Chapter 1
Building a Science of Resilience Intervention for Youth

Sandra Prince-Embury and Donald H. Saklofske

This volume entitled *Resilience Interventions for Youth in Diverse Populations* will present empirically supported programs and interventions designed to enhance resilience and describe how these methods have been approached and applied across children, context, and unique circumstances. This volume follows up on our previously published volume—*Resiliency in Children, Adolescents, and Adults: Translating Research into Practice* (Prince-Embury and Saklofske, 2013). That volume addressed the need in the study of resilience for clarification and translation of these constructs for practical application. Although discussions of resilience and resiliency are not new (Prince-Embury, 2013), the systematic study of interventions to enhance resiliency is still in its formative stage. The aim of this volume is to begin such a systematic study as well as identify, clarify, and present current programs for children to a wider audience. We have focused in this volume on resilience interventions for youth based on developmental literature suggesting that early development presents the best opportunity for preventive intervention in that the effects of both protective and risk factors are developmentally cumulative.

As editors, we have invited the authors of chapters in this volume to define the population of youth they are addressing and what challenges this population may face. They were also asked to describe those components of resiliency that form the core of their described models and programs and how the interventions used relate to these components. Finally authors were asked to describe the changes targeted and observed and how these changes were or might be demonstrated.

S. Prince-Embury (✉)
The Resiliency Institute of Allenhurst, LLC., West Allenhurst, NJ, USA
e-mail: Sandraprince-embury@earthlink.net

D.H. Saklofske
Department of Psychology, University of Western Ontario, London, ON, Canada
e-mail: dsaklofsk@uwo.ca

Resilience and Its Enhancement

Resilience and resiliency are of particular interest at this time in our human history for several major reasons. The world more than ever is in crisis on various but interrelated fronts: politically, socially, economically, and environmentally. The lack of stability and civil war in much of the Middle East and Africa threatens the wider world today because of both the exporting of terrorism and the capacity to "engage" in war from any corner of the globe. The movement of people from country to country has brought with it both the richness of the earth's cultures, but also old and new hatreds. Literally millions of peoples' lives are threatened daily by conflict, whether driven by religion or politics and the capacity, even the willingness, to inflict such physical and psychological human suffering is almost incomprehensible. Added to this is the economic malaise that continues to plague third world countries due to poverty, political corruption, and nature itself. Of course the economic issues facing all countries including both European and the USA have undermined the security of jobs and income and created financial uncertainty that reminds one of the tragedies of the great depression. Natural disasters are recorded on a frequent basis ranging from floods, drought, earthquakes, hurricanes, and massive fires all of which in turn threaten lives directly. Of course the pollution of oceans and land and the changing climatic conditions, no matter their cause, assault the very biological survival of human kind through the production of food and clean water. While not all children are directly aware of these global events, the potential threats trickle down through communities and families in the form of everyday stressors and tension in family relationships.

While these tragic events may be occurring "elsewhere," they are readily accessible to us because of greater access to information through all forms of media including internet. These circumstances as well as hardships of everyday life present challenges to many children and families regardless of their individual circumstances. It is within these occurrences and events and our awareness that the concept of resilience has gained prominence. It is reasonable that interest in resilience or the ability to thrive in the face of adversity would increase as awareness of challenges increases and as we recall the capacity of humans to survive and sometimes thrive in the face of adversity. As editors we have chosen to include authors and programs developed internationally as this more accurately represents the international interest in this topic and need for substantial and effective practical applications of the construct.

The need for the current volume is consistent with the need for social scientists to move beyond defining and providing examples of resilience toward understanding, and applying the principles of resilience enhancement. While history is replete with examples of the human capacity to confront, survive and even thrive in the face of life's many adversities, we need to consolidate these observations along with all else that we know about human behavior in order to promote resilience for children and their families.

The focus on definition in our previous volume (Prince-Embury and Saklofske, 2013) made obvious sense in a field that had been struggling for clarity of definition and empirically based assessment. However, practical application of the construct of resilience to prepare children and youth for life challenges requires more

scientific demonstration of these principles in practice. In a mental health field with still a strong focus on the medical model, reduction of symptoms has been the benchmark for assessing the efficacy of treatment. Application of resilience requires a preventive model, presumably in the absence of psychological symptoms or before they might occur and in the same vein, a growth-based model. For this reason, constructs of resilience as strength based are needed as well as tools for gauging changes in these strengths.

The past few years have been witness to a plethora of self-help books and interventions that have not always been systematically linked to sound core developmental constructs. As well, these interventions are often not empirically tested for either efficacy or effectiveness. Some interventions that are found to be effective in reducing symptoms claim to increase resiliency while this implied mediating process is not documented or substantiated. Thus there is a disconnect between the complex theory and body of research on resiliency and the abundant self-help products employing this term. The current volume is a beginning to addressing this need by requesting that authors of the following chapters describe their programs in as much detail and specificity as possible while providing evidence for their effectiveness.

This volume is divided into three parts, the first addresses general principles and the next two describe different settings that, in turn, may require different considerations in the design, administration and assessment of the intervention. Part I includes four chapters each presenting a broad-based theoretical framework for understanding resiliency upon which interventions might be based. Part II presents interventions for youth in community and school contexts who have not been diagnosed with clinical disorders, but may be described as at-risk. The interventions presented in these chapters are based on a preventive model that resilience interventions may be presented to nonclinical populations of youth to enhance their resilience to future adversity. Part III presents interventions designed for youth diagnosed with specific disorders. These interventions take into account the needs of youth specific to their diagnostic circumstances.

Introduction and General Issues

Following this introductory chapter (Chap. 1) are three more chapters that address foundational issues related to what we know about resiliency in order to move this knowledge to practice and applications. In Chap. 2 titled "Review of Resilience Conceptual and Assessment Issues," Prince-Embury briefly reviews definitions of resilience and the evolution of theory and research relating to this construct. In Chap. 3, "A Three Factor Model of Personal Resiliency and Related Assessment" she describes a three-factor model of personal resiliency (Prince-Embury, 2007, Prince-Embury and Courville, 2008a, 2008b, Prince-Embury and Steer, 2010) that is based on three-core developmental systems commonly associated with adaptive functioning. In addition, this chapter will summarize and integrate the developmental theory underlying the three-factor model, present theory, and research evidence supporting the model. Interventions associated with each global aspect of personal

resiliency are presented. This model was developed by Prince-Embury (2007) as a way of simplifying resilience theory for practical application, in conjunction with the development of the Resiliency Scales for Children and Adolescents (RSCA) as a user friendly tool for tapping the three-factor model. The RSCA was created and normed in the USA but has been applied internationally.

Chapter 4 "Creating Resilient Mindsets in Children and Adults: A Strength-Based Approach for Clinical and Non-Clinical Populations" by Brooks and Brooks takes as a central focus the concept of a "resilient mindset," applying this concept to both clinical and nonclinical populations in the US schools and clinical settings. In terms of both groups of children, they describe techniques that parents, teachers, and therapists can use in a variety of settings to reinforce a resilient mindset with its accompanying behaviors in children of all ages. They also describe techniques that therapists can use with adult patients or what adults in nonclinical populations can do to strengthen a resilient mindset and lifestyle. The chapter includes case examples capturing a prevention and intervention approach.

Interventions for Schools and Other Nonclinical Populations

Part II presents interventions to enhance resiliency in nonclinical populations. These interventions describe programs that may be applied universally or to at-risk groups of children in settings such as schools, after school activity programs or camps. The different parameters described in each chapter include the selection of children to receive the intervention, cooperation of parents and associated agencies, implementation and assessment of the intervention.

Chapter 5, "Using the Friends Program to promote resilience in cross-cultural populations" written by Paula Barret, Marita Cooper, Julia Gallegos and based in Australia discusses protective and risk factors related to emotional well-being in youths that are needed to provide a framework for the development of resilience-building programs. A brief review of resilience enhancement in youths is provided as well as introduction of the "FRIENDS" protocol, a social-emotional skills program. The FRIENDS program is a robustly supported program and is the only program endorsed by the World Health Organization for the prevention and treatment of anxiety and depression in children and youth. Description of the FRIENDS programs, research evaluating program outcomes, and adaptations of the programs for use with diverse youth populations are also included. Lastly, recent innovations in conceptualization, research, assessment, and treatment of resilience as well as future directions for research are discussed. Although designed for the prevention of anxiety and depression, this chapter was included in the first part of our volume because of its more general applicability.

Chapter 6, "Girls Leading Outward (GLO); a school-based leadership program to Promote Resilience for at-risk middle school girls," by Stepney, White, Far, and Elias describe GLO as a positive youth development program for at-risk middle school girls that not only seeks to prevent future problems, but also aims to foster

resilience. GLO focuses predominately on urban, African-American and Latina students from low-income communities in the USA, with a goal of reaching them prior to their transition to high school. It provides a safe space for girls to express their opinions, voice their concerns, and develop positive relationships with their peers. Through the program, girls are equipped with the skills necessary to effectively problem-solve, overcome obstacles, and manage conflicts with others. Key skills learned include emotion regulation, effective communication and assertiveness, active listening, goal setting, and problem solving.

Chapter 7 "Promoting Resilience through Executive Function Training for Homeless and Highly Mobile Preschoolers" is presented by Casey, Finsaas, Carlson, Zelazo, Murphy, Durkin, Lister, and Masten This chapter provides an overview of their research program designed to understand and promote resilience in an extremely disadvantaged group of children experiencing homelessness with their families in the USA. The authors provide an overview on the risks and resilience of homeless children and the evolution of a translational research program focused on executive function skills as the change target. A developing intervention designed to boost executive function in homeless and other highly mobile children is described, including the theory of change, components of the intervention and the lessons learned from the iterative strategy that is shaping the final form of a preschool intervention for a future efficacy trial. Challenges and ethical issues are described as well as preliminary findings. The importance of collaboration among resilience scientists, preschool teachers from a university laboratory school and community-based programs, shelter staff, and parents in the design and refinement of this intervention will be emphasized.

Chapter 8 "Your Journey Together: Promoting Resilience in the Foster Care System" by Smith, LeBuffe, Alleyne, Mackrain, Sperry, and Likins begins by reminding that there are over 400,000 children in the foster care system in the USA. According to the authors, those children who enter foster care present with three to seven times as many physical, mental and developmental problems as other children. In addition, the separation from their family of origin and disruptions in foster care placements create additional risk factors. Not only the children but the biological and foster parents often have lives characterized by multiple risk factors. This chapter describes a program designed to offset the negative effects of these risk factors, to promote the resilience of both the children and the parents, and to encourage and work toward reunification and permanency. The "Your Journey Together" program is designed for implementation to groups or individuals in office or home settings and uses evidence-based assessments and research-informed, reliance-enhancing strategies. This chapter describes the model, presents a case illustration and preliminary outcome data, and discusses implementation challenges.

Chapter 9, "Building Resilience in Children the Sesame Street Way," written by Oades-Sese, Cohen, Allen, and Lewis, presents a description of an 8-week intervention using a multimedia toolkit to foster resilience in children (ages 3–8). The multimedia toolkit is aimed at increasing children's emotional literacy, attachment, emotional regulation, and problem-solving skills through Sesame Street videos, hands-on activities, web games, and books.

Chapter 10 "Enhancing Classroom Resilience with ClassMaps Consultation" by Song, Sikorski, Doll, and Sikorski turns attention to school-based initiatives in promoting resiliency in children. ClassMaps is based on over 20 years of research, in which classroom environmental factors are identified and enhanced in a collaborative manner with the teachers and students. This chapter discusses the ClassMaps model, research supporting its use, and presents a case study of a third-grade Spanish Immersion classroom in a US public suburban elementary school.

Chapter 11 "The Resilience Doughnut Model an Intervention Program aimed at Building Resilience in Adolescence" was written by Lynn Worsley and showcases a program that has been successfully applied with at-risk children in Australia. Worsley defines resilience as a process of continual development of personal competence while negotiating available resources in the face of adversity. The Resilience Doughnut intervention is premised on the author's model that resilience is developed in seven contexts of existing relationships around the child. The aim of Resilience Doughnut intervention is to determine and link the most positive contexts together in a meaningful way for each child. The research findings presented in this chapter support the view that there are multiple pathways to resilience which are dependent on the interaction of positive intentional interactions around the developing youth.

Chapter 12, "Community and Residential Programs: Spurwink Mental Health System in Maine" authored by Butler and Francis, examines resiliency profiles of school-age youth who attend one of the three after-school/summer community-based programs within a large multi-site mental health system in Maine and compares the resilience of these youths with those in residential treatment. The programs offer a variety of activities to promote skill development, healthy social interactions, budding hobbies and talents, community involvement, and a place to belong. One of the programs focuses on nonelectronic gaming activities with elaborate historic events reenacted in a game-like fashion. Measures assessing resiliency, self-esteem, risky behaviors, hope, and assets administered at the beginning and end of the program are presented in support of this program.

In Chap. 13, "Resilience in Youth who have been Exposure to Violence," Nancy Ghali discusses youth who have been victims of crime or are exposed to community violence and their risk for developing conduct problems as related to personal resiliency and parental relatedness. Specifically this chapter explores the relationship between resiliency factors such as sense of mastery, relatedness, emotional reactivity, relatedness to parents, friends, and teachers, and conduct problems in youth who have been exposed to violence in a general population of high school students in the USA. Ghali presents findings suggesting that those who have high exposure to violence and a high level of emotional reactivity and a low connection to parents and teachers report more aggressive behavior and rule breaking behavior. Intervention implications are discussed.

Chapter 14, "Fostering Resilience in Greek Schools in Times of Economic Crisis," was written by Hatzigristou, Adamopoulou, and Lampropoulou from the University of Athens, Greece. The authors discuss how stressful events and

unsettling times, including economic crisis, have the potential to negatively impact the lives of children and the overall school community. Responding to a recent Greek economic crisis situation, the Center for Research and Practice in School Psychology of the University of Athens in cooperation with the Society for School and Family Consultation and Research developed a multi-level school-based crisis prevention and intervention program that promotes resilience and well-being of teachers and students. This chapter discusses the program and its implementation.

Interventions for Clinical Populations

In some instances, interventions to enhance resiliency may be targeted to a specific clinical population with specific clinical issues. Interventions to enhance resiliency in clinical samples may be designed to either address issues presented by the specific disorder or related impairments in functioning. This section describes resiliency programs for youth presenting with a variety of disabilities including intellectual disability, attention-deficit/hyperactivity disorder (ADHD), autism spectrum disorder (ASD), chronic illness, and transgender adjustment disorder. The programs described in this section of the book have been implemented in the USA, Canada, and Australia.

Chapter 15, "Developing Social Competence through a Resilience Mode" written by Alvord, Rich, and Berghorst, not only discusses interventions with a population of primarily ADHD and anxiety-disordered children but also includes children with comorbid conditions and learning disabilities in the USA. The authors discuss the need for a comprehensive intervention model with includes resilience-building and social-competence skills as well as the importance of treating these issues in the clinical setting concurrent with other intervention strategies A detailed discussion of RBP, including generalizing the skills to home and school, is presented in this chapter.

Chapter 16, "Promoting Resilience in Children with Intellectual Disability" by Gilmore, Campbell, Shochet, and Roberts, describes the characteristics associated with intellectual disability that make these children more vulnerable to a range of adverse developmental outcomes. Research is reviewed about resilience with a specific focus on children who are developing atypically, including those with intellectual disability. The authors then describe the adaptation and implementation of an established resilience-building intervention, "Aussie Optimism" in a randomized control trial. The aim of the intervention is to promote resilience in the children at the time of transitioning to high school in Australia.

Chapter 17, "Resilience Perspectives for Autism Spectrum Disorder" is authored by McCrimmon and Montgomery, two Canadian researchers and School Psychologists. These authors offer the definition of resilience as a dynamic process encompassing good or positive outcome in an individual despite experiences of serious or significant adversity or trauma as suggested by Luthar, Cicchetti, and Becker (2000). Resilience theory has implications for children with disabilities,

such as ASD who present with uneven profiles of strengths and weakness. In this chapter the authors discuss key concepts and research relevant to resilience (protective and risk factors) in ASD. Research- and theory-supported suggestions for individual assessment and intervention aimed at reducing risk and increasing protective factors (buffers) are presented. Examples of resilience-focused intervention programs for children (Self-Regulation Program for Awareness and Resilience in Kids) are provided. In addition, preliminary results of pilot studies of innovative programming incorporating resilience theory will be described.

Chapter 18, "Resilience in ADHD: School-based Intervention to Promote Social-Emotional Well-being," by Climie and Deen focuses on students with exceptional learning needs. Children with ADHD may be particularly vulnerable and require additional supports to be successful. In school, children with ADHD/LD often demonstrate behavioral or social-emotional difficulties, such as low self-confidence, anxiety, or social isolation. The implementation of a low-cost, school-wide intervention program that promotes social-emotional development can be effective in enhancing the resilience of students with ADHD. Previous research has found that morning exercise that allows the heart rate to be at an elevated level for an extended period of time primes the brain for learning throughout the course of the day (Ratey, 2008). This exercise may be particularly beneficial for children with ADHD/LD because it allows them to move their bodies and engage their brain for learning. The SPARK for Learning program, a 20-min daily physical exercise program that allows students to engage in physical activity during the first period of each school day, is described.

Chapter 19 "Resiliency in Pediatric Chronic Illness: Assisting Youth at School and Home" is contributed by Perfect and Frye and is intended to demonstrate how resiliency plays a role in youth's adjustment and management of chronic medical conditions in the USA. The authors provide support for employing a resiliency perspective in aiding youth with chronic illness for more positive outcomes, such as better disease control, healthier interpersonal relationships, and greater self-confidence in their own abilities. Further, the authors address school difficulties faced by youth with chronic illness, highlighting strategies that may work to promote better school functioning. Case examples and data from a study focused on integrating medical, mental health, and school psychological services for adolescents with diabetes illustrate the connections between resiliency and health issues among youth.

Chapter 20 "Resilience Building: A Social Ecological Approach to Intervention with a Trans-sexual Youth" authored by Allan and Ungar presents a strengths-based Social Ecological Approach (S.E.A.) to counseling a transgendered youth by viewing formal and informal supports as potential sources of resilience and positive development. Specifically, S.E.A. focuses on enhancing children's sense of personal self-control, agency and power, experience of social justice and fairness, belonging and purpose, spirituality, and cultural rootedness. Interventions reflect a therapeutic contract to achieve culturally meaningful goals and ensure clients successfully transition their success in treatment back into their "real-life" social ecologies.

Summary

In summary, this volume and the chapters presented in the volume bring together a body of applied translational work to enhance resilience in children and adolescents. The authors are from across the globe and represent a diversity of theoretical backgrounds while all agreeing on the importance of translating resilience theory into applied intervention for our youth. The authors present similar definitions of resilience based in early developmental theory and research on resilience "the ability to bounce back in the face of adversity" while they focus on slightly different aspects of that definition (resilient mindset, school engagement, social skills, ability to discharge excess energy through access to structured activity, etc.). However, the location of the intervention varies from the clinician's office, workshops for parents and caregivers, schools, classrooms, playgrounds, and after school programs. Some authors have focused on resilience within a multileveled context while others have directed attention to one or two levels of this context such as the individual child or the family. Some authors have focused on implementation of their programs and interventions with details of various obstacles and successes in the process. A few chapters intrigue us with transformations that occurred in the course of implementing the intervention. It appears that implementing resilience-enhancing interventions often had unforeseen consequences of enhancing resilience in the larger system and perhaps on the originators of the interventions as well.

The programs and interventions presented in this volume vary also in the intended target of the interventions from the ordinary child "who's parent did not believe needed more resiliency" through the ordinary school classroom, to children at risk due to reported maltreatment within the family, children in foster care placement, children distressed by nationwide socio-economic crisis, or children specifically diagnosed with a clinical disorder such as LD, ADHD, or anxiety disorder. Aspects of resilience applied preventively appear similar across target group although interventions targeting specific symptoms of disorders undoubtedly vary accordingly.

The authors were also asked to address whether or not their interventions "worked" by seeking and providing empirical evidence of significant effects. Some of the researchers were able to approach this question in a systematic, scientific manner, while some have only impressions, anecdotes and preliminary results at this time because their programs are so new. In many cases the verdict is still out but preliminary findings are positive. Perhaps, along with the development of resilience enhancement strategies, we need to be developing a range of outcome measures to assess both short-term and long-term outcomes of interventions at different levels of analysis.

In conclusion we suggest that this volume, the programs described and the science of applied resilience enhancement is a work in progress. We thank and salute all of the authors who have written about their work from the perspective of the current research literature and their own "clinical" experience. We invite the readers to examine, adopt, adapt and evaluate the programs and approaches described here as they apply to the children with whom they work and the settings in which they live.

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