus on how GTO was applied to positive youth development in the manual referring to GTO developmental assets indicating ten steps to measuring success in youth programs and communities (Fisher, Imm, Chinman, & Wandersman, 2006). To incorporate the developmental assets approach, the 10 GTO steps were enhanced to include a specific focus on building these assets. Developmental assets are key supports and experiences, which include, but are broader than, protective factors (Dimitrova & Wiium, *this volume*; Roehlkepartain & Blyth, 2020; Scales, Roehlkepartain, & Shramko, 2017; Uka et al., *this volume*; Wiium & Kozina, *this volume*). Ranging from a caring school climate to participation in service activities, these assets have been shown to predict health and well-being outcomes consistently across sex, race/ethnicity, and family income, but they are often excluded from traditional prevention programming. To ensure that youth receive these assets, the Search Institute (the developer of the asset model) uses a community mobilization and planning process to engage a wide range of individuals, organizations, and systems (Benson, Scales, & Syvertsen, 2011), and to identify and develop appropriate positive youth development strategies. For example, in Step 1 (i.e., choosing which problem/s to focus on) participants use asset indicators such as positive school climate, participation in prosocial activities, risk information.

Earlier studies have shown that GTO improves the capacity (i.e., knowledge and skills about quality program implementation) of individual practitioners and the performance of key program tasks in both quasi-experimental trials (Chinman et al., 2008) and small randomized-controlled trials (Chinman, Tremain, Imm, & Wandersman,

2009). Recent randomized trials suggest that GTO improves fidelity and youth outcomes among organizations implementing specific evidence-based prevention programs (Chinman, Acosta, Ebener, Malone, & Slaughter, 2018; Chinman et al., 2016, 2018) and the sustainability of those programs even 2 years after the GTO support ends (Acosta et al., 2020). GTO was able to achieve these gains despite a suboptimal implementation climate at the participating sites (Cannon et al., 2019) and for a modest cost compared to the outcomes (Herman et al., 2020).

The first large-scale randomized controlled trial of GTO (Chinman et al., 2012) was designed to evaluate GTO applied to developmental assets, called Assets-GTO (Benson et al., 2011). The above mentioned manual was used in a study with participants from 12 community coalitions that had a positive youth development mission in Maine (the most North Eastern U.S. state). Each of the 12 coalitions nominated up to five prevention programs to participate. The programs varied widely, but they generally promoted healthy development in middle school and high school youth. Most programs were not evidence based. Six coalitions and their respective 30 programs were randomly assigned to receive the Assets-GTO intervention, and the other six maintained routine operations. The study assessed the capacity (knowledge and skills) of individual practitioners with a survey, exposure to and use of Assets-GTO supports, practitioner perceptions of the Assets-GTO intervention, and program performance (ratings of general implementation quality via an interview with key stakeholders).

The results showed that practitioners who reported using the Assets-GTO intervention showed greater improvements in capacity as compared to practitioners that did not report using it, regardless of assignment to the intervention (Acosta et al., 2013; Chinman et al., 2013). Consistent with previous studies, programs receiving the largest amount of technical assistance consistently showed the most improvement in performance, or the degree to which organizations carried out activities targeted by the GTO ten steps (e.g., goal setting, planning, and evaluation). These findings suggest that the Assets-GTO

intervention can help organizations engaging in positive youth development. Despite these gains in capacity and performance, we also learned from staff that although the Assets-GTO intervention helped them to better plan and evaluate their programs, doing so required significant resources. More detailed information about the study, including the Assets-GTO implementation tools, online e-learning modules that provide a brief training for each Assets-GTO step, and a bank of tested outcome measures can be found [online](#).

Implications for Research, Policy and Practice

This chapter helps to promote research on comprehensive school-based PYD interventions. As previously mentioned, there are few universal school-based interventions for middle school students that demonstrate positive results and very few with strong evidence of improving outcomes (Grant et al., 2017; Yeager, 2017). Research studies on restorative practices reflect cutting edge thinking about how to efficiently and effectively use school-based settings to help promote healthy development. Further, the findings regarding ways to promote a restorative school environment presented in this chapter, advance PYD theory and research, by empirically validating for the first time that restorative principles can be applied as an approach to promote PYD in the whole school environment. While the Restorative Practices Intervention itself did not create a whole-school change, restorative practices, if used consistently enough, hold promise for reducing bullying and victimization by building a supportive environment through stronger bonds among leadership, staff, and students. Lastly, this chapter promotes research by suggesting that a supportive school environment can both support PYD and prevent bullying among middle school youth (Bradshaw, Reinke, Brown, Bevans, & Leaf, 2008; Low & Van Ryzin, 2014; Schoeps, Villanueva, Prado-Gascó, & Montoya-Castilla, 2018). The poten-

tial to impact cyberbullying, which can occur both inside and outside of school, through a school-based approach is particularly noteworthy. The finding that a supportive school environment can serve double duty, both promoting PYD and reducing bullying and victimization and consequently, the negative developmental impact of bullying, offers significant research advancement.

With regards to policy, this chapter informs an ongoing debate about how to maximize federal and state resources for middle school programming in a way that minimizes competition with academic offerings and maximizes impact on PYD (Mertens & Caskey, 2020). As states cut funding to implement typical, stand-alone prevention programs and limit the amount of time spent on non-academic prevention programs, new approaches to infusing prevention into school based settings will be needed. The efficiencies gained by implementing comprehensive PYD programs that can influence multiple outcome areas without taking time away from academic offerings make these approaches of interest to policymakers and school administrators (Dimitrova & Wiium, [this volume](#)).

With regards to practice, this chapter advances the discussion about what it takes to support quality implementation of multi-level PYD approaches. Without additional support, it will be difficult for these types of approaches to be successful, document their success, and sustain their efforts over time. School settings often move from initiative to initiative, sort of a “flavor of the month” approach to intervention. Making lasting change requires a lasting multi-level approach and in order to support this work, school staff needs training, resources, and ongoing coaching. This suggests that, before adopting a comprehensive PYD approach, policy makers and school administrators should consider how to ensure the resources needed for quality implementation. Similarly, funders and developers of these approaches need to ensure that appropriate implementation supports are in place and that quality of implementation is regularly monitored.

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Promoting Positive Youth Development Through Scouting

Jun Wang, Paul A. Chase, and Brian M. Burkhard

Abstract

One important attribute involved in Positive Youth Development (PYD) is character, which is associated with having a moral or ethical compass, or the proclivity to “do the right thing” at the right time and in the right place. Youth developmental programs represent key ecological contexts for the development of positive attributes among youth, including character development. Being a part of the worldwide umbrella organization of Scouting, Boy Scouts of America (BSA) constitutes an exemplar character focused youth development program, serving approximately 2.5 million youth across the United States. In this chapter, we provide empirical evidence from a

mixed-methods longitudinal evaluation project to illustrate what works in BSA programs in promoting youth character development, and how the process is similar or different across diverse participant populations. We explain the common features (e.g., the Big Three) that should be implemented in youth serving programs, as well as the areas to be individualized and contextualized considering the specific youth population being served. We discuss the usefulness of the relational developmental systems metatheory in guiding research, policy, and practice and advocate for more research-practice collaboration to embrace evaluative thinking and intentional programming.

Keywords

Positive youth development · Character development · Scouting · Program evaluation

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Positive Youth Development (PYD) is a strengths-based perspective toward adolescent development, which views adolescents as “resources to be developed” rather than “problems to be managed” (Roth & Brooks-Gunn, 2003). Since its emergence in the 1990s, PYD has increasingly influenced how researchers and practitioners examine youth developmental pro-

cesses, plan and implement youth programming, as well as how youth development (YD) practitioners work and interact with young people on a day-to-day basis. In practice, the mission and vision of contemporary major YD programs are consistently aligned with the PYD perspective by focusing on developing positive attributes in young people, including character values, prosocial behaviors, and civic engagement (Damon, 2004; Lerner et al., 2005; Lerner, Phelps, Forman, & Bowers, 2009).

Scouting, for example, as one of a few worldwide youth organizations, explicitly aims to help young people in achieving their full physical, intellectual, social and spiritual potentials as responsible citizens and members of their local, national and international communities (The World Organization of the Scout Movement, 2019). As contemporary developmental science elaborated, mutually beneficial individual \Leftrightarrow context relations constitute the fundamental feature of PYD for all youth around the globe (Burkhard, Robinson, Murray, & Lerner, 2019). However, the content of these individual \Leftrightarrow context relations vary across youth populations and developmental contexts, including the YD programs youth are associated with. In the current chapter, we focus on the programs of Scouting to illustrate how PYD is promoted among diverse youth at both global and local levels. In so doing, this chapter advances relevant contributions to the PYD field by providing empirical evidence from mixed-methods longitudinal evaluation project to illustrate what works in Boy Scouts of America (BSA) as an exemplar character focused youth development program, serving approximately 2.5 million youth across the United States. We then present the common features (e.g., the Big Three) that should be implemented in youth serving programs, as well as the areas to be individualized and contextualized considering the specific youth population being served. We conclude by discussing the usefulness of the relational developmental systems metatheory in guiding research, policy, and practice and advocate for more research-practice collaboration to embrace evaluative thinking and intentional programming.

Scouting as a High Quality PYD Program

PYD has been operationalized by Five Cs of competence, confidence, connection, caring, and character (Lerner et al., 2005; Lerner, Lerner, & Benson, 2011). In addition, when youth develop high levels of PYD, a sixth C of contribution (generosity to self, family, community, and civil society) emerges (for an expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)). YD programs do not have to aim at promoting all of the Cs at the same time to ensure high quality, though the Cs are often inter-connected and can be jointly promoted by high quality programming. Developmental science research has cumulatively documented that high quality YD programs that endorse and promote PYD often share several core elements, termed the “Big Three.” That is, in a physically and psychologically safe environment, effective YD programs aim to (1) provide youth with extensive opportunities for sustained, caring, and supportive relationships with adults; (2) promote the development of life skills through activities; and (3) allow for opportunities to contribute to, and be a leader in, valued family, school, or community activities (Lerner, 2004; Lerner et al., 2014).

The core theory of change that underlies this approach is to align the strengths of youth with the resources for positive growth in YD programs, so as to optimize young people’s healthy development. Such a theory of change is derived from the relational developmental systems (RDS) metatheory, which elucidates that the interaction between individuals and their contexts is bidirectional and dynamic (Overton, 2015). If individuals can have their needs met and their strengths supported by resources in their environment, they will survive and thrive. In turn, individuals will be highly likely to sustain and better the environment, which will further support the development of the individuals.

As an exemplary YD program, Scouting puts specific emphasis on the C of character, defined

as a set of mutually beneficial relations between person and context and other individuals comprising their context that may vary across ontogenetic time and place (Lerner & Callina, 2014). Indeed, the citizens' possession of fundamental character attributes is vital for democratic societies to flourish (Damon, 2004; Sherrod, Torney-Purta, & Flanagan, 2010). Thus, societies should invest in socializing youth to develop character, morality, and active and engaged citizenship (Althof & Berkowitz, 2006). According to Damon (2004) and Lerner (2007), PYD may be marked by many of the character attributes that are promoted by Scouting, including diligence, excellence, faith, honesty, integrity, productivity, and service. In addition, Scouting promotes character through engagement in various outdoor and service activities, in which youth learn and practice useful life skills (e.g., camping, navigation, first-aid, cooking, etc.) to survive and thrive both in nature and in their local communities. Furthermore, environmental stewardship and community participation give youth plenty of opportunities to lead, collaborate, and to work together with caring and experienced adult mentors. The "Big Three" and the other "Cs" (beyond character) are also inherent in the programming of Scouting. In the sections below, we describe Scouting's operationalization of PYD both globally and in the United States. We then provide empirical evidence from a U.S.-based developmental study to clarify the processes through which character has been promoted through Scouting. We present the important and comprehensive contributions derived progressively from the three-year longitudinal mixed-methods research on Scouting. We conclude the chapter with discussions about the implications for PYD programming based on the Scouting research, policy and practice.

Scouting Globally

Scouting is a movement that began in England in 1907, from which it relatively quickly expanded into a global phenomenon. Many of the details of Scouting practices vary from country to country,

but the mission at its core is the same internationally. This broader mission is defined by Scouting's international organization, the World Organization of the Scout Movement (WOSM) and includes the education of young people through a value system based on the Scout Promise and Scout Law. Consequently, the Scout Movement helps build a better world in which people are self-fulfilled both as individuals and as constructive members of society (The World Organization of the Scout Movement, 2019). Scouting is also universally characterized by participation in, and leadership of, community service projects. Through these activities and projects, Scouts around the world contribute to their communities. The goal is to develop Scouts into lifelong leaders of positive change (Bouchat, Rimé, Eycken, & Nils, 2020).

Although 169 countries are currently part of the WOSM, not all Scouting programs are exactly the same. Two key distinctions revolve around co-educational programs, and ties to religious groups. Whereas most international Scouting groups in the WOSM have been co-ed for decades, there are some exceptions, including the Boy Scouts of America (BSA) in the United States. Before 2017, BSA only offered a few co-ed programs, such as Explorers and Venturing for teens above 14 years old. BSA introduced a pilot program for co-ed Cub Scout (elementary school aged) packs in 2017. This program was expanded nationally in 2018, and as of 2019, BSA began offering its traditional middle- and high-school aged programs to both boys and girls. By contrast, the United Kingdom began its transition to a co-ed program in 1991 and has been completely co-ed since 2007. The country with the highest membership in the world (over 17 million scouts), Indonesia, is also a co-ed program. Therefore, both the historical and current states of co-educational programming across the Scouting movement are noteworthy when considering the populations served by the Scouting Movement internationally (Asensio-Ramon et al., 2020).

Worldwide Scouting programs also vary with regard to religious reverence. As a program dedicated to "timeless values," religious reverence is

a pillar of character development as defined by the founder of Scouting, Robert Baden-Powell. However, the expression of religious reverence necessarily varies from country to country, as well as within countries. The BSA program, for example, expects participants to participate in whatever religion in which they were raised. BSA provides guidelines for a Scout's choice of over 30 world religions, and asks all Scouts to pledge to do their duty to God and country in the Scout Oath. In contrast, the Scouting Association in the UK introduced an optional, alternative pledge in 2013, which eliminated references to God in the Scout Oath. Other countries have a more homogeneous religious connection between Scouting and the dominant religion in the country. For example, over 90% of Scouting units in Italy are Catholic (Associazione Guide e Scouts Cattolici Italiani, 2020). As a result, both Catholic values and partnerships with Catholic youth groups are ubiquitous in Italian Scouting. Therefore, despite the shared goal of "timeless values," the differences in values within and across countries affect the way in which religious reverence is expressed across the Scouting Movement (Suyahman, 2018).

Due to these varied approaches to achieving the goals of Scouting, a single study of Scouting in one country cannot be generalized to all programs in the Scouting movement. However, despite these limitations, researchers and other youth development specialists have asserted that youth participation in Scouting predicts the development of a wide variety of positive characteristics in youth, including the promotion of a culture of solidarity, peace, and tolerance (Mayor, 1995) in addition to respect for humans, animals, and the environment (Palhares, 2009). Experts have also asserted that Scouting in the United Kingdom influences key developmental attributes, such as citizenship, self-confidence, willingness to serve the community, and self-sufficiency, all of which are goals of the Scouting Movement (Proctor, 2009; Quintelier, 2008). Other researchers and experts assert that Scouting contributes to a sense of identity (Warren, 2009), altruistic prosocial behaviors (Ruiz-Olivares, Pino, & Herruzo, 2013) and lead-

ership skills (Rohm, 2016). Indeed, a study of Portuguese Scouting found an emphasis on participation through service and volunteering, with the goal of increasing civic engagement (Rodrigues, Menezes, & Ferreira, 2015).

The publications noted above provide compelling arguments for the positive influences of Scouting in various countries. However, many publications across the international Scouting literature are not based on strong empirical evidence, nor are they necessarily generalizable across the Scouting movement. Therefore, a robust, mixed-methods study conducted in the United States (explained below) would complement the international study of Scouting to provide evidence that Scouting meaningfully contributes to important youth development outcomes across the international context.

Scouting in the United States

Scouting found its way to the United States in 1910 when the BSA was founded. Legend has it that this history was made by a chance encounter between an American newspaper executive and a local Boy Scout in foggy London. The BSA received a federal charter in 1916 and membership peaked in 1972 at 6.5 million Scouts. As of this writing, there are about 2.2 million youth participants in Scouting programs, and about one million adult volunteers (Boy Scouts of America, 2020a).

The BSA based its programming on Baden-Powell's Scouting program in the United Kingdom, but amended certain aspects of the Scout Oath and Law. For example, the BSA added three points to the Scout Law: brave, clean, and reverent. Indeed, the BSA has had close ties to religious organizations throughout its history. The original founders of the BSA worked closely with the Young Men's Christian Association (YMCA, a Protestant organization). The Catholic Church and the Church of Jesus Christ of Latter-day Saints (LDS) both affiliated with the BSA early in its history.

Boy Scout units are owned and run by local community organizations. These often include

religious or civic organizations, schools, and veterans associations. The largest chartering organizations are United Methodist Church, Catholic Church, parent-teacher groups, Presbyterian Church, Lutheran Church, Baptist Church, private schools, and even groups of citizens. The chartering organization selects the adult leadership for its unit and operates the unit according to its own values in addition to the values and principles of Scouting. For example, a unit chartered by a Jewish synagogue may choose to keep kosher during its meetings and outings. In exchange for providing meeting space and leaders, Boy Scout units often provide service for their chartering organizations, which may range from acting as a color guard in formal ceremonies, to running food drives. In comparison, Girl Scout units do not operate under a chartered unit model and instead are owned and operated by the local Girl Scout council (Girl Scouts of the United States of America, 2019).

Administratively, the BSA is divided into four regions comprised of 272 local councils, which administer to the units within their geographical boundaries. Each council maintains a board of elected community volunteers that sets the council's programs and policies. Councils also maintain a paid staff that supports volunteer leaders in recruiting, fundraising, marketing, budgeting, and other organizational or managerial capacities. The BSA also owns and operates four High Adventure Bases throughout the country. These programs offer adventure programs, such as sailing in the Florida Keys, canoeing in the boundary waters of Minnesota, hiking the rugged and rocky trails of New Mexico, or white water rafting in West Virginia.

The mission of BSA is to develop character in young people. With its focus on character attributes that function to serve one's faith and one's nation, the BSA seeks to promote through its programs the development of young people who will contribute integratively to self and society and who, by being standard bearers for excellence in their personal lives, will model for their nation, the connection between strength of character and service. The development of character and contribution rests on the enactment of BSA programs

with fidelity to the BSA model. Indeed, and once again akin to other YD programs, the programs of the BSA rest on a theory of change, which posits that, if the developmental assets constituted by BSA programs are presented to youth with *sufficient* intensity and *sufficient* duration, then the character and contribution facets of the PYD model will emerge (Benson, Scales, Hamilton, & Sesma, 2006; Mahoney, Vandell, Simpkins, & Zarrett, 2009).

In practice, BSA embeds character-building in its various activities. Through community service projects such as snow shoveling, trash cleaning, or helping seniors, Scouts develop responsibilities of participating citizenship. Through outdoor camping activities, Scouts learn useful life skills, including how to tie different kinds of knots, how to cook, and how to be safe with fire. Scouts are also encouraged to apply their knowledge and skills in different contexts, such as practicing their math skills while selling popcorn or camp cards for fundraising and solidifying their knowledge about plants and insects as they camp in the woods. In addition, the BSA program adopts a developmental perspective, creating developmentally appropriate activities for participants of different ages. BSA serves youth from first Grade through 12th Grade. From Grade 1 to Grade 5, youth participants are called "Cub Scouts" and participate in Cub Scouting. Activities are primarily planned and led by adult volunteers, who are usually parents of the Scouts (Boy Scouts of America, 2020b).

For youth who are 11 years or older, they can become members of Scouts BSA and participate in activities that they lead themselves. The whole Cub Scout period can be considered as a preparation stage for young children to gradually develop character and skills valued by the organization. The explicit goal of Cub Scouting is that, by the final level of the Cub Scouts program, youth will have gained sufficient autonomy in goal-seeking abilities and in leadership skills to aid in succeeding progressively through the upper Scouts BSA ranks (ideally, to attain the level of Eagle Scout) and, outside of Scouting, to live lives of honor and contribution in their local and global communities (Hilliard et al., 2014; Wang, Ferris, Hershberg, & Lerner, 2015a).

As reflected in the Cub Scout oath, law, and motto, helpfulness, rule-following, righteousness, and constant personal development are valued. Values are taught through real life experiences, such as wearing the uniform, participating in pack or den activities, involving family members in activities, and doing activities at home. Core values are weaved into activities, rather than recited through words only. At the Scouts BSA stage, the motto, oath, and Scout Law are more explicitly emphasized, including being trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent (Thomas, 2020).

However, despite these important goals of BSA programs, across the organization's more than 100-year history, there has been little research that systematically or longitudinally investigated the impact of BSA programs on outcomes of youth involved in Scouting. A handful of prior cross-sectional research studies have suggested that BSA programs help to enhance youth character development, well-being, values, relationships, decision-making skills, and commitment to achieving goals. There is still a relative dearth of developmental research about how character related attributes develop as youth participate in YD programs, such as BSA, particularly during childhood and early adolescence. Identifying the need for filling the gap between research and practice, the John Templeton Foundation funded a longitudinal research project that partnered practitioners from BSA in the Cradle of Liberty (COL) Council of greater Philadelphia with researchers from the Institute for Applied Research in Youth Development (IARYD) at Tufts University, USA. We describe the research project and summarize its findings below.

Sample Case of the Character and Merit Project (CAMP)

The longitudinal research project was labeled the Character and Merit Project (CAMP) and adopted a mixed-methods design, using both quantitative and qualitative methods, to assess multiple

dimensions of the BSA program across 2.5 years. Longitudinal survey data were collected from youth involved in Cub Scouting and from a propensity-score-matched group of youth who were not involved in Scouting. In addition, qualitative data were collected through interviews with adult volunteers and youth participants at different time points of the study. The two primary research questions of the study referred to whether (1) BSA programs promote character development among participating youth and (2) If so, how do BSA programs promote such character development?

To answer the first research question about the impact of BSA programs on character development of participating youth, a methodologically rigorous Assessment of Character in Children and Early Adolescents (ACCEA) was created to measure character attributes that are of focal concern of BSA, including the Scouting principles of cheerfulness, obedience, reverence, kindness, thriftiness, trustworthiness, and helpfulness (Wang et al., 2015b). The measure showed good construct validity, concurrent validity, and measurement invariance across Scouts and non-Scout boys and girls. With this validated measure of ACCEA, longitudinal survey data from five time points across 2.5 years were collected from over two thousand Cub Scouts and comparison group of non-Scout youth, who were at the same age and from the same geographical region as the Scouts.

Developmental Patterns of Character Attributes

When the developmental patterns of the character attributes were examined for the Scouts and non-Scout youth, Scouts showed significant increases in cheerfulness, helpfulness, kindness, obedience, and trustworthiness after two years of Scouting participation, whereas non-Scouts typically either did not change or decreased in these character attributes (Wang, Ferris, et al., 2015a). In addition, Cub Scouts developed a significantly more positive outlook on their future after two years of Scouting participation, whereas non-

Scouts remained unchanged, on average. A positive outlook towards one's future is a key predictor of thriving in adolescence (Schmid, Phelps, & Lerner, 2011). Furthermore, Scouts were more likely to demonstrate perseverance and dedication as a result of participating in Scouting (Chase & Lerner, 2014).

Therefore, longitudinal empirical evidence did support the positive impact of BSA programs on Cub Scouts' character development. The Cub Scouting period studied empirically by Chase and Lerner (2014) is the earliest stage of the Scouting program, in which the cultivation of character attributes is primarily through implicit experiential activities. In later stages of the Scouting program, character development is taught more explicitly, and as a result of their maturation, the participants have a greater capacity for abstract understanding of character concepts. Therefore, the findings are even more promising as longer-term cascading effects are likely to follow if children are guided onto a positive track in early adolescence, as demonstrated above.

Developmental Processes of Character Attributes

Examination of the second research question on whether BSA programs promote such character development, revealed multiple programming pathways through which BSA brings positive changes to participating youth. With regard to the youth participants, Scouts who attended weekly meetings more regularly showed significantly greater increase in kindness, thriftiness, trustworthiness, and helpfulness, compared with Scouts who participated less often (Chase & Lerner, 2014). Scouts who attended weekly meetings more regularly also reported significantly greater increase in academic success and became more connected to nature than did Scouts who participated less often. In turn, Scouts who remained in the Scouting program longer demonstrated significantly greater increase in helpfulness than Scouts who had participated for a shorter period (Lynch et al., 2016).

Furthermore, Scouts who actively participated in weekend camping trips and outdoor experiences were more likely to have increasing trajectories of prosocial development than Scouts who rarely participated in such activities (Burkhard, 2019). In addition, exemplar Scouts (i.e., Scouts who were highly connected to the Scouting program, to other Scouts, adult volunteers, and to advancement goals) showed significantly greater increase in cheerfulness, hopeful future expectations, helpfulness, kindness, and goal pursuit strategies than less engaged Scouts (Lynch et al., 2016). Therefore, the intensity, duration, and engagement of program participation all matter for Scouts to benefit from the BSA programming. There is a transactional cycle between Scouts' investment in and their gains from the program.

However, Scouts' program participation and developmental outcomes do not evolve in a vacuum. At the group level, pack culture matters. Lynch et al. (2016) examined the role of pack-level activity involvement in Scouts' character development, in addition to Scouts' individual involvement. They defined "high engagement" packs as having high Scout-level participation frequencies, membership durations, and individual engagement when these three involvement indices were averaged across all members of the given pack. Scouts who were members of highly engaged Cub Scout packs became significantly more engaged in Scouting over time, more so than Scouts participating in less engaged packs. Not surprisingly, when both Scouts and their packs had high engagement, positive outcomes, such as kindness, cheerfulness, and goal pursuit skills improved at a significantly higher rate than in less engaged Scouts and packs (Lynch et al., 2016). Consistent with the RDS metatheory and the theory of change of high quality PYD programs, the synergy between the individual participant and their program context is the key to a mutually beneficial relation between the two.

BSA Methods of Character Promotion

The question arises as to how to facilitate the synergy, or the mutually beneficial interactions

between the participant and the program. PYD research and practice consistently identified the critical role of adults in youth programs. Indeed, adults in youth programs serve multiple functions, contributing to youth development in various ways. Adults are there to supervise and monitor youth activities, so that physical and psychological safety is ensured. Adults design and facilitate developmentally appropriate learning materials and activities, so that youth are challenged, encouraged, and scaffolded to learn new skills progressively. Adults also serve modeling roles for individual youth and groups, so that healthy and positive team cultures are promoted throughout the program settings and time periods.

In the CAMP study, focus group data indicated that a key strength of Scouting is the ability for Scouts to attempt new things in a safe environment, both in terms of physical safety and the promotion of an encouraging social environment (Hershberg et al., 2015). Adult leaders had three core general processes through which they positively influenced youth (1) facilitating supportive youth-adult relationships; (2) providing opportunities for life/leadership skill development; and (3) opportunities for skill application across program environments (Hershberg et al., 2015). These leaders' experiences indicate that BSA programs resonated with "The Big Three" well-established key components of high quality youth development programs (Lerner, 2004). Adult leaders in effective packs and troops were found to positively influence youth self-confidence, leadership skills, goal-pursuit skills, hopeful future expectations, and academic competence (Hershberg et al., 2015). Each of these characteristics is a key component of Positive Youth Development (PYD), an indicator of thriving in adolescence (Lerner et al., 2005). Specific to the BSA programs, natural learning (i.e., learning in nature), peer mentoring (i.e., the patrol model) and skill building (e.g., merit badges, advancement requirements) were found to be the major procedures that drive key developmental outcomes (Hershberg et al., 2015).

The above reported work suggests that there is supportive evidence about the positive impact of

a typical Cub Scouting program on youth character development. Such positive development is enhanced by participants' regular, sustained, and engaged participation of the program, as well as by the synergy between the individual youth and their pack. Throughout these programming components, adult leaders play a central role in creating the safe and positive physical and psychological environment and pack culture, and in using Scouting methods, which focus on creating mutually beneficial person-nature and person-person relationships through developmentally appropriate and individually meaningful skill building activities. With the "Big Three" embedded inherently in the program and character promotion implemented explicitly in activities, BSA is on a promising track to promote PYD through high quality programming.

Promoting Character Development among Unserved and Underserved Youth

As is the case with the overall PYD research and literature, the generalizability of the PYD principles and the appropriateness of the long-established out-of-school-time YD programs (e.g., Scouting) for unstudied youth populations is still in need of examination. Most PYD research and practice to date has been conducted with youth from White middle class families in the U.S. American youth from diverse racial/ethnic backgrounds, or from low-income families and communities are either underserved or unserved by major YD programs. How the PYD approach and YD programs work for youth outside the U.S. has just started to receive more scientific attention (Dimitrova & Wiium, [this volume](#); Wiium & Dimitrova, 2019). A strength-based rather than a problem-centered perspective toward youth development might fall particularly short for non-U.S. youth or non-White middle-class youth in the U.S. The handful of extant studies taking a strength-based approach among understudied youth populations has generated promising empirical findings and practical implications (Eichas, Montgomery, Meca, Garcia, &

Garcia, [this volume](#); Dimitrova et al., [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Smith, Yunes, & Fradkin, [this volume](#); Travis & Leech, 2014).

With these types of societal needs in mind, BSA launched the Scoutreach initiative in 1998 to make Scouting more accessible to the “hardest to reach” youth, especially in underprivileged urban and rural communities. Unlike traditional Scouting programs, Scoutreach offers free membership to participating youth. Meetings and activities are typically held after school to ensure physical and psychological safety. Without relying on parental volunteers’ involvement, which is not always available for underprivileged youth, Scoutreach hires paid staff to lead the Scouting programs for youth participants. Programing adjustments are frequently made according to local resources and constraints to increase the accessibility and availability.

As part of the CAMP study, we also examined how Scouting works with non-traditional Scout participants through the Scoutreach initiative. The ACCEA measure, which was originally developed to assess character attributes among traditional Scouts, was found to work equally well with the Scoutreach children (Wang et al., 2017). Scoutreach youth reported moderate to high levels of character attributes and program engagement. The more engaged they were with the programs, the higher participants reported their character attributes to be. Interviews with Scoutreach youth further supported the links between program involvement and character attributes, according to the participants’ elaboration on how they learned about character attributes through the Scout Law, from stories shared by the adult leaders, and from the way children interacted with each other in Scouting programs. Youth shared that their Scoutreach leaders taught them directly about character attributes, such as kindness and helpfulness (Ferris, Hershberg, Su, Wang, & Lerner, 2016). They also learned about tolerance and acceptance, and about creating positive changes in their communities (e.g., reducing property damage and violence).

However, evidence indicated that Scoutreach programming priorities differed from traditional

Scouting in its explicit emphasis on providing a safe after-school place for youth living in high poverty urban neighborhoods (Hershberg et al., 2015). As many Scoutreach youth did not have adult male caregivers at home, Scoutreach leaders felt particularly responsible to set up positive adult role models for the youth. The leaders also made great effort to introduce the youth to adults from the similar racial/ethnic backgrounds, and who have achieved inspiring personal excellence and contributed to society in various ways. Therefore, not surprisingly, Scouting engagement in high poverty urban neighborhoods positively predicted academic success, character attributes, PYD, and contribution to the community among the Scoutreach participants (Champine, 2016). Positive feelings toward Scouting (i.e., emotional engagement) also predicted rank advancement among Scoutreach Scouts. Despite the lessened emphasis on parental involvement in the Scoutreach programs, parental participation was still associated with positive role modeling and increased parent-child interactions. Thus, Scouting’s engagement of parents was linked to improvements in Scouting program outcomes, as well as strengthening connection within the family (Champine, 2016).

Interestingly, interviews with Scouts, parents/guardians, and leaders in high poverty urban neighborhoods showed differences in individuals’ views of important aspects of Scouting. Scouts and leaders described the importance of outdoor activities (e.g., camping) for recruitment and retention. Parents/guardians more strongly emphasized the importance of relationships that Scouts formed with other Scouts and their leaders (Champine, 2016). The programming methods of natural learning, peer mentoring, and positive youth-adult relationships all find their way into work with Scoutreach youth.

Summary of the CAMP Findings

Considering the empirical evidence summarized above, the CAMP study of Scouting found strong evidence of significant, positive effects of participation in Scouting including character develop-

ment, and additional indicators of thriving such as academic success, hopeful future expectations, goal pursuit skills, and leadership. In addition to overall effects of Scouting, the CAMP study found that the greater the intensity of participation, the greater the effect of Scouting on several important youth outcomes. These findings were especially compelling because of the variety of informants, including youth, parents, district volunteers, and pack-level volunteers. The study also capitalized on the strengths of both quantitative and qualitative methods to unpack the programming and developmental processes with different but complementary information. The inclusion of traditional Scouts, non-traditional Scoutreach Scouts, and non-Scout youth populations greatly increased the applicability of the study and program to diverse youth populations.

However, the study is still limited in its representativeness and duration. All youth were recruited from the Northeastern regions of the U.S., the study only lasted for 2.5 years, and the scope of participants with regard to program level was limited to the Cub Scout age group (i.e., Grades 1–5). Thus, future studies could build upon the results of the CAMP study to identify long-term effects of Scouting across wider age groups and in relation to BSA programs across more regions in the U.S.

Implications for Research, Policy and Practice

Consistent with the PYD literature and as evidenced by the CAMP study, for positive developmental outcomes to occur, high quality YD programs must have key programming components in place, including physical and psychological safety, sustained positive youth-adult relationship, developmentally appropriate and individually meaningful skill building opportunities, as well as the opportunities for youth to take initiative and leadership roles to apply what they learned from the program context to their life in the real world. This chapter has provided further evidence that supports RDS-based theories, such as PYD, providing a framework for strength-based

youth development research, inclusive youth-centered policy making, and effective youth programming.

As shared between the PYD framework and the operation of major YD programs (e.g., Scouting), a strength-based approach allows both the individual youth and the program staff to focus on the alignment between individual strengths and contextual assets with a constructive mindset. When aiming for mutually beneficial person-context relations as both short-term and long-term goals, positive attributes within individuals, youth groups, programs, families, and communities are likely to be developed, reinforced, and escalated. Positive feedback loops are also likely to emerge, evolve, extend, and expand. The focus on mutually beneficial person ↔ context relations is theory-predicated, as well as empirically and practically supported. Having identified the potential for positive outcomes through program participation in BSA, researchers might now turn to investigating specific program elements, developmental assets, and synergies between the two sides that exist in Scouting programming and attempt to identify links between these and positive development. That is, the research and application of the PYD approach should be combined with the specificity principle emphasized by developmental researchers (Bornstein, 2017), that is, exploring youth development research and practice with multi-part “what” questions (1) What programming features regarding PYD; that are linked to (2) What antecedent and consequent person-context relations; during (3) What points in development; for (4) What youth populations; living in (5) What contexts; across (6) What historical periods?

As is the case with most extant developmental studies, except for some developmental comparisons between Scouts and comparison group boys, many findings from the current CAMP study did not control for endogeneity by using counterfactual causal modeling designs, especially with regard to the research on non-traditional ethnic minority Scouts. Thus, no causal inferences can be made about the relation between Scouting participation and character development in these instances. Future research should be more inten-

tional with the use of a counterfactual causal modeling design to include demographically similar comparison samples to facilitate effective control for endogeneity.

As to policy implications, the research into BSA programming has shown that policies focused on reaching all youth (e.g., Scoutreach) should be considered so that the unique strengths and needs of local communities are taken into account in program delivery. Regulations and policies that allow for the adaptation of programming should be encouraged as we are optimistic that all youth stand to benefit from PYD programming when implemented effectively and creatively. Policy makers should consider allocating more resources for programs, making intentional effort to serve and benefit under-represented youth populations. Such resources can include funding opportunities for researchers, practitioners, and organizations to plan, implement, or evaluate programs that aim to serve under-represented youth. These can also be training and professional development opportunities for practitioners who, themselves, come from under-represented populations. Collaboration among organizations serving different populations or meeting different needs of the same or different populations could be facilitated to capitalize on the strengths of such organizations and reach greater societal impact. In addition, the research on BSA programs has demonstrated the usefulness of researcher-practitioner collaboration in generating data-based evidence to inform both research and practice. Policy makers may consider advocating for evaluative thinking and requiring program evaluation as part of programming to help practitioners be more intentional at every step of their programming.

Finally, practitioners should take care to identify and incorporate both individual and contextual strengths into their programs. The “Big Three” provides a useful guide for key features to include in PYD programming, but local communities and individual youth will also bring strengths to the table. Connecting program elements to specific aspects of youth development (such as operationalized by the Five Cs) will also

help to ensure that programs are intentionally promoting positive development. In addition, when the PYD principles are carried out in real life practices, being fully aware of the diversities within and between individuals, populations, societies, and cultures is crucial. Individuals change over time and across contexts. People differ from one another despite shared living contexts, near and far. Societies and cultures differ in norms, values, and the way they socialize young people. Practitioners should follow PYD principles in an open-minded and flexible manner as they bring their extant program to new populations, including youth of younger or older age groups, newer generations of parents and youth, or previously unserved or underserved populations due to geographic, socioeconomic, or cultural barriers. Similarly, it is important for practitioners to have a developmental mindset for the participating youth, the practitioner workforce, and the program per se. No single YD program works for everyone in exactly the same way. Critical thinking and reflection, formative research and evaluation, and sensitivity to feedback from stakeholders across all levels of the program and outside the program, are all needed for programs to stay current, relevant, and effective to the youth they serve. Thus, an emphasis on research and evaluation should be broadly and thoroughly advocated among policy makers, funders, researchers, and practitioners working in the youth development field.

In conclusion, this chapter provided a template for identifying the ways in which a youth program whose goal is positive youth development may deliver programming consistent with contemporary developmental theory. In particular, using RDS-based ideas regarding mutually influential person ↔ context relations to describe and explain specific program elements provides a lens through which research questions can be more easily formulated and individual development more efficiently measured. Aligning one of the world’s largest youth programs (i.e., Scouting) with the leading contemporary developmental theory (i.e., RDS) creates more opportunities for researchers to evaluate the program, policy makers to ensure its support and implementation, and

practitioners to deploy it effectively and intentionally. All programs that seek to promote positive youth development would benefit from evaluation through an RDS lens, for the evaluation of both the potential positive outcomes of a program and the theory of change by which a program operates. In this way, programs will be able to draw a line to key features that support development, and then implement, as well as measure them intentionally.

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Social Change and the Dynamic Family Transmission of Youth Vocational Competence

Oana Negru-Subtirica and Gabriel Badescu

Abstract

By grounding Positive Youth Development (PYD) in the current global political and economic context, we can tackle how macrosocial processes gradually shape the 5Cs of PYD (i.e., competence, confidence, character, connection, and caring). This chapter integrates the inter-generational transmission of vocational competence in families in the global social and political context, applying an interdisciplinary lens at how macrosocial processes can influence youth development. First, we analyze the global social and political context through three key indicators of change relevant for young people referred to the organization of work and employment, current trends of democracy and freedom, and parental

involvement in the lives of their offspring. Second, we investigate how family vocational socialization shapes the potential for PYD in this life domain. We look at parental-child factors (i.e., parental vocational aspirations for their children, parent-child vocational communication) that support our assumption that youth vocational competence should be framed in applied interventions in terms of family-negotiated goals. Lastly, we discuss implications for PYD research, policy, and practice.

Keywords

Social change · Democracy · Trust · Vocational competence · Family vocational socialization

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The Positive Youth Development (PYD) framework focuses on the formation of key personal attributes (i.e., the 5Cs of competence, confidence, character, connection, and caring) that contribute to healthy adaptation throughout adolescence and that protect youth from risk behaviors (Burkhard, Robinson, Murray, & Lerner, 2019). Relevant PYD work underscores the role of social networks as ecological assets that foster personal strengths (i.e., intentional self-regulation, school engagement, hopeful future

expectations) and gradually contribute to the formation of the 5Cs (Dimitrova & Wiium, [this volume](#); Dominguez, Wiium, Jackman, & Ferrer-Wreder, [this volume](#); Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#); for new PYD conceptualizations and expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dimitrova et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)).

The family is a relevant social network and existing research has focused on both direct link from family factors to PYD and mediated link, through intentional self-regulation. Specific parental behaviors and attitudes (e.g., parental involvement, autonomy support) are strong predictors of PYD (Bradley, Ferguson, & Zimmer-Gembeck, [this volume](#); Dutra-Thomé & Ponciano, [this volume](#); Kosic, Wiium, & Dimitrova, [this volume](#); Lansford et al., [this volume](#)). Parenting behaviors, warmth and monitoring are also relevant family factors that foster PYD among youth (Johnson, Kilpatrick, Bolland, & Bolland 2020; Lewin-Bizan, Bowers, & Lerner, 2010; Napolitano et al., 2011).

In addition, recent advancements highlight the need to address specific cultural and economic variables in the PYD scholarship and interventions (Dimitrova, 2018; Dimitrova, Fernandes, et al., [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Eichas, Montgomery, Meca, Garcia, & Garcia, [this volume](#); Ferrer-Wreder et al., [this volume](#); Hull, Ferguson, Fagan, & Brown, [this volume](#); Kaniušonytė & Truskauskaitė-Kunevičienė, [this volume](#); Larsen & Holsen, [this volume](#); Li, He, & Chen, [this volume](#); Smith, Yunes, & Fradkin, [this volume](#)). Such relevant scholarship has successfully applied the 5Cs model in research and intervention work in a variety of youth samples with different cultural and socioeconomic background. Therefore, by grounding PYD in the current global political and economic context, we can tackle how macrosocial processes gradually shape the 5Cs.

Based on these considerations, this chapter integrates the inter-generational transmission of vocational goals in families in a global social and political context, using an interdisciplinary lens

at how macrosocial processes can influence youth development. In this manner, we can broaden the conceptual framework of PYD, by emphasizing the role of macrosocial processes. Additionally, this chapter furthers new methodological approaches for investigating the inter-generational transmission of vocational goals in families.

First, we analyze the global social and political context through three key indicators of change that are relevant for young people in terms of the organization of work and employment, current trends of democracy and freedom, and parental involvement in the lives of their children. The global increase in income inequalities and the decreasing economic mobility have made young people one of the most vulnerable groups on the labor market (Yeung & Yang, 2020). Additionally, youth decline of generalized trust and the democratic recession crisis make the present world much more prone to increases in extremism (Miconi & Rousseau, [this volume](#)) and decreases in cooperation, optimism, and empathy (Bjørnskov, 2007; Uslander, 2018). This state of global affairs increases the protective role of families in the positive development of their offspring. In fact, modern-day parents, especially with an upper-middle class background, tend to offer more support to their offspring, across adolescence and well into young adulthood (Gordon, Russell, & Finan, 2020; Shi & Tan, 2020).

Second, from a domain-specific perspective, we debate the central role that parents play in the career path choices of their offspring (i.e., intentional self-regulation of career choices) and then explore and follow their career goals (i.e., vocational competence). We analyze how youth vocational competence is dynamically negotiated in families and explain how this relational negotiation can contribute to changes in youth connection in the vocational domain and can influence youth contribution to their families. In this endeavor, we investigate how family vocational socialization limits or extends the potential for positive youth development in this life domain (Gottfredson, 2005; Howard & Walsh, 2011). More specifically, we look at parental variables

(e.g., parental vocational aspirations for their children, parent-child vocational communication) that support our assumption that youth vocational goals should be framed in applied interventions as family-negotiated goals. Lastly, we discuss relevant research, policy and practice implications.

Positive Youth Development in the Global Social, Political and Economic Context

Youth development occurs in a dynamic global context and changes at individual and family level are greatly influenced by changes at societal, cultural, and demographic levels. The developmental systems framework acknowledges the dynamic interplay of changes at different levels of individual, group, community, and culture functioning (Overton, 2013; Walsh, 2016). Nevertheless, by better grounding psychological and relational functioning in macro-level changes in the society, we can gain a more in-depth understanding of the opportunities and limitations of a PYD framework in a global context. We analyze the global social and political context by looking at three key indicators of change that are relevant for young people in terms of the organization of work and employment, current trends of democracy and freedom, and parental involvement in the lives of their offspring.

Organization of Work and Employment The organization of work and employment for young people has been influenced by the growth of a financial capitalism searching for short-term investments giving quick profits (Santilli, Maggio, Marconetti, & Grossen, 2018). Globally, the growth of international trade and policies that reduced workers' bargaining power and supported the upward redistribution of growth, have exacerbated income inequalities, both between and within societies (Hussey, Jetter, & McWilliam, 2020) and increased the number of people living below the poverty threshold (Barkai, 2016; The World Bank, 2020). In most developed and developing societies, young peo-

ple are the ones who bear the brunt of economic woes. Millennials, people born between the early 1980s and late 1990s, have worse prospects than their predecessors (Gale, Gelfond, Fichtner, & Harris, 2020). In addition, economic mobility has decreased significantly since the 1940s, a decline that is largely attributed to growing income inequality (Chetty et al., 2017).

The effects of economic precariousness on youth are profound (Santilli et al., 2018). Long-term unemployment for young workers can be harmful and may result in "discouraged workers" and social exclusion from the labor market (Marelli & Signorelli, 2010). These workers tend to be involved in low quality employment with consequences that are similar to those of being unemployed, including lower life satisfaction and psychological strain (Delva et al., 2020; McKee-Ryan & Harvey, 2011). Moreover, growth of wealth inequality has consequential effects on norms and dispositions, such as generalized trust. Generalized trust is a core disposition that remains relatively stable throughout one's lifetime (Wu, 2020). Yet, evidence suggests that over the past decades, aggregate levels of trust have steadily declined among European and American youth, and that the negative effect of income inequality on generalized trust possibly accounts for such decline (Bjørnskov, 2007; Kyriacou & Trivin, 2020).

Having trust in people you do not know encourages cooperative behavior, making it easier to overcome collective action problems (Uslaner, 2002). By reducing social ambiguity, trust also facilitates contingent and complex decision-making (Costa, 2000; Towhidi, Sinha, Srite, & Zhao, 2020). Optimism is also associated with generalized trust (Hough, Sumlin, & Green, 2020). People who have faith in strangers tend to be more hopeful for the future and are more likely than those who are less trusting to believe when things are going well, that they will remain so, and when faced with challenges, that things will get better (Uslaner, 2002). Trust also relates to self-efficacy and hope (Ilyas, Abid, & Ashfaq, 2020; Simas et al., 2020). Additionally, generalized trust has been shown to be important

to integrity and empathy for others (Bahadur, Khan, Ali, & Usman, 2020; Rothstein & Uslaner, 2005; Svare, Gausdal, & Möllering, 2020).

Current Trends of Democracy and Freedom The global trends of democracy and freedom have an effect on how youth bond with people, communities, and political institutions. Drawing on the Freedom House indices, Diamond (2015) concluded that global democracy shows a recessive trend. The Varieties of Democracy project or V-Dem, a comprehensive database of empirical assessment of indicators and dimensions of democracy in 202 countries, provides further support for the democratic recession thesis (Barroso, 2020; Danescu, 2020).

In Europe, the governments of Hungary, Poland, Slovakia, and Austria have incorporated nationalist and neo-rightist policies that are seeping into their political institutions (Greskovits, 2015). In a recent study, Foa and Mounk (2017) argued that young citizens are not just dissatisfied with the performance of particular governments, but they are increasingly critical of liberal democracy itself. The results of the World Values Survey among youth reported that 24% stated that democracy is a “bad” or “very bad” way of running the country, compared to older respondents or prior polls. Also, the proportion of respondents expressing approval for “army rule” has risen across most of the established democracies. The disaffection with the democratic form of government was accompanied by a wider skepticism toward established political parties, representative institutions, and minority rights in most of the countries participating in the World Values Survey (Foa & Mounk, 2017). The rise of illiberal politics coincides, on a global level, with growing income inequality (Keeley, 2015; Wodak, 2019), and inequality is harmful to democratic governance (Klicperova-Baker & Feierabend, 2020; Theodossiou & Zangelidis, 2020).

Parental Involvement in the Lives of Their Offspring Parental involvement with their

children has increased significantly over the past few decades (Fingerman, 2017). Parents have more frequent contact with their children than thirty years ago. Research using data from the United States in mid to late twentieth century found that only half of parents reported contact with a grown child at least once a week, nearly all parents had contact with a grown child in the past week, and over half of parents every day (Fingerman et al., 2016). Moreover, parents tend to give more support to grown children than parents gave in the recent past. From the 1970s through the 1990s, parents spent more money on children during the teenage years, but since 2000, parents across economic strata have spent the most money on children under the age of six or young adult children over the age of 18 years (Kornrich & Furstenberg, 2013). Because better off parents tend to invest more money than poorer parents in young adult offspring, this pattern is likely to increase socioeconomic inequalities in these societies (Fingerman et al., 2016; Hellström, Lapanan, & Olsson, 2020).

In addition, in industrialized nations, rates of parents sharing residence with their adult children have risen in the past few decades. Recent reports show that the majority of young adults in the U.S. live with their parents (Fry et al., 2020). Co-residence and “near co-residence”, in which parents and children live in the same building but in separate households, which most often is a form of support from parents to grown children, has exceeded residing with romantic partners in the United States with similar trends for major racial and ethnic groups (Fry, 2016). Further, the U.S. Panel Study of Income Dynamics on residential locations of adults aged 25 years and their parents, reports a significant majority (75%) having their nearest parent or adult child within 30 miles, and about one third having parents and adult children living close. Spatial proximity was related to socio-demographic disparities with those who were disadvantaged being more likely to have their parents or adult children nearby (Choi, Schoeni, Wiemers, Hotz, & Seltzer, 2020). Geographic proximity to parents is also present

in European societies (Hünteler & Mulder, 2020) with more than half of the adults aged 18 to 34 years living in the same building with their parents (Isengard & Szydlik, 2012).

What explains these changes of the parent and young adult children ties? The changing demographic characteristics of young adults account only for a small fraction of the increase in living with parents (Fry, 2016). A large part of the explanation resides in economic changes over the last decades and consequent increasing dependence of young adults on their parents. Besides, public policies play a strong role in shaping relationships between adults and parents in most of the developed countries (Silverstein, Tur-Sinai, & Lewin-Epstein, 2020). Large differences exist between policy support for young people in North European countries with generous social democratic welfare system sustaining autonomy, versus Southern European countries that encourage greater dependence on families (Isengard & Szydlik, 2012; van Kersbergen, 2020). Furthermore, the global expansion of tertiary education contributes to explain the increase in parental support of young adults (Fingerman et al., 2016). Finally, recent technologies have also increased parental involvement with young adult children, because cell phone, email, and social media have provided almost instantaneous contact at negligible cost (Lemish, Elias, & Floegel, 2020; Ross & Tolan, *this volume*).

In summary, increase of inequality and precariousness as well as the decline of global democracy and freedom have sizeable negative effects on youth development and personal attributes, such as generalized trust, optimism, self-efficacy, integrity, empathy, positive bonds with institutions and family groups. At the same time, the enhanced parental involvement with their children over the past few decades, alleviated the economic hardship of their offspring, while contributing to widen existent socioeconomic gaps. Social and income inequality amplifies these dynamics, enlarging the gap between low and high status individuals (Ceka & Magalhaes, 2020).

Choose a Job, Choose a Career: Whose Choice Is It Anyway?

The vocational domain is a core competence domain for youth (Green, 2020). Many choices that directly impact the job or occupation youth will choose in the future are made in this developmental stage (e.g., choice of specific academic tracks and extra-curricular activities, exploration of specific vocational interests). In this section, we use a domain-specific perspective to debate the central role that parents play in how their offspring choose a career path (i.e., intentional self-regulation of career choices) and then explore and follow their career goals (i.e., vocational competence). We analyze how youth vocational competence is dynamically negotiated in families and explain how this relational negotiation can contribute to changes in youth connection in the vocational domain and can be important for youth contribution to their families. In this endeavor, we investigate how family vocational socialization shapes the potential for PYD in this life domain (Gottfredson, 2005; Howard & Walsh, 2011; Johnson, Mortimer, & Heckhausen 2020). More specifically, we look at parent-child factors (e.g., parental vocational aspirations for their children, parent-child vocational communication) that support our proposition that youth vocational goals should be framed in applied interventions as family-negotiated goals. We argue that by solely empowering young people to take charge of their careers, intervention programs and public policies miss the other half of the equation—the parents.

During adolescence, increases in cognitive control allow young people to project themselves into the future and to regulate their goals in different life domains (Crone & Fuligni, 2020). These personal goal processes integrate complex cognitive control tasks, like feedback learning (i.e., learning from external information received as a response to an action one has initiated), highlighting youth increasing cognitive flexibility, but also their need for social acceptance. The increase in social-cognitive development contributes to an in-depth processing of social situations, marking

a more nuanced conceptualization of personal competence in specific life domains, like the vocational domain. Youth tend to integrate both positive and negative feedback in how they define their competence (Crone & Fuligni, 2020). Hence, for the vocational domain, the role of parents as sources of feedback regarding career choices needs to be better understood.

As young people advance toward adolescence, vocational fantasies marked by an orientation toward size, power, and then gender roles, change to an orientation toward social evaluation and the self (Gottfredson, 2005). This means that as young people grow, they tune their vocational goals to the feedback they receive from their social networks, gradually integrating a vocational dimension to their self. In the ecology of youth vocational competence, families are the first and most important source of information and feedback regarding work and careers (Flanagan, Zaff, Varga, & Margolius, 2020; Whiston & Keller, 2004). Work is a prospective and abstract life domain for many young people and vocational socialization in families can often be a unidirectional process, from parents to children. Hence, vocational reasoning during childhood and adolescence is built on the information that parents provide, in an explicit and/or implicit manner (Porfeli, Hartung, & Vondracek, 2008).

For the vocational domain, during childhood and adolescence, parents are also the *gatekeepers* of their offspring's access to ecological assets, institutions, individuals, and access to resources. Parents guide their children's access to institutions that provide different extra-curricular activities (e.g., sports, crafts) that develop their vocational interests. They facilitate (or not) meetings with other adults who hold jobs out of their children's range of acceptable and accessible occupations, to broaden their range of known occupations (Akosah-Twumasi et al., 2020). Lastly, parents largely control the logistic and financial resources that allow their children's vocational exploration outside educational settings. Hence, it seems plausible that for the vocational domain, parents have a leading input in PYD (Holt, 2020; Newman, Anderson-Butcher, & Amorose, 2020), directly and indirectly, by

fostering their offspring's strengths (i.e., intentional self-regulation, school engagement, hopeful future expectations) (Smith, Brown, Tran, & Suárez-Orozco, 2020; Svendsen, Griffin, & Forkey, 2020; Tan, Oppenheimer, Ladouceur, Butterfield, & Silk, 2020).

Existing research has underscored that key family assets for PYD are parental autonomy support, parent-child communication, and family-guided problem solving (Theokas & Lerner, 2006). Vocational socialization in families occurs mostly in an un-programmed, day-to-day basis, setting the stage for vocational aspirations and goals, for choice of gendered occupations, or for the array of occupations subjectively perceived as accessible by the child (Bryant, Zvonkovic, & Reynolds, 2006; Ion, Lupu, & Nicolae, 2020). Of the many external and internal family factors that influence youth vocational socialization practices, we look at two aspects that are important for applied interventions (a) parental vocational aspirations for their children and (b) parent-child communication about parents' work and the nature of careers. These aspects act as both prerequisites and components of PYD, assuring youth connection with their parents.

Parental Vocational Aspirations for Their Offspring Parental vocational aspirations have a strong impact on children's academic choices (Porfeli et al., 2008). The clearer the goals parents envision for their children, the more time they invest in helping them to reach these goals. Existing research links these aspirations to the global values that parents hold (Simpson, 2003) and there is some evidence that parental vocational aspirations for their offspring are more important than the type of job they have or the general socioeconomic status of the family (Cemalcilar, Secinti, & Sumer, 2018).

Simply put, regardless of how realistic or compatible with the child interests these aspirations may be, strong parental vocational aspirations are a prerequisite for parental involvement in the child vocational development. Longitudinal research on youth from a collec-

tivistic culture (i.e., Indonesia) where individuals define themselves based on social and collective aspects of the self (Hofstede, 2011), pointed out a reciprocal relation between parent and child vocational aspirations. The clearer the parental vocational aspirations, the better their children set own aspirations and planned more toward achieving these goals, especially when there was increased congruence between parent and child aspirations (Sawitri, Creed, & Zimmer-Gembeck, 2015).

In another collectivistic culture (i.e., China), a cross-sectional study on parent-child dyads found high similarity between parent and child vocational aspirations in terms of occupational field, but more differences in terms of the prestige and sex-type of envisioned occupations (Hou & Leung, 2011). Within the PYD framework, these findings suggest that parental aspirations aid the formation of vocational competence directly, by crafting their child own vocational aspirations. For future interventions in this life domain, it is important to note that parents must first define and dwell upon these aspirations and then prompt the child to define their own aspirations. This endeavor requires active communication about careers and vocations in the family and it brings us to the second aspect.

Parent-Child Communication About Parents' Work and the Nature of Work Parent-child communication about work aids the process of hypothesis testing of parental vocational aspirations for their child. Most often, parents view the vocational future of their offspring based on their own work experiences, aspirations, and contemporary work trends (Cemalcilar et al., 2018). In many respects, parents have hypotheses about what their child may or should become. While this is a positive indicator of parental involvement in the formation of their child vocational competence, it will not aid their child connection and confidence if it is not grounded on the child interests. The hypotheses parents hold about their child vocational future often reflect their own vocational (un)accomplished goals more than the child interests.

The prolonged stabilization of vocational interests in youth of the post-modern world and the reduced importance of vocational goals in the daily dynamics of youth life (i.e., work and jobs are activities taking place in a very distant future) impede the formation of long-term vocational goals (Cemalcilar et al., 2018). Youth may find it difficult to extensively explore and then autonomously commit to goals that will be achieved in a very distant future (e.g., to become a medical doctor). Most vocational development theories assume that youth are autonomous intentional agents (Howard & Walsh, 2011). Although, as previously discussed, youth can project themselves into the future and follow abstract goals, they do not have the life experience to understand the importance and long-term impact of vocational decisions made in this time-frame. Therefore, this most probably needs to be a parent-led analysis, embedded in the every-day activities that their child likes to do. Parental warmth and acceptance are needed components in these discussions, as they prompt the child genuine communication of interests and help to build a positive long-term relationship (Fouad et al., 2010).

Parents may be unaware of their power in deciding their child vocational future as they mostly focus on explicitly transmitted information (i.e., what they tell their children) rather than implicitly transmitted information (i.e., what children learn from their parents' actions). This discrepancy in explicit versus implicit parent-child communication can compromise the formation of PYD in the vocational domain. In this domain, parents provide information and resource gatekeepers and hence children can find it difficult to discriminate between the validity of the explicit versus implicit information communicated from parents. Such discrepancy occurs for example in families where parents verbally encourage their daughters to engage in male-dominant activities (e.g., take a car mechanic course), but at home chores are gendered (i.e., father fixes the car, mother does all kitchen work). This gap can influence the child intentional self-regulation, in that it can lead either to over-

reliance or under-reliance on parents as a support system for the vocational domain.

In the examples provided, a daughter may refrain from engaging in a male-dominant activity as the implicit message her parents convey is that “women cannot really do a man’s work”. Existing PYD research showed that family dynamics of every-day life are incredibly important predictor of PYD (D’Urso, Symonds, & Pace, 2020; Dimitrova et al., 2017; Dimitrova & Ferrer-Wreder, 2016; Dimitrova, Johnson, van de Vijver, 2018; Lansford et al., [this volume](#); Theokas & Lerner, 2006). In the vocational domain, studies indicate that mothers spend most time with their children on a day-to-day basis (Simpson, 2003), while other studies highlight that same-sex parent-child dyads (e.g., fathers-sons) benefit more from the time spent together (Bryant et al., 2006). These differences based on parent gender, raise attention to the need to approach and engage parents differently, in order to best involve them in their child vocational development (McKee et al., [this volume](#)). The link between vocational competence and connection to parents during adolescence is perhaps stronger than for other life stages, and this congruence needs to be addressed in parents and then in the parent-child dyads. To aid the construction of vocational goals that youth integrate as personal goals in their self-system, parents need to understand their power but also their limitations in setting vocational aspirations for their offspring. Only then, we can consider genuine negotiation of youth vocational goals in families.

In summary, the inter-generational transmission of vocational goals is negotiated between parents and children, as parents are the gatekeepers for vocational information (Yongqing et al., 2020). Two mechanisms that influence the formation of vocational competence are parental vocational aspirations for their children and parent-child communication about work and careers. Both mechanisms contribute to the link of ecological assets (i.e., parents as social network) - > vocational competence and to the link of vocational competence <- > connection with family within the PYD framework (Lerner et al., 2017).

Implications for Research, Policy, and Practice

This chapter concludes with proposing several theoretical and applied intervention guidelines that could make parental involvement in the lives of their children an efficient lever for PYD. We integrate these recommendations in the context of existing priorities for PYD. Youth development interventions are guided by the “Big Three” components of positive and systematic adult-youth relationships, activities that foster skill formation, and opportunities for youth leadership (Bremner & Schwartz, [this volume](#); Hull et al., [this volume](#); Lerner et al., 2017).

As to research implications, the PYD framework needs further applications in marginalized and vulnerable youth groups, due to their limited access to opportunities and resources (Dimitrova et al., [this volume](#); Eichas et al., [this volume](#); Spencer & Spencer, 2014; Smith et al., [this volume](#); Wiium & Dimitrova, 2019). Parental aspirations and parent-child communication for the vocational domain are greatly influenced by the level of economic stress parents experience (see Bryant et al., 2006 for a review). Parents with low-wage jobs, who have inflexible and non-standards work programs (i.e., shift work, weekend work) tend to offer little career guidance to their children, as they have limited availability for planned or spontaneous vocational communication. Poor families have very reduced resources (e.g., time, knowledge, occupational networks) to support their children in vocational exploration, as they allot most of their resources to maintain decent living conditions (Bumpus, Umeh, & Harris, 2020; Fukuyama, Diamond, & Plattner, 2012). This dynamic is indicative of the increasing social inequality in current societies, including traditionally highly democratic societies (Chetty et al., 2017). Therefore, appraisal of ecological assets for the vocational domain in youth from poor and marginalized families and communities needs to be conducted in a different manner from appraisals in their middle-class and upper-middle class counterparts. A growing body of research indicates that even in poverty, youth gain complex mechanisms of adaptation using

the limited ecological assets they have access to (Frankenhuis & Nettle, 2020). The difference though is that these mechanisms of adaptation are different from the normative indicators that are approved by the society. Hence, the development of vocational competence in poor and marginalized youth may integrate family resources in a different manner that needs to be understood through qualitative and only then quantitative approaches (Dimitrova, Sam, & Ferrer-Wreder, 2021). For instance, an appraisal of trust at the family and then at the youth level is mandatory, as these families do not rely on the social and community system in the same manner as better-off families do. Relevant research implications regard the ways in which ecological assets appraised in terms of trust (i.e., who or what do they trust?) influence youth strengths (i.e., intentional self-regulation, school engagement, hopeful future expectations) and consequently, the construction of vocational competence.

As to policy implications, the intergenerational transmission of vocational goals in families is mostly unidirectional process, from parents to children. Parental vocational aspirations for their children and parent-child communication about work always occur in a social and political context and reflect the positive and negative trends in cultures and societies. The growing distrust in liberal democracy among youth worldwide (Diamond, 2015; Greskovits, 2015) may also involve a change in trust youth have in their ecological assets (e.g., institutions like schools and governments; existing resources in their communities, such as available jobs, counseling centers). Hence, an important question arises: When youth believe less and less in a democratic society, what do they believe in? The indicators of adaptive developmental regulation proposed by the PYD framework are embedded in an axiom of democracy, consultation, and collaboration (Lerner et al., 2017). Therefore, at the level of antecedents of PYD, from a policy perspective, trust in a democratic society needs to be appraised to better understand if the components of this framework are of relevance for youth (Saud, Ida, & Mashud, 2020).

Policies that are effective in reducing the economic precariousness of youth could increase the potential for PYD. In particular, policies that reduce long-term unemployment of young workers are most likely to have sizeable effects. Work experiences, acquired as part of either job-creation schemes and/or employment incentives, represent the most cost-effective measure. Extending vocational education has also a positive impact, but its magnitude is rather small (e.g., Gonzalez Carreras, Sala, & Speckesser, 2015). Moreover, addressing inequalities is beneficial for helping the economy, social cohesion, population health, and quality of democracy, which in turn enhance the potential for PYD (Chancel, 2017). To reduce inequalities, whether social or environmental, one strategy could focus on tax progressivity, to reduce inequality at pre-tax level and to control the excessive wealth aggregation of the very rich (Alvaredo, Chancel, Piketty, Saez, & Zucman, 2018). Another approach involves increasing public investment in sectors that give young generations more opportunities, including education, health, and environmental protection (Aiyar & Ebeke, 2020; Bah & Kpogon, 2020; Khan, Zhang, Kumar, Zavadskas, & Streimikiene, 2020).

As to practice, especially for the vocational domain, upward occupational mobility means trust in a democratic system, societal structure and individual agency that supports this type of occupational mobility (Heckhausen, 2020). Existing data indicate that upward social mobility is much more reduced than it was initially envisioned (Brown & James, 2020; Keeley, 2015). Against this background, the PYD framework could be implemented at grassroots level to empower families and communities and develop intentional self-regulation mechanisms. For families with parents investing more in their children, this could be achieved more easily, as there is availability and resources for change (Fingerman et al., 2016). Interventions in the vocational domain could directly target families and focus on raising awareness regarding the importance of parent-child systematic discussions on deciding the vocational paths youth could follow. By mak-

ing parents aware of their role as gatekeepers for the vocational future of their offspring, they could become more motivated to learn adaptive strategies in supporting their child vocational competences.

In conclusion, the PYD framework could integrate information on social change when analyzing the intergenerational transmission of vocational goals and values. Changes in democracy, freedom, and the trust young people have in their communities and governments, impact the agency families perceive when planning their children's future. Additionally, increasing social inequalities worldwide require new methodologies and approaches for appraising ecological assets for the vocational domain in youth from poor and marginalized families and communities. The application of the PYD framework in research, policy, and practice with these families and communities represents a meaningful and strengths-based approach for fruitful advancements in that regard.

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Positive Youth Development in the Digital Age: Expanding PYD to Include Digital Settings

Katherine M. Ross and Patrick H. Tolan

Abstract

Positive Youth Development (PYD) has called attention to the dynamic interactions between youth and settings as critical to their growth and development. In-person settings (e.g., peer, family, school, and community) have been the primary focus of previous research and practice. This chapter introduces the digital setting as salient to today's youth growth and development and argues for the integration of such setting into PYD models, measures, and practices. We first summarize the current literature that predominantly views digital settings from a risk lens. Next, we highlight existing studies to suggest PYD can

and does occur in digital settings. We then make recommendations for adopting a PYD lens to the digital space in order to harness the potential of this space for promoting youth identity exploration, social and emotional skill development, relationship building, self-directed learning, agency, and advocacy. Finally, we conclude with recommendations for research, policy, and practice.

Keywords

Positive youth development · Digital setting · Developmental assets · Adolescence

The authors wrote this chapter prior to the COVID-19 pandemic. As adults and youth alike around the world learn to conduct their personal and professional lives using digital tools, digital settings hold a higher relevance than ever before. Researchers and youth serving individuals and agencies are called to include digital settings at the forefront of their work. We must prioritize understanding and harnessing digital settings as a context for positive youth development.

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A central tenant to Positive Youth Development (PYD) is a focus on the dynamic relation between youth and context. In fact, a distinguishing factor between PYD and other positive development frameworks (e.g., Positive Psychology and Social and Emotional Learning) is the recognition that alignment between context and individual is the key to understanding youth functioning (Tolan, Ross, Arkin, Godine, & Clark, 2016). Thriving, meaning the optimal state or outcome according to the PYD model is obtained through optimizing the transactional relation between youth and existing assets, resources, and contexts (Lerner, von Eye, Lerner, Lewin-Bizan, & Bowers, 2010). PYD research, policy and practice have consid-

ered homes, schools, and communities as contexts critical to youth development. To date, the digital context has not received as much attention, despite this space being central to youth lives. With the rapid adoption of digital media access in developing countries, social media, gaming, social apps, and text messaging are the venue for rapid shifts in opportunity, expectations, and self-understanding (Pew Research Center, 2016; Rahman, Aydin, Haffar, & Nwagbara, 2020).

This chapter seeks to explore the digital context in relation to PYD. As such, and in contrast to the vast majority of research and commentary on youth and digital media as risk laden, we aim to recognize this as a context brimming with opportunity for positive interactions to occur. First, we outline why the digital setting is integral to PYD by providing definitions, reviewing literature on youth accessibility, widespread usage, and integration into everyday life. Next, we summarize the predominant focus of existing empirical support for the negative consequences of digital settings in youth development. Then, we make the case for viewing digital settings from the PYD lens by citing existing empirical evidence to suggest positive development can and is already occurring in the form of learning, building social and emotional skills, fostering and maintaining relationships, and engaging with PYD programs. Finally, we provide suggestions on how to integrate the digital space into PYD frameworks, measurement, and intervention design and delivery. We conclude the chapter with a discussion on implications for research, policy, and practice.

There are several frameworks that researchers, practitioners, and policymakers adopt in the PYD arena. The two most ascribed to and applicable across international contexts (Dimitrova, Buzea, et al., [this volume](#); Dimitrova, Sam, & Ferrer-Wreder, 2021; Wiium & Dimitrova, 2019) are the 5Cs model (Burkhard, Robinson, Murray, & Lerner, 2019; Chen, Wiium, & Dimitrova, 2018, 2019; Fernandes, Fetvadjev, Wiium, & Dimitrova, [this volume](#); Wiium, Ferrer-Wreder, Chen, & Dimitrova, 2019; for an expanded 7Cs model see Abdul Kadir, Mohd, & Dimitrova, [this volume](#);

Dimitrova, Fernandes, et al., [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)) and the developmental assets model (Benson, Leffert, Scales, & Blyth, 2012; Roehlkepartain & Blyth, 2020). We therefore chose to write this chapter from those perspectives which are more thoroughly outlined in the introductory chapter of this *Handbook* (see Dimitrova & Wiium, [this volume](#)).

The Digital Setting as Part of Modern Youth Development

Today's youth are "digital natives"; they have grown up in the digital age and the use of digital media is intrinsic to them, interwoven in all aspects of their lives. They never had to adapt to a new understanding about how to use the internet, apps, or cell phones. One implication is that digital media is a natural and probably less distinct aspect of life for them than for prior generations. In fact, media access and use is inherent in youth's experience of self-development, family experiences, learning experiences, peer relationships, and connection to the world. Digital spaces are designed to be appealing and intuitive for youth, increasing the likelihood of their seamless involvement between digital and non-digital experiences. Thus, understanding the relation of digital settings and youth development needs to be tracked along two complimentary but distinct lines; how it is to be understood by adults and observers of youth, such as researchers and scholars, and how it is to be understood and experienced by youth.

For this chapter, we note that previous work tends to put media into two categories: old and new. The American Academy of Pediatrics defines old media as "traditional or broadcast media". This includes television, radio, and periodicals. They define new media as "new digital or social media" and this includes social media, video games, and texting. There are clear advantages and disadvantages to new media. A key advantage to new media is that while old media is passively consumed and experienced at times and

in forms dictated by the provider, new media is interactive, engaging, driven by the interests of the consumer, and in some cases, enables collaborative learning, activity, and experiences (Al-Rahmi et al., 2020; Chassiakos, Radesky, Christakis, Moreno, & Cross, 2016). A key disadvantage to new media is that adult supervision and regulation is more difficult. While it is clear that old media affected and was influenced by youth and as such plays a part in PYD, the focus here is on new media as an integral part of PYD.

Studies show that digital media is a context that youth are increasingly accessing, using, and developing in on a daily basis. One of the primary modes of access is now through smart phones (Pew Research Center, 2016). Youth have the ability to be on the internet, on social media, text message, game, and watch media content practically anywhere, at any time, and simultaneously, if they choose. Smart phone access is increasing. As children enter the teenage years, many end up owning their own cell phone, granting them almost unlimited access to digital media. Recent estimates by the American Academy of Pediatrics reported that 75% of teenagers now own their own smart phone (Chassiakos et al., 2016). Worldwide, about 86% of people in advanced economies and 54% in emerging economies own smart phones (Pew Research Center, 2016). Evidence suggests that the age that kids first have access to a smart phone is decreasing. In 2011, only 52% of youth under age 8 had access to a cell phone and that number was up to 75% by 2013 (Lenhart, 2015). The gap of digital media access is narrowing between high and low income youth with recent evidence suggesting that most youth, regardless of economic status, are accessing smart phones. In a study of 350 low income families in the United States, nearly 95% reported that youth under the age of 4 had used a cell phone (Kabali et al., 2015).

With increased access, comes increased usage. Besides sleeping, youth ages 8–18 spend more time using digital media than any other activity in a given day, averaging more than 7 h of use per day (this figure includes television, music/audio, computers, video games, and movies) (Rideout, Foehr, & Roberts, 2010). Some estimates suggest

that youth (ages 8–18) spend about 8 h a day on electronic media, a dramatic increase from the early 2000s and predicted to continue to increase (Rideout et al., 2010). Additionally, some of that time is spent on multiple media tasks at once, termed “digital multi-tasking”, amounting to about 11 h a day in combined exposure (Rideout et al., 2010). In 2012, youth between 14 and 17 sent on average 100 texts per day (Lenhart, 2015). It is reasonable to believe that, nowadays this number is much higher. In the United States, recent estimates suggest that half of youth log onto social media accounts daily (Rideout, 2016) and the majority (81%) interact daily with peers on the internet (Lenhart, 2015). Additionally, 97% of the American youth ages 12–17 report playing video games including computer and online video games, or through handheld or console gaming devices (Jones et al., 2009). Half of the American homes have a dedicated gaming console device and 80% have a digital device that is used to play video games (Entertainment Software Association, 2015). There is evidence to suggest that this phenomenon is occurring worldwide, not just in the United States (Alvarez-Galvez, Salinas-Perez, Montagni, & Salvador-Carulla, 2020; Patriarca, Di Giuseppe, Albano, Marinelli, & Angelillo, 2009; Pew Research Center, 2016; Sala, Gaia, & Cerati, 2020).

In summation, the expansion of the internet and digital media has radically transformed the landscape for adolescent development. This transformation has occurred in a multitude of ways. First, is the breadth and depth of information now accessible? Presently, approximately 58% of the world has internet access and it is rapidly increasing each year (Statistica, 2019). Second, what was once accessible only by the affluent and those in developed economies is now widely available and consumed; shifting boundaries in what information is being obtained and used, how cultures are relating, and how news and history are digested. Third, as media use is more integrated into all aspects of life, the boundaries of experiencing being on media and being “in person” are disintegrating. Fourth, awareness of cultures, life experiences, news, and information that would not have been known by individu-

als even a decade ago flows into daily life continuously. Fifth, digital media exemplifies and probably heightens the extent to which youth shape their development; aligning interests with setting use and dynamically interacting with others. Sixth, in the past, most of media access was through a shared family device, such as the family television, computer, game console, or parents' smart phone. These previous circumstances made it easy for parents to monitor their children's use and promote familial mediation of the experience. However, at this point it may be that digital access without parental mediation is more the norm and familial exchange may be peripheral to youth use. Nowadays, these changes impact daily experience of youth, whether they are utilizing a device at the moment or not.

The salience of such digital space is not reflected in typical ecological models of development and often not addressed in writing about PYD. In part, this is because of the rapid development of digital media and media use. How to conceptualize its role in development is difficult. Moreover, those conceptualizing (adult providers and researchers) are experiencing these shifts and adaptations as external and new in kind as well as extent; which is not necessarily applicable to youth of today. Any attempts to characterize seem to accentuate the limitations of describing youth development apart from engagement of youth voice. Not surprisingly, most research, to date, on internet or social media use tends to look at the association with negative consequences or outcomes to see media use as likely harmful and fraught with risk (Anderson et al., 2010; Boulianne & Theocharis, 2020; Craig et al., 2020).

Negative Consequences of Digital Media for Youth

There is a mainstream message or assumption that use of digital media, particularly direct and frequent use, is problematic, especially for youth. This is apparent in school policies that ban cell phones or other technology use during school hours and parenting philosophies that limit

youth's exposure to television, the internet, cell phones (Kessel, Hardardottir, & Tyrefors, 2020; Naumovska, Jovevski, & Brockova, 2020). For early childhood, these rules and boundaries are fairly universal, but as youth enter adolescence there is a lack of consensus between parents, practitioners, and scholars on the amount and type of media engagement that youth should experience. The research on this topic has yet to catch up with the rapid expansion and access to media.

A primary concern is that increased time spent with digital media (regardless of format) takes away from time that could be spent on other productive activities, such as physical activity/exercise, learning, in-person social interactions, reading, etc. Another concern is that new media has created an easier platform for youth to participate in risky behaviors that are commonplace for adolescence to begin with, such as bullying, risky sexual behavior, peer deviance training, exposure to negative peer norms, access to substances, and so on (Vannucci, Simpson, Gagnon, & Ohannessian, 2020). The stakes for engaging in these risky behaviors on a social media platform may also be higher and have longer lasting detrimental impacts since an image, video, or post can live on forever. In the simplest terms, the digital space creates another context in which youth *can* have difficulties, in addition to the traditional contexts that have long been studied, such as home, school, and community contexts. In fact, related research has coined the term "digital stress" to refer to the added stressors that adolescents experience in digital settings (Steele, Hall, & Christofferson, 2020; White, Weinstein, & Selman, 2018).

There is a body of research to support this negative perception of the impacts of digital media on youth behavior, development, and academic performance. Specifically, media consumption and use have been associated with real concerns, such as cyberbullying. Thus, bullying in digital spaces or cyberbullying has been widely researched (Kircaburun, Demetrovics, Király, & Griffiths, 2020). Findings point to cyberbullying carrying over into in-person behavior and the omnipresence of digital media as particularly dif-

difficult for victims (and perpetrators) and their public interactions (Waasdorp & Bradshaw, 2015; Ybarra, Espelage, & Mitchell, 2007). Digital media use has also been linked to depression, anxiety, and decreased self-esteem and well-being (Martins & Harrison, 2012; Saiphoo, Dahoah Halevi, & Vahedi, 2020; Twenge, 2020). Other studies have demonstrated that exposure to violent media leads to aggressive behaviors (Anderson et al., 2010), desensitization to violence (Carnagey, Anderson, & Bushman, 2007), and decreased prosocial behavior (Anderson & Bushman, 2001; Han & Carlo, 2020). Social media use has also been linked to risky sexual behavior and substance use (Vannucci et al., 2020). Finally, some research has also found that interactions on digital settings can lead to poor language skills (Madigan, McArthur, Anhorn, Eirich, & Christakis, 2020) and academic performance (Liu et al., 2020; Luo, Yeung, & Li, 2020; Sharma & Shukla, 2016).

While decades of research pointed to the potential negative impacts of digital media on youth development and outcomes, emerging literature is offering an alternative perspective. We purport that, like all other settings that historically relied on a deficit model to study youth development, research on the digital setting could benefit from the PYD theoretical lens.

Digital Media as an Avenue for Positive Development

A defining emphasis of the PYD perspective is that youth negotiate and make use of their settings. In fact, it is the proper alignment of youth strengths and assets with supportive and engaging environments that promotes positive development. Bronfenbrenner's ecological model of development highlights key settings for PYD to occur, including home, school, and community (Bronfenbrenner & Morris, 2006). Decades of research have supported these settings as essential to consider in youth research, policy and practice. What makes these settings critical for positive development is (1) their permanence and stability in youth lives, (2) these settings are

innately engaging, interactive, and collaborative, and (3) the interaction between youth and these settings is mutually beneficial (i.e., these settings contribute to youth development and youth contribute to these settings). The review above of the prevalence of digital media in the life of youth makes it likely that youth are engaged in digital settings more often than other settings. While time youth spend at school, home, and other community settings is fixed and perhaps dynamic (not the same from day to day), youth time spent in digital contexts is stable and omnipresent. These characteristics make it important for researchers, policymakers and practitioners to examine such settings through the lens of promoting positive development and potentially delivering PYD interventions. Digital settings should be included in the ecological model of development, along with other guiding PYD frameworks.

Digital media shares many of the same characteristics of traditional PYD settings that make them ideal for positive development to occur (e.g., permanence, engaging, interactive, collaborative, and mutually beneficial). The new opportunities for the 5Cs of competence, confidence, connection, character, and caring and for accessing needed assets to shape one's development positively are increasingly being recognized (Ram Lee & Horlsey, 2017; Umaschi Bers, 2006). There is a good reason to believe that *positive* development can occur in this space and therefore should be explored more robustly (Blumberg, Blades, & Oates, 2013; Reich, Subrahmanyam, & Espinoza, 2012).

Current Understanding of PYD and Digital Spaces

While PYD as a model has not formally acknowledged the digital space as a context, there is some literature to suggest that positive development is possible and already happening in these spaces. Some research has uncovered potential benefits of digital media on adolescent well-being, mainly through increased access to opportunities. These opportunities include learning, building social

and emotional skills, fostering relationships, engaging with PYD programs, and exposure to information, ideas, and other cultures not previously accessible (Beyens, Pouwels, van Driel, Keijsers, & Valkenburg, 2020; Chassiakos et al., 2016; O'Reilly, 2020).

Learning While there is an overarching fear that the use of social media is detrimental to learning and academic performance, research has suggested that there are benefits in addition to studied drawbacks (Wright, 2020). For instance, Badaway and Hashem (2015) delivered surveys to youth ages 12–19 in Egypt inquiring about their internet/social media use and studying habits. The majority (92%) of the sample reported using internet to study. The authors also found no correlation between the number of hours spent on social media and grade point average for the youth in their sample. Other studies have also supported the idea that youth are using social media to access information, engage in self-directed learning, and develop technical skills (Ito et al., 2009; Tartari, 2015; Toh & Kirschner, 2020). In interviews with twenty Albanian youth ages 11–16, Tartari (2015) found that the majority (70%) were using social media to share educational materials and expand on their learning by consulting others on homework problems, watching youtube tutorial videos, and practicing communicating in a foreign language. Ito et al. (2009) wrote a book on youth's use of digital media based on 23 in-depth ethnographic case studies and highlighted their use of digital space for self-directed learning.

Building Social and Emotional Skills Adolescents are using social media networking sites to develop their own social and emotional skills, such as communication, community engagement, and identity development. There is some self-report correlational evidence to suggest that adolescents who spend more time on social media sites have higher social competence (Hygen et al., 2020; Tsitsika et al., 2014) and qualitative data to indicate that youth use social media sites primarily for communication (Tartari, 2015). Text messaging can also support positive youth engage-

ment; the majority of text messages among peers are positive or neutral in nature (Underwood, Ehrenreich, More, Solis, & Brinkley, 2015). Social media provides an avenue for self-expression and can support identity development (Boyd, 2007; Davis, 2012; Kim & Li, 2020; Stern, 2008). In qualitative interviews with 32 adolescents from Bermuda, Davis (2012) found that online interactions promoted two key aspects of identity development, sense of belonging and self-disclosure. Boyd (2007) wrote about youth identity exploration, youth learning expression and social cues on the MySpace platform. While MySpace has lost popularity since this ethnographic study, the findings can be translated to other platforms (e.g., Instagram, Snapchat). Contrary to popular belief, there is support that youth online presentation is much reflective of their "true self" or in-person presentation (George & Odgers, 2015). Boyd's (2007) analyses support this idea; youth today are constructing their identity in a series of negotiations between in-person and online interactions. Youth who struggle with in-person social interactions or have anxiety can compensate in online settings (Glover & Fritsch, 2017; Reich et al., 2012). Social media use can also support empathy development (Blakemore & Agllias, 2020). In a study of 942 Dutch youth, Vossen and Valkenburg (2016) found that social media use was related to increases in empathy (through youth understanding and sharing of others' feelings) over time. These studies support digital media as a context for youth to develop critical social and emotional skills.

Fostering Relationships We also know that adolescents are using social media networking sites to foster peer relationships, including friendships (Lenhart, Purcell, Smith, & Zickuhr, 2010; Thomas, Orme, & Kerrigan, 2020) and romantic relationships (Prinstein, Nesi, & Telzer, 2020; Smahel & Subrahmanyam, 2007). Digital spaces, such as the internet can be used to maintain (Valkenburg, Schouten, & Peter, 2005) and strengthen (Reich et al., 2012; Valkenburg & Peter, 2009) friendships that were created in in-person contexts. Youth join social networking sites in order to maintain existing friendships (Boyd, 2007). In fact, youth who engage with known

peers on social media and who use social media to form new friendships feel less lonely (Teppers, Luyckx, Klimstra, & Goossens, 2014; Yang & Brown, 2013) and closer to their peers (AP-NORC, 2017). Communicating with peers online increases youth sense of belonging (Davis, 2012; Kashy-Rosenbaum & Aizenkot, 2020). Additionally, the rates of communicating with friends via text messaging is skyrocketing; estimates from an American sample indicate that the number of youth who communicate with friends daily via text message and the number of texts sent per day to friends has dramatically increased and continues to climb (Lenhart et al., 2010). Developing and maintaining friendships is a critical component of adolescent development and these studies highlight that digital media is a context that can help support and promote these relationships.

Engaging with PYD Programs A recent study demonstrated how PYD programs can use social media to engage with youth. Ram Lee and Horlsey (2017) used mixed-methods (a series of content analyses on the 4-H PYD study at Tufts University, USA, Facebook page, and seven in-depth interviews with youth users), and found that PYD programs are using social media platforms to communicate with youth directly about their organization and ways for youth to get involved. In fact, the organization they investigated had dramatically increased the number of followers, total posts, and interactions from 2009 to 2013. The 4-H used their Facebook page to educate others about their organization (e.g., the history and mission), communicate information, and solicit involvement. The findings also demonstrated that youth are using social media to interact with PYD programs and peers that they know through PYD programs. Youth reported building connections with the organization and fellow 4-H members through their utilization of the Facebook page. Finally, the findings indicated that social media can foster and encourage civic engagement, a key outcome of the PYD model. The content analyses and interviews showed that traits from the 5Cs model were supported through youth interaction with the PYD program's social media page (Ram Lee & Horlsey, 2017).

Other Opportunities In general, there is evidence to suggest that digital media can have a positive impact on mental health, in addition to the focus of extant literature on the negative impacts (Dienlin & Johannes, 2020; Odgers & Jensen, 2020). Youth self-report of social media impact on their well-being is generally positive, contributing to closeness in relationships, affirming self-expression, inspiring exploration of interests, and overall entertainment; although this relation is complex and can also lead to negative impact on well-being in each of the aforementioned domains (Weinstein, 2018). Additionally, while little empirical work has been done in this area, many researchers have theorized that the globalization of digital media has opened up a realm of possibilities for youth to engage with others from their cultural heritage or engage with people from other cultures (particularly in cases where they live in a homogenous setting) (Hu, Liu, Zhang, & Wang, 2020; Sobre-Denton, 2016). While studies of positive development in digital settings are limited to recent decades, the above reported body of work suggests a need to integrate this empirical work into the PYD theoretical framework.

Viewing Digital Settings as PYD Opportunities

Integrating Digital Experience into PYD Frameworks

There are two main PYD frameworks which identify (1) the 5Cs or (2) a number of developmental assets that are critical to youth development. In order to expand these frameworks to incorporate the digital setting, modifications to existing constructs or the addition of new constructs needs to occur. In the case of the 5Cs model, we contend that modifications to existing constructs would suffice since this framework is not tied to specific settings. However, in the case of the developmental assets model, the addition of new constructs may be necessary since this model is tightly linked to an ecological framework that currently only outlines individual, peer,

family, school, and community as major contexts (Scales, 2011).

The 5Cs model can be expanded by incorporating digital settings and interactions within each C. Youth can develop (1) *Competence* both in carrying out tasks on digital media settings and in interacting with others on these platforms. Youth can develop competence in the direct use of a particular media, such as youth learning coding skills or how to elevate their marketability as an employee using social media platforms. Youth can also develop competence in digital communication by engaging in prosocial interactions with peers via text message or social media; (2) *Confidence* can be expanded to include youth's digital identity as an important component of having a positive internal self-worth. Youth are already naturally curating their online identity by what they choose to post and how they choose to use various digital platforms. There is opportunity to expand on this by helping youth safely use this space for identity exploration and experimentation in a way that might not be possible in in-person settings. We can expand the listed settings that youth can develop to (3) *Connections* and include digital settings in addition to family, school, and community and (4) *Character* development can occur on digital media as we begin to consider social norms and standards of behavior in these settings. An especially interesting component to consider is (5) *Caring* and how we might bring compassion to the digital setting to encourage youth to have empathy for others that they are interacting with, in a space that can often be dehumanizing. As cited earlier, there is already research to support that these skills are being developed on digital spaces (Vossen & Valkenburg, 2016). Additionally, social media is an exceptional tool for broadening the scope of youth efforts to show care for issues that are important to them, for example environmental advocacy, political advocacy, or bringing attention to issues impacting them and their peers that would otherwise not receive media attention. Youth using digital media platforms as a space to amplify their voice is a perfect example of youth *Contribution*, or the 6th C that could be further supported and promoted by adults.

The developmental assets model can be modified by expanding the ecological model to include digital settings and articulate existing assets that are linked to positive developmental outcomes. This overhaul could borrow from available literature, some of which was reviewed in this chapter, to identify assets, such as (1) communicating with existing friends in digital settings; (2) building new friendships for special interests or minority statuses that otherwise are not available to youth in in-person settings; (3) using digital media for self-directed learning activities; (4) reading for pleasure using digital devices; (5) developing a positive digital identity; (6) valuing other cultures and perspectives on digital platforms; (7) using digital spaces to make the world a better place, and (8) getting involved with prosocial activities and organizations online. More research is needed to identify key assets for digital settings; although previous research has suggested that interactions in this space are not equivalent to in-person interactions and thus deserve a more thorough investigation than simply modifying what we currently use to measure in-person assets (e.g., The Transformation Framework; Nesi, Choukas-Bradley, & Prinstein, 2018).

Considerations for PYD Measurement

Modifications to the PYD framework inherently suggest an opportunity to modify PYD measurement. There are two prominent assessments aligned with the aforementioned PYD frameworks – the 5Cs measure (Dimitrova, Buzea, et al., [this volume](#); Dimitrova, Fernandes, et al., [this volume](#); Fernandes et al., [this volume](#); Geldhof et al., 2014; Li, He, & Chen, [this volume](#)) and the Developmental Assets Profile ([DAP]; Dominguez, Wiium, Jackman, & Ferrer-Wreder, [this volume](#); Kabir & Wiium, [this volume](#), Kasic, Wiium, & Dimitrova, [this volume](#); Kozina, Wiium, Gonzalez, & Dimitrova, 2019; Scales, 2011; Scales, Roehlkepartain, & Shramko, 2017; Uka et al., [this volume](#); Wiium & Kozina, [this volume](#)). Currently, no measures have been developed to assess positive develop-

mental processes in digital spaces, but other theoretical frameworks have begun this work. Recently, a measure was developed from the Positive Psychology theoretical orientation to examine flow on social networking sites (Kaur, Dhir, Chen, & Rajala, 2016); others have created a measure of digital citizenship (e.g., ethics for the digital environment, fluency for the digital environment, reasonable activity, identity in the digital world, and social/cultural engagement) via Korean teacher perspectives (Kim & Choi, 2018). This type of work is promising and can be used as a template for developing a similar measure for the PYD model. Modifications to the 5Cs measure would include creating items to mirror the suggested changes to the model discussed in the previous section. Since the 5Cs of PYD measure is not directly linked to contexts, changes to this measure would require expanding each C to understand how those competencies are being promoted in digital spaces.

Modifications to the DAP measure would be more straightforward. The current DAP measures assets in individual, peer, family, school, and community domains. A digital domain could be added and could include items that assess (1) feeling safe on social media sites; (2) having clear rules and expectations on smart phone use; (3) having peers and family watch out for them on digital media platforms; (4) being involved in prosocial activities on digital spaces; (5) engaging with peers and positive programs on digital spaces; (6) using digital media for self-directed learning, homework, and/or academic collaboration, and (7) being involved in social justice, politics, or other advocacy efforts on digital platforms. Additional opportunities for PYD measurement include using social media tracking data to investigate youth use of prevention or intervention materials delivered on the platform to determine access, dosage, or other implementation fidelity questions. Previous qualitative work could also form the basis for survey development that tracks how youth use digital spaces to learn, develop social and emotional skills, foster relationships, and engage in positive youth development activities.

Application to Intervention Design and Delivery

The empirical literature has laid the groundwork for thinking about digital spaces as contexts for positive development to occur; the frontier to this work now lies in developing and delivering PYD interventions specifically for this space. The intervention literature is somewhat lagging behind what is already taking place in educational settings as digital spaces are common tools for academic instruction (Blumberg et al., 2013; Zhu & Mok, 2020). New forms of digital media are brimming with potential; they tend to be more interactive, accessible to a broader audience, a space that youth enjoy and are already engaged in, and can be used to deliver and/or practice educational content.

There are several avenues for the application of digital media to PYD intervention design and delivery. The first is delivering existing interventions through digital modes. Much work is needed in this area. A recent review of health interventions delivered on social media platforms for adolescents shows that these initial efforts have fallen short and none showed significant impacts (Shaw, Mitchell, Welch, & Williamson, 2015). The second, stemming from the empirical support outlined earlier in this chapter, is to gain a clearer understanding on how to capitalize on positive developments that are already occurring in the space and to intentionally use digital media to promote PYD. Research suggests that youth are learning, developing social and emotional skills, building relationships, and practicing civic engagement on digital media without the aid of formalized PYD interventions (Lenhart et al., 2010). This body of literature can inform potential mechanisms for intervention and how to formalize skill building to purposefully foster these skills in the context of a PYD program.

The possibilities for PYD interventions are plentiful, but our review of this literature suggests that the following types of interventions may be a good fit for the digital context and worthy of empirical studies.

1. A safe space for *identity* exploration. Identity exploration has commonly been studied in PYD interventions (Waid & Uhrich, 2020) particularly in out-of-school contexts (Deutsch, 2008). Digital settings, such as social media and gaming offer a lower stakes setting for youth to try out different identities and potentially explore them with more anonymity and fluidity than in in-person contexts. This may be particularly valuable for youth who want or need to explore identities that are less sanctioned or respected. For example, in situations where adolescents (a) cannot find someone among their known peers or adults in their immediate environment with this common identity or (b) do not feel safe exploring this identity in school or home spaces, media may provide positive images of that identity, a community of others with similar concerns and experiences, and more thoughtful and accurate information for use in navigating development. Connecting with like individuals from sexual, racial, religious, or other minority identity groups can help youth to feel less isolated and build prosocial subculture connections; something now possible for any youth with access to social media.
 2. A space for *relationship* building and *social and emotional skill development*. Some research suggests that youth are better able and more willing to communicate intimate information online than offline (Valkenburg & Peter, 2007). A key component to adolescent development is the strengthening of peer relationships, including friendships and romantic connections. Intimacy building is difficult in contexts that are full of alternative demands as well as peer and adult influence, such as schools, homes, and after school spaces. Text messaging, group messaging, social media interactions, and other forms of digital communication can be less intimidating and can build and strengthen important relationships for youth. Youth are able to stay connected with friends during times when peer relationships traditionally struggled or dissipated, such as during summer break, after the completion of a PYD program, or when a family relocates. Digital media has changed the landscape for adolescent romantic relationships and sexual behavior. These modes of communication make potential partners more accessible and for the development of relationships to occur more rapidly. This constant connection is also fraught with challenges; social media platforms create a “digital display” of friendships and romantic relationships for peers to view, comment on, and potentially influence. These new facets of intimacy and relationships may be an area where youth need additional support to navigate.
 3. A space for youth *agency* and *advocacy*. Digital settings offer an avenue for youth to feel empowered and active agents within the global community (Boulianne & Theocharis, 2020; Leong, Pan, Bahri, & Fauzi, 2018). In fact, youth tend to be more efficient and savvy users of these spaces than adults (Chassiakos et al., 2016). Youth can get their voices heard by a broader audience for issues that are important to them via “digital activism” (Carty & Barron, 2018). A primary example of this is the youth who came forward to promote gun safety awareness after the Parkland, Florida shooting (Bettencourt, 2018). Using social media platforms, Parkland youth organized and gained international attention for a National School Walk Out on March 14, 2018 and a protest in Washington, DC March for Our Lives on March 24, 2018.
- There is a link between political engagement and social media activism; also positive experiences of social media activism are related to positive political efficacy (Bowyer & Kahne, 2020; Velasquez & LaRose, 2015). This type of activity exemplifies the “contribution” or civic engagement area within PYD and is one that could be harnessed and supported by adults in an intervention setting. Additionally, youth have access to information via digital spaces and can be agents in their own development, choosing which spaces to engage in and honing in on skills they cannot learn in classroom settings (e.g., through youtube tutorials).

Key Considerations for PYD Interventions in Digital Spaces

There are some characteristics of digital spaces that require practitioners and researchers to think critically about how to safely deliver PYD interventions. Evidence suggests that media literacy lessons are effective in teaching youth to be skeptical consumers of media content (Austin, Chen, Pinkleton, & Johnson, 2006; Stanley & Lawson, 2020). It is common for school-based interventions to begin by having youth establish ground rules to create a safe and productive space. The same concept could be applied to interventions delivered in digital settings. Youth could explore how to create a safe and positive space for engaging, whether through text messaging, social media apps, or gaming communication platforms. Youth should be encouraged to critically analyze media content and reflect on the messages in relation to their own values. Further, interventions could help youth understand their brains in relation to social media. Topics, such as understanding the instant reward when someone likes your post online; why youth seek out peer approval and how that may be amplified on digital spaces with a broader peer audience; how social media can perpetuate youth's bias towards thinking peers are engaging in maladaptive or risky behaviors (e.g., substance use, sexual behaviors, etc.) and how online interactions transform peer relationships (Nesi et al., 2018) need further exploration.

Existing PYD interventions may not be interested in adapting their intervention for digital spaces, but may benefit from creating access and information for their program through digital media (Ram Lee & Hurlsey, 2017). In fact, most youth serving agencies now have websites and social media accounts to promote their material or provide information to existing users. As outlined earlier in this chapter, the permanence of digital media in the everyday life of youth calls all youth serving agencies to rise to this reality and provide an up to date and appealing digital space for youth that is easily accessible and navigable. It is up to these agencies to continue to engage with youth users in the spaces that they

are most often, even as that changes from year to year. Having youth help create these resources makes it more likely that youth will engage themselves (Banerjee & Greene, 2006). In conclusion, whether PYD programs choose digital spaces as a primary mode of delivery or not, they are still called to navigate these spaces in order to reach the youth that they serve.

Implications for Research, Policy and Practice

The major implication for research highlighted by this chapter is the need to integrate the digital space in empirical studies of PYD. We posit that due to the relative newness in the literature, extent mixed-methods work is needed to delve into and construct informed models of how youth experience digital media including how they bound that experience from other in-person experiences. In particular, it seems valuable to characterize well and with adequate diversity and detail, how youth utilize digital media for personal development, goals, support, contribution and other positive youth development features.

As to policy, the major constraint is the newness of this topic as a developmental consideration and the limited appreciation for the PYD approach as advantageous. Most fundamentally, policies need to be informed by youth developmental needs, balancing youth agency and autonomy with deterring risky or maladaptive behavior in digital settings, as with all other settings in the ecological model. At a societal level, there is a need for attention to responsibilities of media producers, educators, civic leaders, and parents in helping youth with managing media; in terms of managing access, content, or more specifically navigating personal presentation and interpersonal relationships in these spaces. At a local level, those working with youth, justice and child welfare and health professionals, educational professionals and institutions, and parents and neighborhoods will inevitably face issues of management of digital media and of increasing integration into the personhood and the social experience of youth. Each will need to formulate

policies about how to help youth manage this fundamental change in development and how personnel and regulations should be affected. In many ways, the competing tensions in policy formulation and regulation practices will not be new; helping support positive development while also helping protect youth from harm applies to many other issues and concerns. However, digital use is exceptional and perhaps unique in how complex and rapidly shifting, and in how it is experienced by youth as pervasive and integrated into all aspects of youth experience. It certainly means that it is premature suggesting certain policies that are preferable or more soundly based than others at this juncture.

As to practice, this chapter promotes actions related to digital media to shift from predominance of fear and risk focused efforts to promote adult and youth literacy and orient towards harnessing digital media as a potentially powerful positive youth development tool. Most immediately, this may mean guidance for parents on understanding how youth engage in digital media and promoting communication between parents and adolescents about optimizing such use. In many ways, this would look very similar to how parents talk with and help youth manage other settings, such as schools or neighborhoods. This would include setting boundaries and expectations, while providing guidance on navigating interpersonal relationships, goal settings, and other PYD tenants in these settings. Similarly, mental and physical health care could be enhanced through use of digital media, particularly if informed by a PYD perspective to frame the engagement as enabling youth aspiration, realization, and management of emotional and social challenges. Lastly, there is a great need to formulate expected practices for purveyors of media based on youth developmental needs and capabilities. It seems that those developing applications and media outlets have a vested interest in understanding youth development but also a societal responsibility to attend to vulnerabilities due to age. Sound practice may have to be formulated with limited empirical basis with the intent to modify as such information is accumulated.

In conclusion, youth and digital media are one of the most rapidly developing areas of attention in scholarship, policy, and practice formulation in social science. While previous work has focused on the detrimental impacts that digital media has on youth development, empirical findings suggest that youth are using digital spaces for positive developmental activities, such as self-directed learning, identity development, social and emotional skill development, and relationship building. Furthermore, there is budding support that digital spaces are positive avenues for civic engagement and amplifiers for youth-centric political movements (Bean & Dunkerly-Bean, 2020; Mihailidis, 2020). Policies and practices should emanate from these findings and support youth positive use of digital spaces. Positive youth development offers an optimal lens for approaching this burgeoning focus and for helping align the seismic shifts in understanding of youth activity and engagement in the digital context and the impact on thriving. Overall, our conclusion is that this is an area of great need and relevance to explore with research, to consider in practice and to integrate into youth policy. We expect that in the next decade there will be a rapid growth in the number of studies attending to youth and digital media and a seismic shift in how naturally and substantially it is considered in research, policy and practice related to youth.

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From Prevention and Intervention Research to Promotion of Positive Youth Development: Implications for Global Research, Policy and Practice with Ethnically Diverse Youth

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Abstract

In this chapter, we look at the underpinnings of Positive Youth Development (PYD) against the backdrops of resiliency, positive psychology and prevention/intervention science, frameworks that inform PYD approaches around the globe. We seek to draw upon the similarities and distinctions between PYD and these frameworks, the advances promulgated within the PYD, and future directions. We begin with a foundational discussion on the roots of PYD and its grounding in resilience and positive psychology. Next, in the context of discussing research on PYD around the

world, we focus on PYD prevention and intervention. We are particularly attuned to community programs as a tool for advancing practices that promote PYD, specifically among ethnically diverse populations. We close with implications for future research, policy and practice providing the foundation for growth in incremental knowledge in this vital and under-researched field.

Keywords

Positive youth development · Prevention science · Intervention · Resilience · Positive psychology · Research · Policy · Practice · Racial-ethnic and cultural diversity

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Over the past two decades, research on the positive development of youth has redefined the focus from the problems of children and adolescents to the more positive attributes families, schools, and communities hope to foster in young people. Though adolescence is indeed a time of tremendous, physical, emotional, cognitive, and social growth, current research has reminded us that neither childhood nor adolescence are necessarily quite so tumultuous. Furthermore, many

divergent, yet adaptable pathways to positive development exist that vary across individuals, societies, cultures, and nationalities. These ideas of potentiality, collaboration, and context inform our evolving theoretical frameworks in Positive Youth Development (PYD). In the following sections, we explore the conceptual and methodological underpinnings of PYD that draw upon previous work in risk and resilience and positive psychology. Subsequently, we examine the critical contributions of prevention science in informing a focus upon promotion. Contributions of these fields to concepts and methods in PYD and potential areas for future development are highlighted. Importantly, we look at the ways in which PYD is advancing new concepts and prospects for promotion with promise for broader sustainability, particularly in community based organizations that involve ethnically diverse youth around the globe, giving consideration to the implications of PYD for future rigorous, mixed-methods research, beneficial public policy and innovative practice.

Positive Youth Development: Theoretical Underpinnings in Resilience and Positive Psychology

Positive Youth Development (PYD) refers to desirable developmental attributes and characteristics in childhood and adolescence. As aptly put by Karen Pittman, PYD is not simply the absence of problems, but also helping youth to become caring, productive citizens of our society (Pittman, 1991). PYD is based upon the consideration of person-environment fit across development (Eccles et al., 1997; Fredericks & Simpkins, 2012). In fact, PYD is rooted in the idea of developmental systems in which youth interactions within their contexts contribute substantially to how they grow, think, regulate, and operate resiliently within their worlds. The relational developmental systems theory recognizes that it is in synergistic interactions in contexts at home, in school, with peers, and in community settings across childhood and adolescence that foster

PYD (Larson, 2000; Larson & Hansen, 2005; Lerner, Johnson, & Buckingham, 2015; Lerner et al., 2014). The ecodevelopmental theory stresses the varied and dynamic role of family, peer, school, community, and cultural contexts as integral to youth development (Bronfenbrenner & Morris, 2006; Cicchetti, Toth, & Maughan, 2000).

Some of the early research on PYD conducted by the Search Institute in the U.S. attended to the contextual influences, namely developmental assets of youth. These 40 assets categorized in 8 overarching areas included (1) support (love and caring from related and unrelated adults); (2) empowerment (youth voice and service); (3) boundaries and expectations; (4) constructive use of time; (5) commitment to learning; (6) positive values; (7) social competencies; and (8) positive identities (Roehlkepartain & Blyth, 2020; Scales, 2011; Scales, Roehlkepartain, & Shramko, 2017). Currently, broadly cited conceptualizations of PYD refer to the 5Cs of competence, confidence, connection, caring, character, and a possible 6th C of contribution (Geldhof et al., 2015). For ethnically diverse youth, there is a potentially 7thC referring to the role of culture and identity (Brittian & Williams, 2017; Smith, Peterson, & Leman, 2017; Smith, Witherspoon, & Osgood, 2017; Williams, Anderson, Francois, Hussain, & Tolan, 2014). For new PYD conceptualizations and an expanded 7Cs model including creativity among ethnically diverse youth see Abdul Kadir, Mohd, & Dimitrova, *this volume*; Dimitrova et al., *this volume*; Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, *this volume*).

Resilience and PYD

There are a number of shared characteristics between PYD and resilience. Ann Masten defines resilience as the capacity of a dynamic system to adapt successfully to threats to the system function, viability, or development (Masten, 2014). This conceptualization of resilience emphasizes a systems framework, akin to the ideas of context and relational developmental systems inherent in

PYD. The distinction comes in that for resilience to be evident, it requires adversity, and overcoming that adversity. At the core of resilience theory is the idea of risk, protective, and promotive factors. Risk factors are those that if allowed to persist, result in undesirable outcomes. Protective factors are those that in the presence of adversity, moderate or reduce the risk for undesirable outcomes (Twum-Antwi, Jefferies, & Ungar, 2020). Promotive factors are akin to the idea of developmental assets in PYD representing positive aspects that exist regardless of levels of risk (Roehlkepartain & Blyth, 2020).

Extant global research has helped to identify family and school factors related to resilience that have informed prevention and intervention around the globe (Bahramnejad, Iranpour, Karamoozian, & Nakhaee, 2020; Gomez & Ang, 2007; Kozina, 2020; Laible et al., 2017; Luthar & Eisenberg, 2017; Maalouf et al., 2020; Tam, Li, Benotsch, & Lin, 2020). It is around the idea of promotive factors or promotion, that resilience and PYD converge (Masten, 2014; Oshri, Topple, & Carlson, 2017). Both are couched within developmental systems frameworks that acknowledge the interaction of the individual and their context, and that some influences are overwhelmingly positive.

In resilience, the emphasis on adversity and overcoming it, is a central premise. In a society in which some groups are characterized as “disadvantaged” and “less advantaged” due to their socio-economic status, race, ethnicity, or immigrant status, we seem to imply that having every advantage is most desirable. Indubitably, it is critical to have the resources necessary for nutritious food, clothing, safe housing and health. Yet, we should not presume that being advantaged universally leads to positive development. High rates of substance abuse, suicide, sexual harassment, and crime across social classes and geographic areas provide evidence to the contrary (Miech, Johnston, O’Malley, Bachman, & Schulenberg, 2015). Prevention, intervention, and promotion activities with youth are increasingly examining ways to help youth recognize that learning is a process, that they are capable of growing, particularly if with

adult and systemic support, they learn from mistakes and persist.

Similar ideas talk about the “steeling” effects of adversity that help youth to become stronger and more resilient (Davidson & Carlin, 2019; Rutter, 2012). Determining the quality or levels of adversity that are more facilitative versus debilitating, i.e., *hormesis*, could represent another frontier in resilience research (Oshri, 2019). Scholars have discussed hormesis as a curvilinear dose-response relation in which a low dose of environmental adversity or toxicity induces positive adaptation up to a threshold (Oshri, 2019). Further emphasis has been given to the consequent positive development that can result from overcoming adversity, not in a passive way, but instead using the circumstances as opportunities to learn and transform (Yunes, 2015). However, Davidson and Carlin (2019) caution from their analysis of initiatives in Scotland, that public policies should not be predicated upon individual’s “overcoming” adversity but instead ameliorating underlying causes including discrimination, youth unemployment and lack of opportunity.

Advances in resilience include understanding the interaction of biological science and neuroscientific explorations of how brain development interacts with adversity and executive function, the top-down internal system of self-regulation, memory, and psychological flexibility (Blair, 2016). Further socio-biological research regards physiological reactions to adversity, such as stress, coping, and “weathering” (Brody, Miller, Yu, Beach, & Chen, 2016), advances that have not yet been integrated into PYD research. However, though family and even school factors have been considered substantially in resilience research (Luthar & Eisenberg, 2017; Rutter & Maughan, 2002; Ungar & Hadfield, 2019; Walsh, 2016), context is more heavily emphasized in PYD research with great consideration of work in community based settings and youth organizations.

Methodologically, the resilience research has taken both variable-centered and person-centered approaches. Variable-centered approaches examine the types of factors that predict risky and

adaptive outcomes. Person-centered approaches have been described as more “wholistic” allowing examination of a number of factors that characterize individuals and examining multiple potentially adaptive profiles of individual development (Masten, 2014). Emerging research in PYD is beginning to draw upon the methodological advances that utilize person-centered approaches to explore diverse pathways to PYD (Bowers, Winburn, Sandoval, & Clanton, 2020; Lerner et al., 2017; Yu, Smith, & Oshri, 2019). The ideas that there are multiple idiographic pathways to well-being and adjustment suggest that we might consider more than “one size fits all” approaches. Youth programs are great settings for offering a variety of activities relevant to individual youth interests and needs.

In summary, resilience has offered many conceptual frameworks to PYD particularly in terms of considering promotive factors in development. Methodologically, research in resilience is integrating biosocial factors and person-centered approaches that acknowledge multiple diverse pathways to positive development, frontiers for future research, policy and practice in PYD. However, PYD scholarship advances work in resilience by a deeper examination of community contexts and youth organizations with potential for delineating future practices in these organizations that foster youth development, policies that provide varied youth experiences, and professional developmental systems to adults to appropriately support young people.

Contributions of Positive Psychology to PYD Research

Work on positive psychology, draws upon conceptualizations akin to resilience and PYD. The movement of positive psychology was started by Martin Seligman and colleagues who embraced the mission of promoting this field (Seligman, Steen, Park, & Peterson, 2005). According to Poseck (2008) the term, “positive psychology” appeared for the first time in a work by Maslow, dated 1954 and again in his book “Toward a Psychology of Being” (Maslow, 1962). At that

time, these thinkers were already seeking a wholistic view of human beings. Positive psychology connects to concepts in resilience and PYD, redefining traditional psychology changing from solely focusing on the understanding of psychopathologies. This is not to say that psychology should ignore psychic illnesses and their consequences, but that it is possible to study both suffering and happiness, as well as the interactions between these two human dimensions (Seligman et al., 2005).

Another important conceptual contribution from positive psychology has been that of eudaimonia (Ryan, Huta, & Deci, 2008). Eudaimonia, a sense of fulfillment obtained from achieving larger more collective goals, is contrasted with hedonistic happiness that focuses on self fulfillment. Ryan et al. (2008) argue that eudaimonia is not only enjoying life, but living well. Related neurological research is beginning to examine regions of the brain associated with eudaimonia, and pursuing rewarding goals, with other affective decision-making processes (Lewis, Kanai, Rees, & Bates, 2013). This research in positive psychology suggests that youth programs, policy and practice should attend not only to well-being among youth, but also their pursuit of worthy, beneficial, humanitarian goals.

A great deal of prevention/intervention research emanates from the study of positive psychology, particularly regarding cognitive approaches in reframing human suffering to gratitude, approaches that could inform prevention and intervention research in PYD. Examples of prevention/intervention research rooted in positive psychology include mentoring approaches (see Eichas, Montgomery, Meca, Garcia, & Garcia, [this volume](#); Larsen & Holsen, [this volume](#)). Previous studies with social educators have shown that the role of the “resilience mentor” could be defined as a progressive and constant relationship, a “significant other” that supports and activates the initiation of resilience processes in the presence of pain or trauma (Fradkin, Weschenfelder, & Yunes, 2016; Weschenfelder, Fradkin, & Yunes, 2018). It is a concept that Walsh (2005) calls the “relational lifesaver,” exemplifying proximal processes of healthy

development as described in the bioecological model (Bronfenbrenner & Morris, 2006). Extensive meta-analytic research in the U.S. on mentoring approaches has found that effective quality and consistent mentoring is impactful upon youth (Christensen et al., 2020; Grossman & Tierney, 1998; Tolan et al., 2020).

In summary, work in PYD shares conceptual foundations with the ideas of positive psychology. Like PYD, positive psychology has sought to reframe the focus of study from clinical concerns to well-being. Prevention and intervention research in positive psychology seeks to help people reframe their life perspectives with gratitude and in connection with supportive relational mentors; exemplars that hold promise for prevention and intervention work with youth. The policy implications of work in positive psychology points to public support and training for programs that connect youth in schools and communities to caring and helpful adult mentors, particularly for youth who are diverse in their racial-ethnic backgrounds and often the victims of discriminatory treatment in the education, employment, and the justice systems (Barbarin, Murry, Tolan, & Graham, 2016). In summary, positive psychology has contributed to attention concepts that define well-being, shifting the focus from problems and developing interventions that promote support, character, gratitude, and cognitive frameworks that promote positive individual adaptation.

Prevention, Intervention, and PYD

In this section, we explore the conceptual and methodological contributions of prevention science to the field of positive youth development. Prevention science evolved from previous eras in which researchers, practitioners, and policy makers sought to identify “what works?” (Eichas et al., [this volume](#); Eichas, Ferrer-Wreder, & Olsson, 2019). Initial conceptualizations of prevention examined the degree to which efforts were targeted to reducing the incidence and risk of problem behaviors (primary and secondary prevention, respectively), or reducing the duration or effects of these behaviors (tertiary). Later

conceptualizations ranged from indicated models that focused upon those at highest risk to more universal models, encapsulating entire classrooms, schools, or communities (Mrazek & Haggerty, 1994).

The appeals of universal models was that they could be implemented across an entire specified group. Universal programs were targeted to individual socio-emotional skills in school based programs designed to help children recognize, express, and address their emotions in socially acceptable ways (Greenberg et al., 2003). Another exemplar of a school-based universal program is the Good Behavior Game (GBG), delivered in classrooms using cooperative teams of children who encourage each other’s self-regulation with helpful reminders and praise. GBG was found to most benefit urban, ethnic minority male 1st and 2nd graders in the Baltimore, Maryland Public School System by reducing hyperactivity at a critical developmental point. Follow-up as late as early adulthood found reduced problem behaviors, substance abuse, and better mental health among those that took part in the program in 1st and 2nd grade compared to their counterparts who went without (Kellam et al., 2008).

Indicated approaches in prevention are often built upon research in resilience identifying key risk and protective factors. Though indicated approaches may identify and label youth, it is possible that these approaches conserve resources by focusing upon those most in need. In one study in the United States, the label identified both need and potential by delivering the intervention in a multi-family group format to the top 25% of middle-school students, identified as antisocial *and* influential among their peers. Intervention was implemented with students and community based family groups from 40 schools across 4 states, Georgia, North Carolina, Virginia and Illinois, resulting in improved parenting practices and reduced school-wide violence perpetration (Henry & Multi-Site Violence Prevention Project (MVPP), 2012; Smith et al., 2004).

The largest and longest federally funded prevention-intervention trial, Fast Track, was conducted in North Carolina, Pennsylvania, and

Washington state in the United States for high risk children (African American, European American and Latino/a) identified in kindergarten. The study used multi-component aspects to enhance parenting, school based socio-emotional learning and peer interactions, and afterschool mentoring and tutoring with longterm effects on delinquency, substance abuse, and mental health (Dodge et al., 2013). Some of this prevention research is disseminated internationally in Hong Kong and India (Balaji, Andrews, Andrew, & Patel, 2011; Ma, Shek, & Leung, 2019).

Though funding streams often require attention to reducing “silos” of problem behaviors (e.g., conduct disorder, substance use, sexual risk), initiatives among prevention scientists have built upon common risk, protective, and promotive factors. Many of these prevention programs hypothesized that problem behavior would be reduced by fostering aspects of positive development including socio-emotional skills, family and community support (see Bradley, Ferguson, & Zimmer-Gembeck, [this volume](#); Kopic, Wium, & Dimitrova, [this volume](#); Upadaya & Salmela-Aro, [this volume](#)). Catalano, Berglund, Ryan, Lonczak, and Hawkins (2002; Catalano et al., 2019) offer an extensive review of some of the early work in PYD prevention programs in the U.S. and globally confirming impacts upon positive aspects of development. Thus, prevention science though attuned to risk has often hypothesized that the pathway to prevention was through promotion.

Methodologically, over the past 2–3 decades, prevention science has been characterized by research with large samples often at risk of problem behaviors, examining program effects upon experimental treatment/control groups, using multiple measures of potential risk and protective factors in multivariate analyses across time from childhood to early adulthood and diverse racial-ethnic backgrounds. While these randomized control trials have been helpful in identifying some important practices, the costs and intensity of some would prove challenging, while others have and are being disseminated widely at the state and national levels in homes, schools, and community based facilities (Bradshaw et al.,

2012; Chamberlain et al., 2008; Dishion et al., 2014; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 2009; Olds, 2002). Clearly, prevention science offers contributions in terms of exemplars of rigorous randomized longitudinal research (see Kaniūšonytė & Truskauskaitė-Kunevičienė, [this volume](#); Lansford et al., [this volume](#)), conceptual models that include both prevention and promotion (see Ferrer-Wreder et al., [this volume](#); Ginner Hau, Ferrer-Wreder, & Westling, [this volume](#); Kozina, [this volume](#)) and examples of partnering within state and national systems to foster public policies, broader implementation and sustainability (see Acosta, Chinman, & Phillips, [this volume](#); Fagan et al., [this volume](#); Hull, Ferguson, Fagan, & Brown, [this volume](#); Li, He, & Chen, [this volume](#)). While the methodology in PYD has yet to attain this level of sophistication in terms of rigor and longitudinal evaluation, the vast number of community organizations hold promise for longer term implementation and sustainability of best practices to support youth. In the following section, we explore the unique contributions and opportunities for PYD promotion both in terms of “bottom-up” community approaches, innovative conceptualizations, methodologies and broader implementation and sustainability. Pittman and Fleming (1991) remind the field to involve youth insolutions: “What is needed is a massive conceptual shift - from thinking that youth problems are merely the principal barrier to youth development to thinking that youth development serves as the most effective strategy for the prevention of youth problems”.

Taking it to the Streets: PYD and Community Programs

While work in resilience, positive psychology, and prevention science have conducted substantial applied research in home and school settings, much less research in these areas have focused on community settings, as in the field of PYD promotion. Community programs have been a part of society at least as early as the mid-1800’s in which the Young Men’s (YM)/Young Women’s

Christian Association (YWCA) was established in London and the United States. About this time, the Boys Club was also established in the mid-1800's and renamed the Boys and Girls Club in 1990. The heart of these initiatives was providing safe places to live, learn, develop, and grow (see Wang, Chase, & Burkhard, [this volume](#)). Today, thousands of youth programs exist supported by private and governmental sources (Montgomery, 2020). However, identifying what qualifies as a PYD prevention or intervention approach is complex. PYD approaches are thought to engage young people in structured and productive activities that divert them from unhealthy behavior (see Bremner & Schwartz, [this volume](#); Miconi & Rousseau, [this volume](#); Ross & Tolan, [this volume](#)) providing them with experiences that help develop their interests, talents, skills and competencies in a supportive atmosphere in which young people develop bonds with peers and adults (Catalano et al., 2002; Roth & Brooks-Gunn, 2016).

Research in PYD has drawn upon both qualitative and quantitative work that attends to the role of youth agency, collective efficacy, engagement, leadership, and voice (Eichas, Montgomery, Meca, & Kurtines, 2017; Larson & Angus, 2011; Ozer, Newlan, Douglas, & Hubbard, 2013; Smith, Osgood, Caldwell, Hynes, & Perkins, 2013). For example, qualitative research by Larson and Angus (2011) built upon grounded theory and ethnographic approaches among 11 programs, 708 interviews, and 108 youth. They explored the "arc of work" that included projects in which youth led, planned, monitored, adjusted plans, and received authentic evaluation of the project's results through which learning occurs (Larson & Angus, 2011).

Youth participatory action research (YPAR) models draw upon youth leadership of ethnographic research coupled with engagement in gathering quantitative research that helps to assess needs and spur youth community activism. In PYD more so than in prevention science, more "bottom-up" approaches have emerged that engage youth in community settings in creating, innovating, and leading in their communities (Barton & Tan, 2018; Ozer et al., 2013; Smith

et al., 2013). PYD is promoted in programs that integrate youth participatory methods around the globe. Projects in the United States utilized interactive technology to inspire youth to create change-based stories of coping and success (Ozer et al., 2017). International studies in Portugal demonstrated that participatory action research was successful in giving youth a voice in the areas of health, well-being and active citizenship (Branquinho, Cerqueira, Ramiro, & Matos, 2018; Branquinho & Matos, 2019; Matos et al., 2018). PYD has also incorporated research on broader dimensions beyond measures of self-esteem, self-efficacy, cognitive and academic development, including new concepts such as authenticity, future orientation, personal expressiveness (activities that are meaningful), creativity and spirituality (Dimitrova, Fernandes, et al., [this volume](#); Eichas et al., 2017; Thomaes, Sedikides, Bos, Hutteman, & Reijntjes, 2017; Tirrell et al., 2019). PYD often includes both individual and settings-level aims that are attuned to collective social processes and organization, particularly the redistribution of more responsibility and autonomy to young people (Tseng & Seidman, 2007). Thus, work in PYD is more "bottom-up," engaging youth in leadership and voice, and exploring novel concepts that not only describe individual development but also social processes among youth, adults, and their contexts (Dimitrova, 2018; Dimitrova, Sam, & Ferrer-Wreder, 2021; Dutra-Thomé & Ponciano, [this volume](#); Larsen & Holsen, [this volume](#)).

Programs in PYD have a shared mission in providing a safe haven for young people, helping them to develop into productive and caring citizens. One of the few rigorous, longitudinal studies of PYD was based on relational developmental systems, understanding the mutual interactions between youth and their contexts (Lerner et al., 2017). In this important study of a large, national sample of youth in the United States, spanning over a decade and hundreds of published articles, more evidence is provided on the importance of family contexts, on youth self-regulation and ability to benefit from participation in youth programs and on concepts such as civic engagement

and participation. Though the authors readily acknowledge that the sample lacks representative groups of ethnic minority youth, this critical work sets the stage for defining PYD, considering novel concepts such as plasticity, and new idiographic methodologies attuned to varying pathways to PYD.

Beyond this important work, though youth programs are widely available, few have been the topic of rigorous, and needed longitudinal evaluation (Courtin, Kim, Song, Yu, & Muennig, 2020). Some of the few more notable programs include the Big Brothers/Big Sisters Mentoring program, in which adolescent youth receiving monthly support from a mentor over 12–18 months were significantly less likely to have started using illegal drugs or alcohol, hit someone, or skipped school. They were also more confident about their school performance and got along better with their families (De Wit, DuBois, Erdem, Larose, & Lipman, 2020; Grossman & Tierney, 1998).

The Quantum Opportunities Program (QOP), a community-based youth development program, provided cultural enrichment, education, service, personal development activities, as well as financial incentives, over a 4-year period, from 9th grade through high school graduation in small groups of youth and adults. QOP increased the likelihood of high school graduation and reduced the likelihood of dropping out of school or becoming adolescent parents (Lattimore, Grotper, & Taggart, 1998). Other more culturally-oriented community based programs have sought to help racial-ethnic minority youth adapt successfully to their contexts resulting in more positive identities, cultural values of collective responsibility, less substance abuse and sexual risk (Belgrave, Chase-Vaughn, Gray, Addison, & Cherry, 2000; Flay, Graulich, Segawa, Burns, & Holliday, 2004; Riggs, Bohnert, Guzman, & Davidson, 2010; Tebes et al., 2007).

In the United States, afterschool programs have become an important context for PYD programs designed to support increasing numbers of working parents, providing safety and monitoring to children who would otherwise be unsupervised. Initial assessments of the 21st Century Learning

Centers (21C) were pessimistic or mixed in terms of their results, often confounded by program quality and implementation (Cross, Gottfredson, Wilson, Rorie, & Connell, 2010; Gottfredson, Cross, Wilson, Rorie, & Connell, 2010; James-Burdumy, Dynarski, & Deke, 2008). More recent work is beginning to take into account the variability of the contexts in terms of quality of adult support, youth engagement, and the impact on youth outcomes (Frazier et al., 2015; Frazier, Mehta, Atkins, Hur, & Rusch, 2013; Kuperminc et al., 2019; Smith, Osgood, Oh, & Caldwell, 2018; Vandell, Lee, Whitaker, & Pierce, 2020).

Meta-analyses have been conducted to examine the effects of PYD programs across multiple studies. Ciocanel, Power, Eriksen, and Gillings (2017) detected modest effects upon socio-emotional outcomes and the largest effects on academic outcomes. Further, this meta-analysis demonstrated a more narrow focus on risk and protective factors but not the wider range of outcomes that are often the goal of PYD programs. Other meta-analytic work with follow up data demonstrated that socio-emotional interventions do influence PYD. In this meta-analysis, the largest effects were found on academic performance of youth from varying racial-ethnic and social backgrounds. Further, interventions with children had larger effects than those with adolescents emphasizing the importance of early promotion efforts (Taylor, Oberle, Durlak, & Weissberg, 2017).

In summary, PYD has drawn upon conceptual and research underpinnings in resilience, positive psychology, and prevention science. Though these areas still offer much in terms of future research in PYD (e.g., socio-biological research, rigorous, longitudinal methods, person-centered approaches), PYD makes unique contributions in terms of using mixed-methods, both qualitative and quantitative to understand not only individuals but the settings processes that are core to relational developmental systems. PYD has a history of integrating more bottom up and top-down approaches that engage youth and foster agency. PYD also expands the focus of developmental science from the typical focus on variables like self-esteem and efficacy

to authenticity, racial-ethnic identities, cultural orientation, mindsets and more long-term future and life outcomes.

Broadening PYD: Ethnically Diverse Populations and International Research

The idea of studying the positive development of racial-ethnic minorities has been raised by communities that have long been defined by deficit perspectives (McLoyd, 1990). The identification of more culturally relevant dimensions becomes increasingly important as the study of PYD advances to examine the interaction of race, culture, and ethnicity both domestically and internationally. More recently, new initiatives have been undertaken by the Ethnic and Racial Issues (ERI) Committee of the Society for Research in Child Development (SRCD) under the leadership of Natasha Cabrera. The SRCD sponsored a widely subscribed special themed conference on positive youth development among racial-ethnic minority youth resulting in a SRCD Social Policy Report and subsequent book volume (Cabrera, 2013; Cabrera & Leyendecker, 2017). Subsequently, the SRCD ERI Chair Emilie Smith, the SRCD International Affairs Committee Chair, Anne Petersen and a British psychologist Patrick Leman, edited a Special Section of *Child Development* on PYD in diverse and international contexts (Leman et al., 2017; Smith et al., 2017). Further, both Committees in collaboration with the European Association of Developmental Psychology (EADP) and the European Association for Research on Adolescence (EARA) supported an expert meeting in line with the SRCD Strategic Plan Initiatives to generate new insight on explanatory mechanisms on what is presently known about PYD and positive adaptation of immigrant and ethnically diverse youth from a global perspective. Consequently, two special issues were published on explaining positive adaptation of immigrant and minority youth in the *Journal of Adolescence* (Titzmann, Ferrer-Wreder, & Dimitrova, 2018) and on PYD across cultures in *Child & Youth Care Forum* (Wium &

Dimitrova, 2019). More initiatives, including the current volume are critical in bring international work in PYD to the forefront (Chen, Wium, & Dimitrova, 2018, 2019; Dimitrova et al., 2016; Dimitrova et al., [this volume](#); Dimitrova & Ferrer-Wreder, 2016; Fernandes, Fetvadjev, Wium, & Dimitrova, [this volume](#); Kozina, Wium, Gonzalez, & Dimitrova, 2019; Petersen, Koller, Motti-Stefanidi, & Verma, 2016; Wium, Ferrer-Wreder, Chen, & Dimitrova, 2019).

Though in practice, substantial PYD programming is often conducted in racial-ethnic minority communities around the globe, framing strengths-based processes that describe the interaction of race, ethnicity and culture around the globe, are still emerging topics of PYD research (Brittian & Williams, 2017; Dimitrova et al., 2016; Dimitrova, Johnson, & van de Vijver, 2018; Dimitrova & Wium, [this volume](#); Smith et al., 2017; Williams et al., 2014). Brittian and Williams (2017) describe PYD programs as potentially culturally relevant contexts that can socialize youth into a positive sense of their identity and culture, while promoting other aspects of health and adjustment that are culturally congruent, such as compassion for others, a collective sense of work and responsibility, along with a positive racial-ethnic identity. Research has specifically explored the interaction of ethnic identity, a sense of affirmation and belonging to one's group and found positive associations with PYD among 5–7th grade African American and Latino youth (Williams et al., 2014).

PYD work has been conducted in school contexts revealing that more democratic and equitable settings foster civic attitudes among youth of color (Jagers, Lozada, Rivas-Drake, & Guillaume, 2017). Other research has found that for Columbian youth, school climate is related to prosocial behaviors, which in turn is related to positivity, defined as optimism, self-value, and life satisfaction (Luengo Kanacri et al., 2017). Civic engagement has been explored by a number of researchers interested in PYD examining the social boundaries and opportunities for civic engagement in adolescence and early adulthood (Finlay, Wray-Lake, & Flanagan, 2010; Watts, Diemer, & Voight, 2011; Wray-Lake & Abrams, 2020).

Both schools and afterschool programs are important contexts for PYD interventions and promotion (see Acosta et al., [this volume](#); Ginner Hau et al., [this volume](#)). In one of the few cluster, randomized study of a universal cooperative strategy in afterschool, Smith et al. (2018) found that team strategies that afford youth collective efficacy and responsibility had direct effects upon reduced hyperactive behavior and increased prosocial behaviors of listening and caring. Further, across time, program quality (i.e., appropriate levels of structure, support, and engagement) was related to caring and connection across time for African American and European American youth and was particularly related to the cultural value of respect for adults among African American and Latino youth. These collectivistic cultural values are potential newly identified aspects of PYD for youth of color (Smith, Witherspoon, et al., 2017).

PYD in international contexts is an emerging area of research (Petersen et al., 2016; Wiium & Dimitrova, 2019). Wiium and Dimitrova (2019) present original research across 20 countries and 4 continents (i.e., Africa, Asia, Europe, and Latin America) with interdisciplinary scholars across psychology, public health, and environmental science among youth and emerging adults from ages 16–29. New studies in Brazil among diverse racial-ethnic youth have facilitated the exploration of the degree to which connectedness to family and community foster confidence and self-esteem, less perceived prejudice and problem behavior (Dutra-Thomé, DeSousa, & Koller, 2019).

In Brazil, a model of a PYD intervention fostering persistence among youth was designed for implementation in public schools. The intervention, entitled “Be the Superhero of Your Own Life” uses the images and symbolic forces of comic super heroes (CSHs) as tools for inspiring and promoting resilience among children and adolescents (Fradkin et al., 2016; Fradkin, Weschenfelder, & Yunes, 2017; Yunes, Fernandes, & Weschenfelder, 2018). Utilizing pre- and post-test meetings, the facilitator used experiential methodology as a guide to promote dialogues during the 5 modules with 2–3 activities lasting approximately 2 hours each. The results revealed

that stories of pre-cloak CSHs and their “turning points” (Rutter, 1987) help adolescents who suffer from bullying, socio-economic deprivation and/or emotional abandonment to feel empowered, hopeful, and less alone. As indicated by Fradkin et al. (2016), the program “Be the Superhero of Your Own Life” confirmed that CSHs can help adolescents in gaining trust and establishing relations with peers who have experienced similar adversities. Pre-cloak CSHs can help in this process of trust and relationship building (Fradkin et al., 2016). Future research can expand upon these creative and innovative approaches in studies of broader implementation and evaluation.

Implications for Research, Policy and Practice

This chapter provides relevant implications for future research, policy and practice. With regards to research, PYD emerges from other psychological movements in positive psychology and resilience but is distinct in its focus on the development of broader desirable characteristics in youth such as caring, character, competence, confidence, connection, contribution, and for racial-ethnic minority youth, even cultural dimensions. While research on resilience has drawn upon multiple methodological innovations, incorporating biopsychological studies, the work in PYD is more bottom-up, deserving more attention in measurement and rigorous, longitudinal evaluation methodologies (see Dimitrova & Wiium, [this volume](#)).

With regards to policy, in the United States, the 21st Century Community Learning Centers (21C) are part of public policy that provides some support for afterschool programming when youth are most in need of appropriately structured and supportive developmental opportunities (Afterschool Alliance, 2014). Another national initiative designed to foster youth development particularly among ethnic minority males is the My Brother’s Keeper Program (Barbarin et al., 2016). Related family support programs are being broadly implemented and disseminated

with a number being shared internationally as well (Chamberlain et al., 2008; Henggeler et al., 2009; Olds, 2002). From a public policy perspective, it is paramount that we foster empirically based policy and practice that do not depend upon individual resilience, but proactively seek to transform youth *and* their contexts to reduce systemic barriers and foster their positive developmental outcomes locally, domestically and around the globe.

Finally, in terms of implications for practice, it is the bottom-up nature of PYD, endemic to community contexts and organizations that provides promise to the broader implementation and sustainability of best practices in PYD. Innovations are being created in PYD intervention around the globe, in schools, afterschool programs, and community opportunities for civic engagement that seek to help youth be able to emerge from multiple contexts and backgrounds strong and healthy. Many of these involve youth as leaders and participants actively engaged in the change process. Important to the success of these approaches is the posture of the adult facilitators to those who perceive the worth and value of youth diverse in race-ethnicity, socio-economic status, culture and nationality, being a mediator of learning that allows youth to explore, plan, solve problems, and create. These innovations provide the focus for enhancing novel conceptual frameworks in PYD, methodological work with rigorous evaluations and innovative practices that build upon youth agency.

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The Morning Sun Shines Brightly: Positive Youth Development in a Global Context

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Abstract

This chapter summarizes themes woven across the present *Handbook*. These ideas are not new in and of themselves, but they nevertheless highlight key issues prominent in the literature today. These themes include (a) PYD implies a systems-level perspective; (b) PYD includes both strength promotion and deficit reduction; (c) there is no “best” model of PYD, (d) defining PYD requires specificity; (e) PYD is holistic; (f) specificity applies to all contexts, and (g) we need to integrate etic and emic approaches. Such themes are equally relevant to PYD in WEIRD (Western, Educated, Industrialized, Rich, and Democratic) contexts, supporting the overall message we derive from the present *Handbook* that PYD research, policy and practice are becoming well-established across the globe. If the globalization of PYD was ever thought of as a burgeoning topic for tomorrow, that tomorrow is clearly our today.

Keywords

PYD · Global context · PYD research · PYD policy · PYD practice

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The importance of youth thriving is certainly nothing new (see, for instance, Plato’s *Apology*), but philosophical approaches to youth development have varied across multiple dimensions of context. In WEIRD (Western, Educated, Industrialized, Rich, and Democratic) contexts (especially the United States), for instance, longstanding approaches emphasized the problems young people presented and the various impediments that could derail their positive development. These deficit-oriented approaches only began to fall out of favor in the 1990s and early 2000s and have since been replaced by the concept of Positive Youth Development (PYD), which emphasizes youth and contextual strengths (see Benson, Leffert, Scales, & Blyth, 1998; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Eccles & Gootman, 2002; Hamilton, Hamilton, & Pittman, 2004; Lerner et al., 2005; Roth & Brooks-Gunn, 2003 and many others). In WEIRD contexts, then, the sun has set on deficit-oriented approaches and instead shines brightly on an era of strengths-based practices.

Formal research and thinking about young people’s strengths and potential have resonated across global audiences, and the present *Handbook* provides a snapshot of how that thinking has manifested among worldwide stakeholders to date. The chapters in this *Handbook* range, in the extremes, from research applications and findings in Part A to comprehensive discussions of pervasive field-relevant issues in Part B. Most

chapters occupy a space somewhere between, and all provide valuable insights for future research, policy, and practice.

As with any collection of people, cultures, and ideas, the outward diversity represented in this *Handbook* belies key unifying features and strands of commonality. In this chapter, we discuss several such commonalities that, collectively, elucidate this *Handbook's* implications for the field. We divide this discussion by addressing two overarching questions: *How does one define positive youth development?* and *What does this definition mean for a global community of researchers, practitioners, and policy makers?* This discussion then closes with the conclusion that PYD is more than just the future. The sun has already risen on the era of PYD in global contexts.

Defining Positive Youth Development

The most important thing to know when defining positive youth development is that there is no absolute definition of positive youth development and no single operationalization that applies equally across all contexts. Positive youth development is an integration of understanding, attitudes, and actions. Hamilton and colleagues (e.g., Hamilton et al., 2004; see also Lerner, Lerner, Bowers, & Geldhof, 2015) underscored this point by describing three levels at which we might think about youth development. At the most basic level, we can see PYD as a natural process. PYD is an acknowledgement that the capacities of young people grow and that this growth better enables young people to understand and interact with their environments in ways that promote well-being among themselves and their societies. At a second level, PYD exists as a set of principles that emphasize support for young people's positive development. Such supports incorporate the inclusion of all youth and a positive orientation predicated on building the strengths of young people. At the third level, PYD represents concrete actions through which the other two levels are applied to the real world. This third level rep-

resents PYD-oriented programs, practices, and interventions designed with the explicit goal of helping young people thrive. These programs empower youth to capitalize on and grow their individual strengths while also helping them overcome person-context misfit and structural barriers to their well-being.

The chapters from this *Handbook* reflect all three levels described above and particularly emphasize that any instantiation of PYD depends on some form of systems-oriented approach to development and intervention. Some chapters even include explicit discussions of relational developmental systems perspectives, and we see the importance of systems-level thinking for PYD as the *Handbook's most consistent theme*.

Theme 1: PYD Implies a Systems-Level Perspective

Understanding PYD from a relational developmental systems perspective (e.g., Lerner et al., 2015) requires an acknowledgement that a person cannot be separated from their context. This is not simply because a person must always reside in some sort of context (which is true), but instead reflects a deeper reality that person and context exist only as arbitrarily defined parts of the same system. This person-context system is a unified whole, not a co-action among separate entities. Interventions, programs, and policies similarly exist as elements of the larger person-context system and accordingly exert influence as a part of that system.

Despite the widespread acknowledgment that persons and contexts are completely fused, pragmatism and parsimony nevertheless point to the utility of thinking about youth as being nested in (i.e., theoretically separate from) their contexts. Overton (2010) describes this phenomenon as the opposites of identity. Through heuristic separation, we can describe person-context systems as developing through continuous interactions between young people and their contexts (i.e., person \Leftrightarrow context relations). These interactions are only adaptive and can therefore only represent PYD, when they benefit both the individual

and their context (see Lerner, Dowling, & Anderson, 2003 for a larger discussion of these issues). Attempting to operationalize PYD in a context-neutral way is therefore nonsensical.

Defining PYD as a function of mutually beneficial youth \Leftrightarrow context relations implies that PYD is a process involving malleable characteristics. As Fagan et al. (this volume) noted, PYD programs would be a futile mismanagement of resources if thriving were predicated on stable personality traits. Instead, the process of PYD assumes that youth will actively navigate their contexts and make use of the resources afforded to them (see Ross & Tolan, this volume). These person \Leftrightarrow context relations often benefit a young person, but they can also lead youth toward undesirable outcomes (e.g., substance dependency). Thus, although it is tempting to interpret strengths promotion as the mechanism for reducing deficits, nothing can be farther from the truth. Strengths promotion and deficit reduction can exist as synergistic yet separate goals.

Theme 2: PYD Includes Both Strength Promotion and Deficit Reduction

Several authors in this *Handbook* underscore the importance of increasing youth strengths while simultaneously (i.e., not just as a means of) reducing risk factors and undesirable developmental outcomes. Although many chapters noted the tendency for strengths to correlate negatively with undesirable outcomes (e.g., Upadyaya & Salmela-Aro, this volume), Ferrer-Wreder et al. (this volume) noted that reducing deficits should not be the only goal of an intervention or program. Smith, Yunes, and Fradkin (this volume) similarly drew from Pittman (1991) when arguing that the absence of negative outcomes does not ensure a young person is thriving. PYD must also create invested members of civil society who act according to both their own needs and those of other people. Smith et al. (this volume) similarly emphasized that having certain advantages in life does not guarantee positive development (e.g., substance use, suicide, and criminal behavior are all examples of problems that can occur

across social classes). Programs that integrate prevention and promotion goals (e.g., The Icelandic Model as described by Ásgeirsdóttir & Sigfúsdóttir, this volume) may therefore be especially impactful (see also Schwartz et al., 2010). This is especially true when applying theoretical models and operational definitions that are flexible enough to allow for context-specific nuance.

Although a joint emphasis on promoting strengths while also working to reduce deficits may seem obvious, repeated reliance on the phrase “strengths-based” increases the possibility that PYD will erroneously become perceived as only concerned with building skills. Indeed, such a misperception aligns with older definitions of strengths-based models which emphasized exclusive attention to the gains people make, no matter how trivial (Weick, Rapp, Sullivan, & Kisthardt, 1989). In this respect, Edwards and Pratt (2016) described PYD as a mechanism for promoting youth development rather than eliminating deficits.

The misperceptions that PYD advocates a strengths-only approach to youth development may weaken the case for expanded PYD-based programming in global contexts. For instance, Small and Memmo (2004) criticized the PYD perspective for its tendency to overlook risks that many youth face as well as the threat those risks pose for healthy development. While there may be no single best approach to PYD in the literature, discussions of the pros and cons of applying a specific model or practice to a specific context must remain aware of how that specific application will affect youth holistically, including both their strengths and their deficits (see also Benson, Mannes, Pittman, & Ferber, 2004).

Theme 3: There Is No “Best” Model of PYD

Many, but by no means all, chapters in this *Handbook* built upon foundations laid by two major PYD theories: The five Cs discussed by Lerner et al. (2005) and the Search Institute’s 40 developmental assets (e.g., Benson et al., 1998). More than a decade of research supports the

utility of both models, and both align with systems-level thinking while remaining intuitive to practitioners and policy makers alike. The five Cs model emphasizes five key constructs (competence, confidence, character, caring, and connection) whose presence collectively suggests a young person is on a positive developmental trajectory and is likely to be making meaningful contributions to society. As Geldhof et al. (2014) explain, each C may appear to be a characteristic of a young person, but each of the Cs is better explained as representing a person-context relation. Although operationalized in a very different way, the 40 developmental assets similarly describe characteristics of young people (internal assets representing educational commitment, values, social competencies, and positive identity) and their contexts (external assets representing support, empowerment, boundaries and expectations, and constructive use of time) that, together, imply a young person is well-equipped to follow a positive developmental trajectory.

Although the five Cs and 40 developmental assets models are accessible and have been widely influential, it is critical to note that they are indicators of thriving rather than comprehensive and authoritative definitions of what it means to thrive. Referring to the five Cs model, for instance, Larsen and Holsen (this volume) noted that the five Cs enable PYD. As such, the expansion of PYD models across diverse global contexts can and should include the expansion of existing operationalizations, the integration of PYD models, and drawing explicit linkages between PYD models and other theoretical models in the literature.

In terms of expanding operationalizations, Fernandes, Fetvadjev, Wiium, and Dimitrova (this volume) built on the literature supporting hopeful future expectations as a predictor of the five Cs (see also Schmid, Phelps, & Lerner, 2011) while discussing life satisfaction as a key outcome in the PYD literature (which can be integrated into, but is not redundant with, the C of confidence). Gomez-Baya, de Matos, and Wiium (this volume) similarly discussed elements of character (i.e., gratitude, optimism) and confidence (subjective happiness) that have not been

adequately captured in existing measures of the five Cs. Ross and Tolan (this volume) encouraged PYD researchers and practitioners to reach beyond traditional spaces for delivering youth development content and to begin seeing the digital world as a key for the development of PYD processes.

At the level of theory integration, chapters in this *Handbook* illustrated the ways that models of PYD can be integrated with each other and with other theories from related fields. Li, He, and Chen (this volume) demonstrated how constructs from the PATHS model of PYD can be conceptualized in a way that aligns with the five Cs model. In terms of better integrating models from across the field, Kozina (this volume) noted the strong overlap between theories of PYD and theories centered on social and emotional learning. Dost-Gözkan & Wiium (this volume) connected PYD and self-determination theory, while Ferrer-Wreder et al. (this volume) encouraged stakeholders interested in PYD to acquaint themselves with the lessons learned in intervention science. Miconi and Rousseau (this volume) noted the implications that models of PYD could have for the study of violent extremism. Of course (and consistent with the systems-based approaches to PYD described above) any extension and integration of theories will remain highly contextualized. Thus, it is critical that the application of any PYD model accommodate specificity.

Theme 4: Defining PYD Requires Specificity

Formally codifying the complexity implied by systems-level thinking, Bornstein (2017) introduced the specificity principle as the assertion that the conditions of specific individuals who occupy specific times and places moderate specific facets of development in specific ways. An application of the specificity principle to the present *Handbook* implies that models of, and research on, PYD do not generalize to every context in the world. Unique contexts demand unique operationalizations. Methods for accommodating the specificity principle can affect all levels of

research and practice and may be as straightforward as couching a particular report in a particular context. For example, Bradley, Ferguson, and Zimmer-Gembeck ([this volume](#)) noted that their research was completed in an Australian context and clarified that adolescents in that context experienced a great deal of autonomy. Furthermore, youth who participated in their study had ample opportunities to interact with peers, both in-person and online. Specificity might impact the population one chooses to study or work with, such as Hull, Ferguson, Fagan, and Brown' ([this volume](#)) decision to focus on emphasis on NEET youth (Not active in Education, Employment, or Training opportunities), or it may even impact the outcomes one wishes to examine and promote. For example, Kabir and Wiium ([this volume](#)) noted that environmentalism is a particularly relevant outcome in the context of Ghana. Specificity might manifest in the phrasing used in research and intervention materials, as is illustrated by Ferrer-Wreder et al.'s ([this volume](#)) example of needing to replace the word "compliments" with something more akin to "showing appreciation." As Eichas, Montgomery, Meca, Garcia, and Garcia ([this volume](#)) noted, successfully engaging marginalized youth in PYD requires that we understand their unique experiences and the PYD processes most important to target *for that group*.

What Have We Learned About PYD in a Global Context?

The above discussion emphasizes that there is no one best PYD perspective because any PYD-based model or program will need context-specific tailoring in order to maximize its impact. Acknowledging the high degree of specificity required when applying PYD-predicated research, policy, and practice to new contexts can therefore be disheartening and lead one to question the practicality of applying PYD perspectives across the globe. As we clarify in the following sections, though, we see strong evidence that this work is already being undertaken. The work presented in this *Handbook* leaves us

optimistic about the state of PYD across the globe, both as it manifests today and as it will manifest tomorrow.

Theme 5: PYD Is Holistic

As discussed above, systems-oriented approaches to PYD assume that a young person is fully embedded in their context and that context-ignorant approaches have limited practical utility except when providing general frameworks or a starting place for discussion. Given the centrality of context in the person-context system, PYD-inspired practices can and must acknowledge contexts as both moderating youth development and as a conduit through which youth development can be optimized. When we say that PYD is holistic, we are therefore emphasizing that PYD-based practices can target elements of the person-context system that extend past what we would traditionally designate as the "person."

Although young people occupy any number of different contexts, the chapters in this *Handbook* draw specific attention to families and schools. Dutra-Thomé and Ponciano ([this volume](#)) discuss the role parents can play in supporting youth during the transition to adulthood, which aligns well with Negru-Subtirica and Badescu's ([this volume](#)) discussion of the intergenerational transmission of work-related values and goals. McKee et al. ([this volume](#)) note that programs designed to strengthen parenting skills, both universal and culture specific, can have cascading effects on young people's development. At the same time, Ginner Hau, Ferrer-Wreder, and Westling ([this volume](#)) emphasize the potential that classroom contexts have for enabling and promoting positive development across the globe. Bradley et al. ([this volume](#)) discuss how support from parents and peers, as well as overall feelings of school connectedness, can promote positive academic outcomes.

The family and school contexts also provide milieu for accommodating the specificity principle. Just as opportunities, barriers, and norms may vary between cultures, school and family contexts are not homogenous. This is even true

within small geographical areas, for instance between schools in the same city or even between classrooms in the same school. Although many chapters in this *Handbook* applied the specificity principle in ways that explored differences and similarities between national contexts, we should not forget that it applies equally to the varying contexts that exist within a given unit of organization (e.g., within a country).

Theme 6: Specificity Applies to All Contexts

The specificity principle implies that variation exists between many levels of a young person's context. When examining PYD in the global context, we must therefore not allow our consideration of context to stop at the level of political boundaries (e.g., divisions between countries). In fact, Lansford et al. ([this volume](#)) noted that more variance may exist within cultures than exists between cultures. As an example of this, Smith et al. ([this volume](#)) noted that the intersection of race, ethnicity, and culture may be especially germane to understanding PYD among racial-ethnic minority youth. In a similar vein, Kosic, Wium, and Dimitrova ([this volume](#)) compared Slovene minority youth living in Italy to members of the Italian majority. James, Noltemeyer, Roberts, and Bush ([this volume](#)) tied the issue of intra-national specificity to a much broader literature by describing how one indicator of PYD (competence) may work differently among African American youth as compared to American youth from other ethno-racial backgrounds. Uka et al. ([this volume](#)) similarly illustrated how culture and context interact by comparing youth from a single cultural background but who live in different countries.

Other contributions to this *Handbook* highlighted intra-national variance in ways that extend beyond ethno-racial differences. Dutra-Thomé and Ponciano ([this volume](#)) described how the transition to adulthood may be more abrupt among youth from low-SES backgrounds as compared to their wealthier peers. Wium and Kozina ([this volume](#)) explored the

interaction between national context and gender as a means to understand PYD among girls who live in contexts that provide women and girls with markedly different opportunities. Other chapters emphasized intra-national variation in more subtle ways. Negru-Subtirica and Badescu ([this volume](#)) couched their chapter in the context of current economic trends and attitudes toward democracy. Kaniušonytė and Truskauskaitė-Kunevičienė ([this volume](#)) took a data-driven approach to intra-national variance by relying on latent profile analyses. Although their chapter specifically examined mean differences and growth trajectories, future work could push further by questioning whether PYD manifests in dissimilar ways among inductively defined groups. Such studies could open the exploration of these data-driven groups to direct follow-up research. As these chapters highlight, then, successfully applying PYD concepts and practices requires a synergistic consideration of both deductive and inductive thinking.

Theme 7: We Need to Integrate Etic and Emic Approaches

Lansford et al. ([this volume](#)) discussed etic and emic approaches to the contextualization of PYD, and we believe the integration of these methods lies at the heart of effectively translating PYD between diverse contexts and groups. As Lansford et al. ([this volume](#)) described, etic approaches take the perspective of a cultural outsider and apply theories derived elsewhere to a novel context. Many chapters in this *Handbook* translated measures of the five Cs or 40 developmental assets for use in a new context, for instance. Such approaches allow for the application of similar instantiations of PYD across contexts, as one might want when exploring cross-context means or criterion validity.

Emic approaches are more bottom-up and instead take the perspective of a cultural insider. Emic approaches allow for greater levels of specificity at the cost of some generalizability. Leaning more toward the emic side of the spec-

trum, Ferrer-Wreder et al. (this volume) discussed the Planned Intervention Adaptation (PIA) protocol as a potentially helpful guiding framework for applying a program in a new context. They describe PIA as a two-part process, in which the first phase includes program selection, intervention development, and formative research. The second phase then entails an intervention trial of the adapted program. Although specific to the case of program adaptation, elements of PIA could easily be modified to facilitate the cross-cultural adaptation of other PYD concepts.

Most other chapters in this *Handbook* gravitated toward etic approaches, although none did so blindly. Instead, several chapters alluded to the fact that broader concepts might translate across cultures even when the nuance of a specific operationalization does not. For example, Wang, Chase, and Burkhard (this volume), discussed the “big three” features common among many youth-serving organizations. In line with the definition provided by Lerner (2004), Wang and colleagues described the big three as (1) providing youth with opportunities to make sustained connections with supportive and caring adults; (2) engaging youth in activities that promote the development of important life skills; and (3) providing opportunities for young people to lead and contribute to their families and communities. The big three are predicated on Western ideals but are general enough to be easily adapted to many contexts. McKee et al. (this volume) similarly discussed potentially universal elements of good parenting (e.g., sensitivity), and Ginner Hau et al. (this volume) referenced the literature on universal human values. Other chapters with an etic orientation relied on statistical procedures to assess the reasonableness of comparing their measures across groups.

Among the chapters with the strongest etic orientation were those that tested measurement invariance between two or more groups. Measurement invariance (e.g., Geldhof & Stawski, 2015; Little, 1997; Meredith, 1993) consists of sequentially more-restrictive tests that establish the between-group equality of a measure’s psychometric properties as preparation for

making more meaningful comparisons (e.g., comparing mean scores across groups). A lack of measurement invariance indicates that between-group comparisons might not be easily interpretable. More specifically, weak/metric invariance indicates the reasonableness of comparing latent covariances between groups. Strong/scalar invariance suggests that factor means can be compared reasonably between groups.

Rather than testing for absolute equality of a scale’s measurement properties between groups, tests of measurement invariance are imprecise by design. Rather than using a likelihood ratio test to evaluate invariance statistically, researchers typically compare the Comparative Fit Index (CFI) of each model and test whether the more restricted model (i.e., that imposes a given level of invariance) exhibits non-negligibly worse model fit. Guidelines provided by Cheung and Rensvold (1999) suggest that a particular level of invariance is reasonable and imposing the relevant model restrictions, causes the CFI to decrease by no more than .01 after imposing invariance on a set of parameter estimates. Meade, Johnson, and Braddy (2008) suggested changing this threshold to a decrease of no more than .002.

Even when applying less restrictive tests (e.g., CFI decreases of .01 or smaller), invariance may be less common than researchers would seemingly prefer. More than one chapter in this *Handbook* failed to establish strong invariance, for instance. Rather than treat invariance as something to push for, we encourage authors to celebrate the diversity uncovered when measurement invariance fails and to use such findings as an opportunity to gain additional insights regarding specificity. Discussions of why researchers and program evaluators cannot meaningfully compare item responses across groups may actually be more interesting and propel future work farther than research that focuses only on simple mean-level differences between constructs.

Where to Now? Implications for the New Day

Multiple authors noted recent calls for theories and measures designed to catalyze international scholarship on PYD (e.g., Abdul Kadir, Mohd, & Dimitrova, [this volume](#); Dominguez, Wiium, Jackman, & Ferrer-Wreder, [this volume](#); Manrique-Millones, Pineda Marin, Millones-Rivalles, & Dimitrova, [this volume](#)), especially in low- and middle-income countries (e.g., Bremner & Schwartz, [this volume](#); Dimitrova, Buzea et al., [this volume](#); Dimitrova, Fernandes et al., [this volume](#); Dimitrova & Wiium, [this volume](#)). The contributions to this *Handbook* show that the field has responded to those calls in a robust and productive way. PYD has already debuted on the global stage.

Core elements of PYD already exist in many ecologies (e.g., as discussed by Abdul Kadir et al., [this volume](#) and by Li et al., [this volume](#)), and today's work will entail formalizing our understanding of those manifestations, learning how to assess their impacts, and pushing for a more thorough acceptance of PYD at all levels of society. Consistent with the themes presented above, today's PYD must evolve beyond its roots in WEIRD contexts and embrace the diversity evident across the world. PYD-inclined researchers, practitioners, and policy makers should certainly learn from work already completed (e.g., restorative practices in U.S. schools, as discussed by Acosta, Chinman, & Phillips, [this volume](#)), but they must also work to make those models their own. They should use common sense (asking themselves if a particular concept or practice aligns with local norms, for instance) and engage key stakeholders in ongoing discussions. A good start is to encourage qualitative and ethnographic research, as Lansford et al. ([this volume](#)) suggested. Others (e.g., Larsen & Holsen, [this volume](#); Smith et al., [this volume](#)) called for participatory methods that elevate and validate the voices of diverse stakeholders—young people included. By walking this middle path between the old and the new, between the global

and the specific, global instantiations of PYD will continue to take flight, will proliferate, and will see the increased thriving of young people worldwide. PYD in a global context is not the direction for tomorrow's work—it is clear that tomorrow is already here. The sun is up, it is shining brightly, and, as far as we can tell, today is going to be a beautiful day.

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