

Cross-Cultural Advancements in Positive Psychology 17
Series Editor: Antonella Delle Fave

Sophie Leontopoulou
Antonella Delle Fave *Editors*

Emerging Adulthood in the COVID-19 Pandemic and Other Crises: Individual and Relational Resources

 Springer

Cross-Cultural Advancements in Positive Psychology

Volume 17

Series Editor

Antonella Delle Fave , University of Milano, Milano, Italy


The aim of the Cross Cultural Advancements in Positive Psychology book series is to spread a universal and culture-fair perspective on good life promotion. The series will advance a deeper understanding of the cross-cultural differences in well-being conceptualization. A deeper understanding can affect psychological theories, interventions and social policies in various domains, from health to education, from work to leisure. Books in the series will investigate such issues as enhanced mobility of people across nations, ethnic conflicts and the challenges faced by traditional communities due to the pervasive spreading of modernization trends. New instruments and models will be proposed to identify the crucial components of well-being in the process of acculturation. This series will also explore dimensions and components of happiness that are currently overlooked because happiness research is grounded in the Western tradition, and these dimensions do not belong to the Western cultural frame of mind and values.


Sophie Leontopoulou • Antonella Delle Fave
Editors

Emerging Adulthood in the COVID-19 Pandemic and Other Crises: Individual and Relational Resources

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*To my sister Stella, bright star, embodiment
of positivity and resilience.*

Sophie Leontopoulou

*To the memory of my parents Guido
and Giuseppina, daily models of resilient
navigation through life challenges.*

Antonella Delle Fave

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Chapter 1

Introduction



Sophie Leontopoulou and Antonella Delle Fave

Abstract The theory of emerging adulthood, as proposed by Arnett (2000, 2004) sought to describe an extended period of development between adolescence and young adulthood covering the ages between 18 and 29. Significant social changes affecting young people since the 1960s led to the creation of this new period of the life course, including prolongation of studies, that led to a delay in the assumption of adult roles; increased access of women to higher education and career opportunities outside the family; and greater tolerance of premarital sexuality and cohabitation. Arnett (2004) delineated five distinct features of emerging adulthood, including identity exploration, instability, focus on the self, feeling in-between adolescence and young adulthood, and possibilities. He also described criteria for adulthood, primarily accepting responsibility for one's self, making independent decisions, and becoming financially independent. The new conceptualization rapidly gathered momentum, and empirical evidence from different countries gradually accumulated, together with practical applications and interventions. Meanwhile, global and local crises emerged, which impacted on emerging adults' experience, development and goals in unprecedented ways. This book represents an attempt to explore positive and negative dimensions of well-being among emerging adults from different world regions under challenging conditions, through empirical evidence collected during the COVID-19 pandemic and the Greek economic crisis, and to identify individual and relational resources that may foster their positive development in different contexts.

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The theory of emerging adulthood, as proposed by Arnett (2000, 2004), sought to describe an extended period of development between adolescence and young adulthood covering the ages between 18 and 29. It is a culturally embedded theory, in that emerging adulthood is primarily observed in industrialized societies, even though it is more recently and steadily growing in developing countries (Tanner & Arnett, 2016). Significant social changes affecting young people since the 1960s led to the creation of this new period of the life course. These included prolongation of studies, and consequently, delay in the assumption of adult roles, including career, marriage, and parenthood; increased access of women to higher education and career opportunities outside the family; and greater tolerance of premarital sexuality and cohabitation. Arnett (2004) delineated five distinct features of emerging adulthood, including identity exploration, instability, focus on the self, feeling in-between adolescence and young adulthood, and possibilities. He also described criteria for adulthood, primarily accepting responsibility for one's self, making independent decisions, and becoming financially independent.

The new conceptualization rapidly gathered momentum, and empirical evidence from different countries gradually accumulated, together with practical applications and interventions, targeted to the specific needs and challenges of emerging adults, and aimed at promoting youth's positive development and well-being. Meanwhile, global and local crises emerged, which impacted on emerging adults' experience, development, and goals in unprecedented ways.

This book represents an attempt to explore positive and negative dimensions of well-being among emerging adults under challenging conditions, through empirical evidence collected during the COVID-19 pandemic and the Greek economic crisis, and to identify individual and relational resources that may foster their positive development in different contexts. In the effort to achieve adequate depth and breadth by presenting relevant, novel, and pertinent scientific evidence, researchers from different world regions were invited to contribute to the book, leading to the inclusion of 18 chapters, divided into three sections and briefly introduced here.

Part I presents some overarching theoretical perspectives and international explorations of challenges and resources of emerging adulthood during times of crisis.

Bronk in Chap. 2 provides an overview of theories and models of purpose in life, a crucial dimension in human development. The chapter synthesizes research across different disciplines to argue that emerging adults are motivated to pursue purposes during trying times, despite enhanced challenges. Both the literature exploring the benefits of leading a life of purpose, as well as the related empirical evidence are discussed, focusing on the environmental and personal features that enable individuals to pursue purposes amidst hardship. The final section offers suggestions for helping young people around the world lead lives of purpose, especially during trying times.

Taking as an example the recent severe and prolonged Greek crisis, in Chap. 3 Chalari provides an overview of the concept of crisis and how it can be understood and shaped by emerging adults through collective meaning making of fear, unsettlement, and lived experiences. The chapter concludes by emphasizing the potential relevance of studying the uniqueness of the prolonged Greek crisis to develop

strategies for supporting emerging adults' well-being in other problematic socio-economic contexts.

In Chap. 4 Giotsa provides an international overview of emerging adults' mental health during the COVID-19 pandemic, with a specific focus on their interpersonal relationships with parents and with partners in romantic relationships. Changes and conflicts related to the social distancing measures are highlighted, including lack of communication and intimacy, as well as emotional detachment within families and within romantic relationships. Positive aspects and resources, such as sharing emotions, pursuing purpose and taking proactive care of others' needs are also highlighted.

Part II primarily includes empirical evidence collected across countries about the daily lives and experiences of emerging adults during the COVID-19 pandemic, as well as one study conducted during the Greek economic crisis. The chapters address both positive and negative dimensions of emerging adults' patterns of adjustment to the crisis-related challenges.

Adopting a mixed-method approach, in Chap. 5 Sanzò, Borgonovo, Bernardelli, and Delle Fave explore mental health levels and qualitative descriptions of perceived challenges and opportunities for well-being among Italian University students during the first lockdown phase of the pandemic. Over 90% of the participants were classified as moderately mentally healthy or flourishing. Distance learning activities and interpersonal relations emerged as key resources in helping participants structure their time budget and adaptively cope with the pandemic-related challenges. The competences deemed as most relevant to face the pandemic situation were adaptive coping strategies, optimism, hardiness, and resilience.

In Chap. 6 Karakasidou, Raftopoulou, Papadimitriou, Pezirkianidis, and Stalikas report findings obtained during the COVID-19 pandemic from Greek University students. Overall, participant reported moderate to high levels of well-being in its different facets, as well as low to moderate levels of negative emotions. Perceived satisfaction with distance learning emerged as a relevant resource, associated with most well-being indicators.

Wilson Fadiji, Chigeza, and Shoko in Chap. 7 provide results of a qualitative study conducted among South African University students, exploring the role of meaning making and its relations with well-being during the COVID-19 lockdown. The prominent themes in participants' reports were the re-emergence of value systems, a renewed sense of connectedness, self-extension, or otherness, the acquisition of new skills and accomplishments, and the development of inner strength and growth. The dynamics between self-care and caring for others lies at the core of these emerging adults' meaning making process, promoting their well-being under inherently disempowering circumstances.

In Chap. 8 Chan, Fang, Cheung, Luk, Leung, and Chen provide findings from a study involving Chinese emerging adults, to investigate the interplay of growth mindset and self-compassion in their relationship with resilience during the COVID-19 pandemic. Both growth mindset and self-compassion emerged as significant though independent predictors of resilience. In particular, among the components of self-compassion, self-kindness, and mindfulness were specifically and

positively related to resilience levels. Moreover, the interaction between growth mindset and the self-compassion component of common humanity (which refers to the understanding of life hardships as shared human experiences) positively predicted resilience. The discussion of these findings is framed in a culture-sensitive perspective.

Chapter 9 features an empirical investigation of the positive and negative dimensions of well-being among emerging adults in Mexico, during the COVID-19 pandemic. González-Arratia López-Fuentes and Torres Muñoz explore the relationship of self-efficacy and stress perception with resilience and happiness, taking into account the potential role of age and comparing self-efficacy, happiness and stress values across groups of participants with different resilience levels. Overall, and in line with international evidence, positive relationships were observed between self-efficacy, resilience, and happiness, while negative ones with perceived stress.

In Chap. 10 Papastylianou and Zerva investigate the role of resilience, loneliness, and perceived parental rearing behaviors as predictors of life satisfaction among Greek University students during COVID-19 pandemic. Both resilience and loneliness were significantly associated with participants' life satisfaction, positively the former and negatively the latter, whereas perceived parental rearing behaviors did not emerge as a significant predictor in the final model. Moreover, neither gender nor residing with parents during quarantine significantly predicted life satisfaction.

Scharf, Enav and Scharf in Chap. 11 use a mixed-method approach to investigate romantic relationships of Arab emerging adults living in Israel during the pandemic. They found that despite pandemic-related restrictions created difficulties for becoming acquainted and dating in public places, they also propelled creativity and the use of other forms of communication to attain and preserve closeness and intimacy. Participants with higher levels of meaning and a growth belief regarding relationships, as well as lower levels of other-perfectionism attributed higher importance to romantic relationships. Additionally, parental models of relational intimacy were positively associated with a growth view of relationships and higher levels of perceived meaning in life.

In Chap. 12 Leontopoulou and Chletsos investigate perceived hope among University students during the Greek socio-economic crisis, in relation to family and individual economic conditions, recollected parental involvement in participants' school activities, and perceived parental hope. The findings suggested that personal and family income were strongly associated with emerging adults' experience of the severity of the crisis. This in turn was mirrored on levels of youths' hope, in addition to their perceptions of parental hope. Higher recollected parental school involvement seemed to contribute to emerging adults' hope even under crisis.

The third section of the book deals with students' experience of academic activities during the pandemic, and with University-based interventions designed to support emerging adults' psychosocial resources.

Asanjarani in Chap. 13 reports on academic well-being and engagement among emerging adults during the pandemic period, specifically focusing on the issues raised by the necessity to move all teaching activities to online platforms. Moving from an analysis of the different aspects of online learning, including its

shortcomings and challenges for teachers and students, the author invites psychologists and educators to design interventions for promoting well-being, healthy academic engagement, motivation and purpose in the learning process of emerging adults.

In Chap. 14 Shernoff presents an example of game-based learning, suggesting its potential for promoting flow and deep learning among University students in times of crisis, considering that lack of concentration and engagement were identified as relevant barriers to learning during the pandemic. A 3-year quasi experimental study involving US emerging adults who took an undergraduate engineering course was implemented to compare a video game learning approach to a traditional one. Students taking the game-based course reported higher intrinsic motivation, work-play integration, engagement, as well as better performance on tests of complex course concepts designed to measure deep learning. In light of the current spreading of online academic activities across countries, these findings can represent useful suggestions to improve the quality of learning in Universities.

Chapter 15 hosts a mixed-method study designed to investigate the role of music in undergraduate students' well-being during the COVID-19 lockdown. Chrysostomou, Triantafyllaki, Anagnostopoulou, and Zioga assessed students' musical training, well-being and the use of music for mood regulation. A positive relationship was detected between perception of the beneficial role of music for well-being, and well-being scores. Three groups of participants were then identified based on their well-being and musical training levels. Qualitative results highlighted that students with higher musical training and students with higher well-being levels (regardless of training) used music in more diverse ways compared to those with low musical training or low well-being levels, who primarily used music for emotional discharge.

Chapter 16 focuses on empowering Brazilian emerging adults to face the post-COVID-19 challenges. Araujo, Pinheiro, Arantes, and Pereira explored how collaborative work may support graduate and undergraduate students in building purpose and well-being in their lives and in the lives of others. An educational process is described in which active learning techniques, hybrid learning, and technology tools were used to invite students in small working groups to face and solve real problems occurring in their social environment, and to design interventions to be implemented in the community. The learning strategies and emergent solution prototypes can represent examples to be adapted to other contexts, with the aim of empowering emerging adults to deal with difficulties and crises.

In Chap. 17 Karampas, Pezirkianidis, and Stalikas present a novel internet-delivered intervention for emerging adults developed during the pandemic that combines stress mindset training with Acceptance and Commitment Therapy. Greek University students were randomly assigned to a five-week intervention and a control group. Participants in the intervention group reported a higher "stress-is-enhancing" mindset and a lower "stress-is-debilitating" mindset. Considering the contribution of stress mindset to both the level of perceived stress and the related coping strategies, these findings bear useful suggestions for designing interventions

aimed at fostering emergent adults' mental health and performance under stressful circumstances.

Chapter 18 by Reynolds reports on a program aimed at building resilience for emerging adult pre-service students in teaching and librarianship. Instructional guidelines for designing culturally responsive resilience coursework, knowledge-building, and practice opportunities for emerging adults in these fields are described. Curriculum guidelines refer to both formal higher educational offerings, and practice-based wellness classes in resilience building, mindfulness and compassion training.

Having described the purpose of this book and outlined all chapter contributions that inform and shape it, we hope that its appeal for a wide array of readers—researchers and students in different fields, practitioners, counsellors, and trainers, as well as the general public—can be glimpsed. The volume includes novel quantitative and qualitative research, interventions studies, as well as critical reviews and conceptual papers. In bringing together such a diverse group of scholars, who collected evidence from a wide range of countries across continents, our aim was to provide a broad and deep understanding of emerging adults' mobilization and exploitation of personal and relational resources in facing life challenges, focusing on the COVID-19 pandemic and the Greek economic crisis as exemplary critical conditions. In today's turbulent and unstable societal and world context, the theme of successful adaptation to problematic circumstances is highly relevant to professionals and researchers in psychology, developmental science, education, sociology, economics, and the clinical fields of crisis/trauma and counselling. We, therefore, hope that this book may represent both a useful reading, and a starting point for further advancements in the study of the challenges and resources faced by emerging adults worldwide.

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Part I
On Crises, Emerging Adults,
and Well-being

Chapter 2

Discovering and Pursuing Purpose in Trying Times



Kendall Cotton Bronk

Abstract Over the past twenty years, research on purpose has increased dramatically, and this growing body of research consistently points to a myriad of physical, psychological, social, and even academic benefits associated with leading a life of purpose, especially among emerging adults. However, much of this research has focused on young people amidst times of relative calm and tranquility. What does the pursuit of purpose look like among young people amidst times of turbulence? Are young people likely to pursue lives of purpose during challenging times, and if so, what does this look like? What does it entail? In addition to offering a definition of purpose, the present chapter synthesizes research across different disciplines to argue that emerging adults are motivated to pursue purposes during trying times, despite the enhanced challenges associated with doing so. More specifically, this chapter outlines a conceptualization of purpose used regularly in research on the topic, references literature on the benefits of leading a life of purpose—especially during challenging times—and reviews relevant empirical research on the external supports and internal characteristics that enable individuals to pursue purposes amidst hardship. Implications for helping young people around the world lead lives of purpose, especially during trying times, are also addressed.

Keywords Purpose in life · Emerging adulthood · Positive youth development

Life is never made unbearable by circumstances, but only by lack of meaning and purpose.
– Viktor E. Frankl

Viktor Emile Frankl was born on March 26, 1905, on the top floor of his family's home in Vienna Austria, to parents who were Jewish civil servants (Viktor Frankl Institute, 2021). By all accounts he was a bright, inquisitive child, who was both

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deeply emotional and also deeply rational. Those who knew him say he had a terrific sense of humor. As early as high school, he took an interest in psychology, and as a young adult, he worked as a Professor of Neurology and Psychiatry at the University of Vienna. In these roles, he began writing a book about purpose and its critical role in human survival. This book would become his life's work.

At the age of 36, he met and married the love of his life, Tilly Grosser. It was 1941. Just a few months later, the couple learned they were expecting their first child. They were overjoyed. However, only a few months after this, with World War II in underway, the couple was arrested by the Nazis. Tilly was forced to abort their child, and the Nazis seized and destroyed Frankl's manuscript, his book on the importance of purpose. Viktor and Tilly were imprisoned in Auschwitz. Viktor remained at the camp for several months, but Tilly was quickly moved to another camp, Bergen Belsen. Sadly—tragically—she died at Bergen Belsen, at the age of 24.

Unaware of his wife's fate, Frankl spent the next nearly three years in four different concentration camp. He used the time to study people, and what he learned confirmed what he had long suspected: people can withstand a lot if they have a reason to live.

A man who becomes conscious of the responsibility he bears toward a human being who affectionately waits for him or to an unfinished work, will never be able to throw away his life. He knows the 'why' for his existence and will be able to bear almost any 'how.' (Frankl, 1946, p. 101)

While in the camps, Frankl used his knowledge of the power of purpose to keep himself going. When he came down with Typhoid fever, he started re-writing his manuscript on scraps of paper he found and stole. Writing helped sustain him. Finishing his book and returning to care for his wife— he did not know that she had died— provided him with a reason to live.

On April 27, 1945, the final camp Frankl was in was liberated by the Americans, and Frankl was freed. Upon being released from the concentration camp, Frankl was finally able to pen and publish his book on purpose. He wrote the book in only 9 days, having thought it through so carefully while a prisoner. *Man's Search for Meaning* was published in Austria in 1946, and since then, it has been translated into 24 languages and sold more than 10 million copies. Frankl's life's work offers an inspiring example of someone who pursued purpose in incredibly trying times.

Today, we find ourselves living in challenging times, although, thankfully, for most people anyway, the challenges we currently confront are not nearly as dire as the ones Frankl confronted. However, we find ourselves beset by economic instability, social and political change, and a serious global pandemic. Accordingly, it is difficult to argue that these are anything other than challenging times. This chapter reviews research that sheds light on the extent to which and the manner in which emerging adults are motivated to and capable of pursuing purpose in times of challenge. In addition, this chapter outlines empirically based strategies adults can employ to support young people pursuing purpose amidst difficult circumstances.

2.1 Purpose Defined

Before diving into the ways that purpose may help emerging adults navigate challenging circumstances, it is important to offer a clear definition of the construct. In his book, Frankl uses *purpose* and *meaning* interchangeably, but to conduct scientific research on these constructs, it is necessary to clearly differentiate them. To that end, and to honor Frankl's conceptualization of purpose, my colleagues and I proposed a definition that has been regularly used in research. *A purpose in life refers to an active commitment to accomplish aims that are meaningful to the self and motivated by a desire to contribute to the world beyond the self* (Damon et al., 2003). This definition has three important dimensions. First, a purpose is an active commitment. This means that a purpose is not something individuals merely think or dream about. It is something they act on. Something they *do*. Second, purpose is a prospective construct (Bronk & Mitchell, 2021). It represents a forward-looking, far-horizon commitment to act. As a goal of sorts, it represents a stable and enduring aim that provides an orienting sense of direction. Third, in addition to being meaningful to the self, a purpose in life is also of consequence to the world beyond the self. Purposes are inspired by a desire to contribute to the broader world in personally meaningful ways. Based on this definition, research suggests emerging adults find purpose in a wide range of activities, including in serving God, volunteering in their communities, caring for their families, creating new works of art, advancing political and social change, and pursuing careers that enable them to make a personally meaningful difference in the broader world (Baumsteiger et al., in press, 2022; Damon, 2008).

Importantly, this definition also differentiates purpose from meaning. According to Baumeister (1991), meaning encompasses values, efficacy, self-worth, and purpose. Others have noted that meaning is comprised of coherence, significance, and purpose (Martela & Steger, 2016). Although these definitions vary, they share a perspective that views purpose as a dimension or instantiation of meaning. Accordingly, individuals can find meaning in any experience that makes their lives feel more significant, but they can only find purpose in those experiences that are also goal-oriented in nature and motivated by a desire to make a difference in the broader world (Bronk & Mitchell, in press). This means that whereas taking a walk in the woods might make one's life feel meaningful, working to preserve the environment might instead fill one's life with purpose.

Based on this conceptualization, individuals may begin the search for purpose in adolescence, but it is often not until they reach emerging adulthood—or even later—that they identify a purpose for their lives (Bronk, 2013). By adolescence, individuals have gained the cognitive capacity to engage in the hypothetical-deductive reasoning required to seriously consider how they want to use their skills to contribute to the world beyond themselves (Inhelder & Piaget, 1958).

In addition to being capable of searching for purpose, adolescents and emerging adults also tend to be highly motivated to do so. Purpose formation and identity development go hand-in-hand; as individuals explore who they hope to become (the

identity question), some also consider what it is they hope to accomplish in their lives (the purpose question; Bronk, 2011). In fact, research finds that as individuals explore and commit to identities, they simultaneously explore and commit to purposes (Hill & Burrow, 2012). Purpose formation is related to healthy identity development for heterosexual as well as LGBTQ individuals (Collins et al., 2021). Given the critical role purpose plays in healthy identity formation (Bronk, 2011; Burrow & Hill, 2011; Damon, 2008; Erikson, 1968, 1980) and given that identity development today is typically not resolved until emerging adulthood (Côté & Levine, 2014), purpose is a particularly important construct to consider with regards to emerging adults.

2.2 Purpose and Psychological and Physical Well-being

Frankl argued that leading a life of purpose was crucial to staving off negative psychological states and supporting human survival. Recent empirical research backs up his theoretical claims. For instance, the presence of purpose has been found to be inversely related to loneliness, boredom, and suicide ideation (Bhagchandani, 2017; Dukes & Lorch, 1989; Fahlman et al., 2015; Heisel & Flett, 2004).

However, more recent research on purpose has been concerned with understanding the construct's role, not only in surviving, but also in thriving. Studies have concluded that purpose is correlated with indicators of psychological health, including hope, life satisfaction, and stronger and more abundant social ties (Bronk, 2011; Bronk et al., 2009; Steptoe & Fancourt, 2019). It has similarly been found to coexist with indicators of physical health, including less chronic pain, better sleep, and greater longevity (Dezutter et al., 2016; Hill & Turiano, 2014; Turner et al., 2017). Although these findings are correlational in nature, epigenetic research suggests that leading a purposeful life may lead to a more healthful genetic expression (Fredrickson et al., 2013), and other research finds that individuals with purpose, as compared to their peers, tend to engage in more health-sustaining behaviors, such as eating well, exercising regularly, and visiting the doctor (Hill et al., 2019; Kim et al., 2014). Consistent with this finding that individuals with purpose tend to take better care of their health, a recent study found that individuals with purpose, compared to individuals who lacked purpose, were more likely to get vaccinated against COVID-19 (Hill et al., 2021). Taken together, it seems clear that purpose not only correlates with physical health; it also contributes to it.

2.3 Benefits of Purpose Amidst Crises

In addition to the indicators of physical and psychological health that are likely to benefit all emerging adults, purpose is also associated with some indicators of well-being that are particularly likely to help young people weather challenging

circumstances (Pfund et al., 2020a). For instance, several studies have concluded that purpose promotes resilience to stress, which is inescapable during trying times (Bronk et al., 2018; Burrow & Hill, 2013; Gutowski et al., 2017). Purpose has been found to help emerging adults navigate the stress associated with trying to find work amidst the Great Recession and with managing the stress associated with being diagnosed with cancer (Bronk et al., 2018; Bronk et al., in press, 2022). In fact, researchers point to purpose as a critical resource for the development of resilience, or the ability to bounce back from stress and challenge (Smith et al., 2012). Relatedly, purpose has also been linked to both lower levels of daily distress and anxiety (Kiang, 2012). Although it is unclear what the mechanism is for these relationships, it seems likely that having a larger aim toward which to orient oneself provides a meaningful reason to keep going, despite obstacles, hardships, and setbacks.

Another way that purpose is likely to benefit emerging adults during times of challenge may have to do with the way purposeful emerging adults view obstacles in their paths. A creative study featured college students standing before a large hill in the middle of campus (Burrow et al., 2015). Half of the students were primed to reflect on their favorite movie, and the other half was primed to reflect on their purpose in life. Compared to the students primed to think about their favorite movie, students primed to think about their purpose estimated that the hill was steeper, but at the same time, they also reported that they were better prepared to climb it. In other words, in a purposeful mindset, emerging adults tended to view challenges—not as less significant—but as less overwhelming, less daunting, and more surmountable. The ability to view challenges as surmountable is an important capacity during difficult times.

Another study—a daily diary study—(Hill et al., 2018) similarly concluded that on days when stressful events occurred, individuals with purpose, compared to individuals who lacked purpose, reported greater positive affect, less negative affect, and fewer physical symptoms. In short, daily stressors do not seem to affect individuals with purpose as negatively as they affect individuals who lack purpose.

Related to the ability to manage challenge, purpose has also been found to contribute to the development of grit, or a sense of passion and persistence for one's goals (Duckworth et al., 2007). Over the course of a semester, college students with purpose were more likely than college students who lacked purpose to develop grit (Hill et al., 2016). This relationship did not hold in the other direction, meaning that gritty individuals were not particularly likely to develop purpose. This suggests that once individuals know what it is they hope to accomplish in their lives, they are likely to persevere and make progress toward it.

Finally, coping represents yet one more way that purpose is likely to benefit emerging adults confronting challenging times. Coping refers to the cognitive and behavioral efforts to manage internal and external demands, regulate stressful emotions, and modify distressing circumstances (Ishida & Okada, 2006; Lazarus & Folkman, 1984), and research finds that purposeful individuals tend to utilize more adaptive coping strategies (Stoyles et al., 2015). When individuals perceive stressors to be more manageable or more controllable—which is often the case

among more purposeful individuals (Burrow et al., 2015)—they are likely to employ effective problem-focused coping strategies to tackle them. Coping effectively is another important skill for navigating difficult times. Taken together, leading a life of purpose is likely to benefit emerging adults under most circumstances, but it appears to be particularly important for emerging adults facing hardships.

2.4 Leading a Life of Purpose Is Difficult in Difficult Times

Having established what a purpose is and why it is beneficial to emerging adults, it seems relevant to turn to research that explores what purposes look like among emerging adults facing trying times. Research, and perhaps common sense, suggests it is more difficult to discover and pursue purposes during challenging circumstances. To explain why this may be the case, it makes sense to reference Maslow's (1943) well-known hierarchy of needs. This theory suggests that the life-sustaining requirement of securing basic needs—such as personal safety, food, and shelter—may supplant the need to focus on self-actualizing aims, such as searching for a purpose in life.

Some recent empirical research supports this theoretical argument. For instance, individuals in dire circumstances may not anticipate long, positive, or predictable futures for themselves, and as a result, they may be less likely to orient to the future, which is required for purpose development (DuRant et al., 1994, 1995; Schmidt et al., 2016). A study of undocumented migrants who came to the USA as children found that as adolescents and emerging adults these young people struggled to envision their lives in the future, largely because of their uncertain immigration status, and this adversely impacted their ability to develop a purpose in life (Gonzalez et al., 2013). In this way, challenging circumstances appear to encourage individuals to focus on the here and now at the expense of focusing on the long term, which can hinder purpose development.

Not only can challenging circumstances make it more difficult for individuals to focus on the long term, but they can also make it more difficult to act in purposeful ways. A handful of studies have concluded that the presence of purpose is inversely related to the stress and anxiety associated with challenging circumstances (e.g., Bigler et al., 2001; Gutowski et al., 2017; Pinquart, 2002). It seems likely that stressful situations dominate thinking in a way that minimizes the planful thought and meaningful action associated with leading a life of purpose.

Finally, it is also the case that emerging adults confronting hardships may encounter real or perceived barriers to the pursuit of purpose. Individuals who find purpose in reporting the news, for instance, may struggle to access education and internships required to pursue their purposeful, professional path. In each of these ways and others, leading a life of purpose is made more difficult by challenging circumstances and in difficult contexts.

2.5 Internal Characteristics and External Supports

However, pursuing purpose amidst hardship is not impossible. In fact, a handful of recent studies of purpose among emerging adults facing challenges concluded that hardships that might otherwise curtail the development of purpose, can catalyze it, at least under certain circumstances. For instance, a mixed methods study, designed to explore the purpose-development process among ethnic minority youth living in low-income communities, first identified the challenges confronting youth (Bronk et al., 2020). Youth talked about hardships associated with poverty, discrimination, immigration status, and health problems. These difficulties could have stymied their pursuit of purpose. However, they did not, at least not under some circumstances. When the young people had access to social supports—such as parents, peer groups, mentors, or institutional supports, such as church groups or extracurricular organizations—that could help them find meaning in addressing these challenges, then the challenges—rather than curtailing the pursuit of purpose—catalyzed it. As an example, a Latina talked about the discrimination she suffered both as a woman and as first-generation immigrant from Mexico. Not surprisingly, she found this treatment very demoralizing. However, she discovered a number of young people who, like her, had experienced racism, sexism, and other forms of discrimination, but they were taking action to improve their circumstances. Once she met this group, she became inspired to do the same. In her interview, she reported that she had applied to college, where she planned to study pre-law. She wanted to become a lawyer and follow in the then Senator Kamala Harris’ footsteps to become a politician and fight for social change. In this way, she—like many of the other young people from low-income communities—encountered a personal hardship that in the presence of social support served to inspire the pursuit of purpose.

Other studies have come to similar conclusions. For instance, researchers concluded that ethnic minority youth often discover purposes in the hardships they experience straddling two cultures, the dominant culture and their ethnic minority culture (Kiang & Fuligni, 2010), and another study determined that familial support, including emotional, cognitive, and monetary support, was critical to purpose development (Moran et al., 2012).

Yet another study similarly concluded that hardships in the presence of support could inspire purpose. This study was conducted with young people of color living in urban, low-income communities (Gutowski et al., 2017) who reported facing many challenges, including financial, family, academic, vocational, peer, neighborhood, relocation, and immigration-related stressors. These hardships acted as barriers to purpose to the extent that they made it more difficult for young people to imagine themselves realizing their most personally significant aims. In some cases, these challenges became so significant that they eclipsed young people’s ability to focus on the pursuit of purpose altogether. However, these same challenges motivated young people to pursue purposes when they reported having adults in their lives who had high expectations for them. These supportive adults motivated

purpose to the extent that they inspired youth to take action to escape the contextual stressors that threatened to hold them back.

Another study conducted with adolescent and young adult cancer survivors concluded that being diagnosed with cancer led young people to reflect more seriously on their purposes in life (Bronk et al., in press, 2022). In some cases, this meant recommitting to an earlier purpose in life, in other cases, it meant committing to a search for purpose, and in still other cases, it meant committing to an entirely new purpose in life. It is noteworthy that studies relying on different samples of young people exposed to different kinds of hardships, consistently conclude that hardships can spur purpose development, especially in the presence of social support.

This finding is further underscored by both theoretical and empirical studies that point to a reactive pathway to purpose development (Gutowski et al., 2017; Hill et al., 2014; Pfund et al., 2020b). In reactive paths to purpose, individuals are inspired to lead lives of purpose following significant life events, including negative or difficult life events (Liang et al., 2017). In sum, the evidence clearly suggests that challenges in the presence of supports can serve to inspire the development of purpose.

Given that challenge *can* spur the development of purpose, it is important to explore for whom and under what circumstances this is likely to be the case. Research suggests certain internal characteristics, including hope and optimism, may be particularly important for supporting purpose formation amidst challenge. In empirical research on the construct, hope is often conceptualized as a belief that individuals know how to reach their goals (Pathways) and that they have the motivation to use those pathways to do so (Agency; Snyder et al., 2005). In other words, hope involves having *the will* (“Agency”) and knowing *the way* (“Pathways”) to reach a desired outcome. Optimism, on the other hand, refers to the generalized expectation of positive versus negative outcomes in important life domains (Scheier & Carver, 1985).

A recent study concluded that hope and optimism were important characteristics for the pursuit of purpose during challenging times. This study examined purpose among emerging adults on the brink of entering the work world in Greece during the Great Recession (Bronk et al., 2018). As recently as 2016, the effects of the Great Recession were in full effect in Greece. The country was suffering a serious financial crisis. Its debt had ballooned, and as a result, leaders implemented severe austerity measures, including raising taxes, cutting pensions, and limiting the amount of money people could withdraw from the bank at any one time. At the same time, the country was also dealing with a refugee crisis. Refugees from Syria and other parts of the Middle East were streaming into Greece, and the rest of the European Union countries had closed their borders to them. Refugees were stranded in Greece. Against this backdrop, researchers conducted a mixed methods study designed to gain insight into the role economic and political instability played in emerging adults’ views of the future and their purposes in life (Bronk et al., 2018).

Survey results suggested that emerging adults with high purpose scores—as compared to emerging adults with low purpose scores—were resilient enough to

look past the present challenges and envision a positive future. More specifically, purpose was significantly, positively correlated with hope, optimism, positive future expectations, and resilience. This research is underscored by other studies that similarly find that hope and optimism are internal characteristics that often appear in conjunction with the development of purpose (Conversano et al., 2010; Scheier & Carver, 1985).

In addition to hope and optimism, agency and a sense of responsibility represent two other internal characteristics that appear to support purpose development amidst hardship. Agency refers to the sense that people control their own actions and—through them—can have an impact on the broader world (Moretto et al., 2011). When a sense of agency allows people to choose between right and wrong actions, it has implications for moral responsibility (Moretto et al., 2011). Individuals need to feel agentic enough to take purposeful action, and a recent study revealed that emerging adults pursuing lives of purpose during challenging times pointed to a strong sense of responsibility for their families, communities, and even their country as a reason to stay committed to their purposeful aims, despite the hardships they were encountering (Bronk et al., 2018). Purposeful emerging adults said things like, “It’s the only way we can move forward, by looking out for all of us, not just ourselves” (pg. 8). Feeling responsible not only for themselves but also for the other people in their lives gave emerging adults the motivation they needed to persevere in pursuit of their purposes.

In addition to internal characteristics, external supports are also critical to the pursuit of purpose, especially in trying times. As noted above, peers and adults can encourage the development of purpose by helping young people find meaning in addressing the challenges that confront them (Bronk et al., 2020). Another study that came to a similar conclusion examined the effects of trauma on purpose formation (Pfund et al., 2020b). Using the Hawaii Longitudinal Study of Personality and Health, this study featured adult participants who retrospectively reported on three kinds of trauma—non-betrayal trauma, such as trauma caused by enduring a natural disaster; low-betrayal trauma, such as trauma caused by a stranger; and high-betrayal trauma, such as trauma caused by abuse by a family member or relative. Overall, adolescent trauma scores were unrelated to a sense of purpose in adulthood. This means that regardless of whether young people experienced trauma, they were equally as likely to go on to lead lives of purpose. However, there was a caveat to this conclusion. The study was conducted in Hawaii, and for Japanese Americans, one of the largest cultural groups in the study, there was a negative association between adolescent betrayal trauma and adult purpose. Although experiencing betrayal trauma during adolescence did not make other individuals more or less likely to go on to lead lives of purpose, it made Japanese Americans less likely to lead of purpose in adulthood. The study design did not allow researchers to investigate exactly why this might be the case, but they noticed that other social groups, especially Native Hawaiians, reported greater family support than the Japanese Americans. It seems plausible that family support enhanced the other groups’ ability to display resilience and develop purpose, despite the trauma they experienced. Considering the findings of this study alongside studies with similar conclusions

suggests that social support is essential to the pursuit of purpose during trying times (Bronk et al., 2020; Gutowski et al., 2017; Moran et al., 2012).

Empowering young people to act in meaningful ways is yet another way to support the development of purpose amidst challenge. In the broadest sense, youth empowerment refers to a process whereby young people are encouraged to take charge of their lives by taking action to improve access to resources and transform their circumstances (Ledford & Lucas, 2013). Supportive adults and mentors can help young people find meaning in the hardships they confront by empowering them to act to address those hardships. Rather than feeling like victims of injustice or hardship, young people can feel empowered to take action (Bronk et al., 2020).

2.6 Implications for Supporting Purpose among Emerging Adults in Crisis

The research reviewed thus far points to several practical strategies that individuals—parents, teachers, mentors, and others—committed to supporting emerging adults during challenging times—can employ to help young people cultivate and pursue purpose. The first thing to keep in mind is that challenging circumstances, such as the ones we are living amidst, do appear to make the pursuit of purpose more difficult. As a result, it is important to practice patience and to have realistic expectations for emerging adults trying to lead lives of purpose as they confront difficult contexts and challenging circumstances.

To increase the likelihood that emerging adults will derive the benefits of purpose, even during hard times, research suggests they require consistent and enduring support from valued individuals and groups in their lives. This is not a surprising or a counter-intuitive implication, but it is a consistent conclusion. Older adults can play a critical role in helping emerging adults reframe challenges as opportunities for meaningful action (Bronk et al., 2020; Gutowski et al., 2017). They can provide encouragement to take action and provide much-needed support when setbacks occur. They can also provide practical support, including resources and financial assistance, that free the young person to focus on pursuing personally meaningful commitments, including purposes (Moran et al., 2012).

Next, research reviewed to this point consistently points to hope as an internal characteristic critical to the development of purpose. When young people lose hope in a brighter future, the pursuit of purpose becomes nearly impossible, but as long as emerging adults can look past the challenging circumstances before them and imagine a more hopeful future, purpose is possible. This finding holds for young people navigating economic and political instability (Bronk et al., 2018) and young people navigating cancer (Wnuk et al., 2012). The ability to envision a hopeful future appears to be critical to the development and pursuit of purpose at any time, but especially amidst challenging times, when hope may be in short supply (Bronk et al., 2009; Stoyles et al., 2015).

Finally, youth need to feel empowered to act. Helping emerging adults reframe the hardships they encounter as opportunities for action can arm them with the motivation they need. Empowering young people to act is also an important way of restoring the hope (Ginwright, 2010).

2.7 Discussion

This chapter set out to review the growing body of research on purpose among emerging adults confronting trying times. A comprehensive review reveals that emerging adults are likely to find it more difficult to lead lives of purpose when confronted by hardship (Bigler et al., 2001; DuRant et al., 1994, 1995; Gonzalez et al., 2013; Gutowski et al., 2017; Pinquart, 2002; Schmidt et al., 2016). However, they do not find it impossible (Bronk et al., 2020). In fact, some find inspiration for purpose in the very hardships they face. In the presence of social support, hardships can serve to inspire the development of purpose (Bronk et al., 2020; Gutowski et al., 2017; Moran et al., 2012). Emerging adults are more likely to lead lives of purpose during trying times when they have access to external assets, including individuals and groups who can help them find meaning in the challenges confronting them and empower them to take action (Bronk et al., 2020). In addition, youth with particular internal characteristics, including hope, optimism, agency, and a sense of moral responsibility (Bronk et al., 2018; Scheier & Carver, 1985), are particularly likely to lead lives of purpose despite challenging circumstances.

At the same time as we work to support emerging adults' pursuit of purpose, we also need to work to improve the circumstances challenging them. It is important to keep in mind that although young people are resilient, they are not invulnerable. At some point hardships, especially in the form of pervasive discrimination, ongoing trauma, or other similarly long-term and intense adversities, are likely to overwhelm young people and their pursuit of purpose (Gutowski et al., 2017). To that end, we—as adults concerned about emerging adult well-being—need to work not only to help young people weather challenging circumstances and contexts, but also to address the circumstances and contexts that challenge their positive development. Failure to do so puts an undue burden on young people.

Leading a life of purpose during trying times not only supports survival, as Frankl (1959) argued, but it also appears to support thriving, as evidenced by the growing body of purpose research. Emerging adults who manage to lead lives of purpose are likely to be buffered from many of the potentially negative effects of challenging circumstances. They are also likely to better navigate difficult contexts as they view hardships as surmountable, manage negativity, persevere with grit, cope effectively, connect to something larger than themselves, find the motivation to keep going, and feel empowered to combat the systematic injustices often associated with challenging circumstances (Bronk et al., 2018; Burrow et al., 2015; Burrow & Hill, 2013; Gutowski et al., 2017; Hill et al., 2016; Kirshner & Ginwright, 2012; Stoyles et al., 2015; Sumner et al., 2018). Consequently, it is critical to foster the internal

characteristics and provide the external supports that help purposes among emerging adults take root and bloom, even amidst challenging circumstances. In short, empirical research reviewed in this chapter supports and extends Frankl's nearly 80-year-old argument made in *Man's Search for Meaning*: "There is nothing in the world, I venture to say, that so effectively helps one to survive even the worse conditions" and thrive despite them "as the knowledge that there is a meaning in one's life."

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Chapter 3

The Meaning Making of the Greek Crisis Through Collective Experiences of Emerging Adults



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Abstract This chapter argues that the effect of the prolonged Greek crisis (2008–2018) on Greek emerging adults (also termed ‘Crisis Generation’) is not only psychological but indeed socio-cultural, as it involves an entire generation raised within this peculiar critical decade. In order for this argument to be formed, this chapter will offer a critical discussion on a) the conceptualisation of crisis, b) the conceptualisation of youth and emerging adulthood, and c) the shared meaning making of the prolonged Greek crisis among emerging adults. The chapter concludes by emphasising the significance of studying the uniqueness of Greek emerging adults whilst developing through the distinct context of the prolonged crisis, interpreted as a reality which may be experienced or confronted in two ways: either through the precarity and uncertainty of unemployment or through the unsettlement and ambiguity of immigration.

Keywords Crisis · Emerging adulthood · Lived experiences · Meaning making

3.1 Introduction

Crisis is a term used and, perhaps, overused particularly in the last decade in everyday language, which includes a wide variety of possible definitions. The so-called Greek crisis, specifically, became known as the duration of a ten-year (2008–2018) prolonged intensive austerity period in Greece, affecting all citizens to a greater or lesser degree. This chapter explores the meaning making of the Greek crisis by focusing on the unique group of emergent adults, as they have been particularly affected during this period. To do so, this chapter will begin by offering a theoretical overview of the meaning of crisis, followed by the exploration of

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various approaches adopted to study youth and specifically emerging adulthood. The meaning making of youth and the concept of generations will be discussed separately, by offering a distinction between a) youth as process and b) youth through emerging adulthood and culture. The consequences of the prolonged Greek crisis, as experienced by emerging adults, will be specifically discussed.

3.2 What Is the Meaning of Crisis?

The so-called ‘Greek Crisis’ is a term coined by mass media and used in everyday language in order to refer to a decade (2008–2018) of intense austerity in Greece. However, the term ‘crisis’ does not only refer to the economic impact of a period characterised by austerity measures. In order to explore the meaning making of the so-called ‘Greek Crisis’ through lived experiences, we first need to contextualise ‘crisis’ itself. The term ‘crisis’ has been used, and perhaps recently overused, to refer to various aspects of human reality entailing some sort of disruption (usually severe) to what is perceived as normal or expected continuity. As the term per se has been used within a wide variety of contexts, a short overview of its meaning might help evaluate its relevance within social sciences, and specifically emerging adulthood.

The meaning of crisis is primarily connected with danger, which is supposed to coexist with fear and uncertainty. Crisis is a dangerous state of affairs that becomes threat of continuity and stability and may lead to fatal results (Tangjia, 2014). Once ‘crisis’ had become a commonly employed expression, its use became an indicator of both the intensity of a crisis and the perception of it as such. Currently the concept of crisis has been transformed to fit the uncertainties of whatever might be favoured at a given moment (Koselleck & Richter, 2006), although Hall (2019) maintains that crises are primarily characterised by disruption of time, momentum and change.

For Marx and Engels the primarily economic term ‘crisis’ describes the time span when economic cycles begin to turn, the long-term course of which has never previously been intelligible (Koselleck & Richter, 2006). Currently, crisis is also associated with climate change, financial volatility, biodiversity loss, food insecurity and rampant labour-market informalisation, among other phenomena. Crisis has been perceived as a process through which new ways of ordering the relations between humans and the rest of nature take shape (Moore, 2017). Current crises partly originate from the greediness of human nature and affect peoples’ emotions, ways of thinking and acting; the globalisation of economy leads to globalisation of these crises, including HIV, which has become a symbol of the globalisation of diseases (Tangjia, 2014). In this vein, the COVID-19 pandemic is the contemporary representation of a global crisis entailing a wide variety of emergent characteristics, including threat of public health, inequalities of all kinds (social, economic, race, gender, ethnicity, educational), political discontinuities, collective traumatic experiences, and deep social transformations (Chalari & Koutantou, 2022).

Notably, the sociological significance and relevance of the study of (any) crisis and its meaning relates to the ways crisis may be involved in the shaping and

reshaping of subjectivity, as it is lived and challenged through the emergence of new social practices and social struggles (Meszaros, 2014). Tangjia (2014) emphasises that crisis exposes the symptoms of society, in the name of prosperity. At the same time, through collective experiences and the development of deeper awareness, crisis can also offer the opportunity for social solidarity to emerge, as people are forced to search for belonging to a community characterised by sympathy, empathy, cooperation and mutual help, with a common enemy, concern and goal. People become dependent and supportive, they develop deep emotional connections and can learn from each other (Tangjia, 2014).

Life course research (Elder, 1999/1974) strongly emphasises the individual experience of collective threats, such as economic crises or wars, and informs us that there is significant variability in the way major historical traumas, such as the Great Depression of the 1930s and World War II, were experienced. In particular, the impacts on cohort, gender, social class and mental health have been highlighted. French et al. (2009) add that crises are about change, as well as opportunities to try new ideas and practices. Crisis can also be shared, relational, diverging and intersecting with the conjunctures of others, for example within family, generation or community; it can become part of the everyday, as well as future imaginaries, manifesting as a very personal crisis (Hall, 2019). As crisis can determine the ways people live their lives, it also determines the ways we adjust ourselves to new situations. Despite causing dramatic change to living conditions and human relationships (Tangjia, 2014), it can offer possibilities for change and continuity while forming lived, intimate, and very personal experiences (Hall, 2019).

Consequently, crisis can be perceived on a macro as well as micro-level social reality, experienced differently by different individuals albeit resulting in collective meaning making of shared experiences. Crisis has been portrayed as a distinct social, economic, political and historical occasion, characterised by time disruption, fearful and anxious reactions, occasionally entailing hope and opportunity, but most importantly, creating shared realities resulting in collective meaning making of common life trajectories. This chapter shall focus on the impact of crisis on emerging adulthood; in order to address this issue, a thorough theoretical review on this particular stage of life is needed.

3.3 Youth and Emerging Adulthood

According to Arnett (2000) the term ‘emerging adulthood’ refers to a demographically distinct developmental stage including teen years until twenties (18–29), which allows subjectivity and identity to emerge. This concept is also related to the cultural context emerging adults may find themselves into, as such context can restrict or enable young people to become more independent and explorative. However, this term is not the only one related to this specific developmental stage. Although many theorisations are concentrating on the developmental characteristics of this period in peoples’ lives, social sciences and particularly sociology have

offered a plethora of different approaches in an attempt to describe, understand and explain the exact same period of one's life. Therefore, there is a scope in reviewing approaches on the wider concept of 'youth', alongside the developmental approaches of 'emerging adulthood'.

The definition of 'youth' as a sociological term has been approached by various authors proposing different views. Brake (1985) treats 'youth' as potential subculture(s), entailing collective experiences associated with contradictions to the social structure. Youth is thus perceived as a collective identity for which an individual identity can be achieved outside class education or occupation. In this vein, this term is used to refer to the sharing of common experiences between groups of 'young' people (Briggs & Turner, 2012; Bynner, 2005). Much of sociological research has been concentrated on 'youth cultures and/or subcultures' referred as a general way of life associated with young people, particularly teenagers and especially in developed countries. However, Miles (2000) perceives these definitions as problematic and proposes the concept of 'youth lifestyles', which suggests a diversity of experience, especially regarding the ways they interact with and negotiate their everyday lives.

An alternative view (Goldscheider & Waite, 1991) identifies 'young adulthood' with a stage that occurs after adolescence and characterises people in their early 20s and perhaps early 30s, who are still experimenting with their relationships and lifestyles. However, Bynner (2005) explains that perhaps the term 'emerging adulthood' is more appropriate, as this 'social phenomenon' might be more prominent in some sections of life than others (in terms of educational and occupational careers). Finally, Manheim (1952) and later on Joshi et al. (2011), use the term 'new generations' referring to the process under which 'youth' makes 'fresh contact' with cultural norms, while trying to make sense of themselves within a specific historical and social context; according to the authors, 'new generations' need to respond to pre-existing norms and established behaviours by either accepting or refusing them.

3.4 The Meaning of the Concepts of 'Youth' and 'Generations'

Perhaps, it seems complex to produce a specific definition of 'youth', especially if specific age cohorts are not included. Consequently, it might be more helpful to turn to 'generational' theories to attempt a more concrete definition. According to Gilleard (2004), the 'cohort perspective' perceives generations simply as collections of people born in a given time period, although different approaches define generations as groups of individuals born within the same historical and socio-cultural context, who experience the same formative experiences and develop unifying commonalities as a result (Manheim, 1952). The later approaches emphasise the importance of the experience of unique historical context(s) associated to 'collective memories' (Schuman & Scott, 1989). Ryder (1965) explains that although people

might experience the same historical events, they may respond to them according to their life-cycle stage. For example regarding the Greek context, Chalari (2015) has supported that different generations have experienced and responded differently to the same historical event of the prolonged austerity and crisis. Manheim (1952) further argues that young generations are at the forefront of social change. He explains that young people are willing to consider new ideas as they try to make their way through the world, at the same time being able to reproduce previous/established norms and patterns. Consequently, young people will eventually form and reform social patterns and norms, based on their collective memories, commonalities, experiences and ideas shaped by the social reality they find themselves in.

Following the abovementioned rationale, current research tends to use specific categories to refer to four specific generations, defined according to common experiences of certain historical events. According to Lyons and Kuron (2011) these categories are: a) 'Traditionalists', 'Matures', 'Veterans' or 'Silent Generation', born before World War II, b) 'Baby Boomers' born between 1945-mid 1960s, c) 'Generation X' born between mid-1960s and late 1980s and d) 'Generation Y', 'Nexters' or 'Millennials', born between late 1970s and early 1990s. Additional generations include Generation Z (meta-millennials currently facing the effects of COVID-19 crisis, and the following Generation Alpha).

Parry and Urwin (2011, p. 80) use the same categories to explain that 'each generation shares a different set of values and attitudes as a result of shared events and experiences'; they explicitly clarify that 'it is not at all clear how we would actually allocate individuals to one or other generations, when such allocation is based on concepts of social and cultural "proximity"'. Although the problematic nature of the abovementioned definitions of such categories has been repeatedly recognised (Parry & Urwin, 2011; Lyons & Kuron, 2011), current research still uses and refers to these categories (by implementing appropriate adaptations). Gursoy et al. (2008) notice that, regarding work values, each generation (following the categories mentioned above) can entail different characteristics. So, although the categorisation of generations as such has proven to be problematic, much research has actually followed this specific approach in order to measure the values or characteristics of each category. Notably though, the significance of the socio-historical circumstances that each age group find themselves in remains a significant indicator of differentiating each generation.

1. Youth as Process

Moving away from specific age cohorts, the concept of youth has also been depicted as a process or a unique experience. Terms like 'youth lifestyles' (Miles, 2000) involve certain forms and ways of interacting with and negotiating about everyday lives. According to Manheim (1952), generations can be defined through individuals born within the same historical and socio-cultural context, who experience the same formative experiences and develop unifying commonalities. Erikson (1946, 1976) perceived youth identity formation through the passage from childhood to adulthood and conceived identity as a process that is internal, but also includes the relationships that individuals form with others during the life course. Notably, if the

passage from childhood to adulthood is experienced through a certain and indeed intense (or even traumatic) socio-cultural context, then the impact of crisis on youth formation becomes a distinct social phenomenon, which merits autonomous exploration. Erikson's studies focused on identity formation after World War Two and he termed the results of such disastrous identity disruption as 'identity crisis'. It, thus, becomes obvious that the impact of the cultural and historical context can be proven decisive in the ways young people move on in life.

Dominant psycho-social views (Cote & Levine, 2016:115) suggest that identity stability in any culture is achieved through the interplay between the personal and the social. Cote and Levine (2016) support that a sense of stable 'ego-identity' (i.e. personal identity) protects people from social conflicts and tensions. In this vein they propose four typologies of young adults, referring to different ways of approaching the task of youth identity formation: a) Resolvers (proactive approach) willing to think ahead in life, b) Guardians (active approach, willing to commit to a course of action, c) Searchers (reactive approach) engaging in exploration and experimentation and d) Drifters and Refusers (inactive approach) unwilling to think ahead, act or explore. Although psycho-social approaches maintain that young people follow different ways to navigate through early steps of adulthood, the balance achieved between the social impact and personal stability is of ultimate significance in shaping their identity. Such approaches are more related to Arnett's (2000) developmental conceptualisation of emerging adulthood, although it can be argued that a more synthesised approach on youth, combining different perspectives, may offer a more concrete understanding of this period of life.

2. Youth, Emerging Adulthood and Culture

Despite the plurality of approaches relating to youth and/or emerging adulthood, some common elements can be identified: a) the limited significance of the specification of age groups, b) the pivotal impact of the social, cultural and historical context each group of young people (or even generation) find themselves in, as well as c) the effect of the intensity of social changes associated with this context. In this sense, the context of the Greek socio-political and economic crisis forms a unique, albeit prolonged period (2008–2018) during which Greek youth has been, and currently is, forming, and reforming, while trying to navigate towards adulthood. Consequently, the utilisation of any theoretical approach depends on the description of the social context emerging adults find themselves. The impact of crisis on emerging adulthood as lived experience constitutes a distinct and significant area of exploration.

Perhaps the most significant aspect of the theoretical review outlined above relates to the realisation that the social, cultural and historical context young people find themselves in affects both the life of each individual, and the formation of an entire generation. Emerging adults will eventually form their own social structures and systems, inevitably based on the ways they were raised and socialised as a generation. Thus, this group will eventually repeat, form or reform the dominant cultural norms, social structures and expectations. Subsequently, the consequences of any crisis on young people do not only concern the unfortunate or disadvantaged

situation of certain deprived young persons. It also concerns the inevitable restructuring of the society once this generation will reach and master adulthood.

3.5 Experienced Greek Crisis and Emerging Adulthood

The impact of the prolonged Greek crisis has been extensively discussed in different contexts, such as political and economic (Kretsos, 2014; Papavasiliou & Lyons, 2015), social and cultural (Herzfeld, 2011; Knight, 2012) as well as psychological (Bonovas & Nikolopoulos, 2012; Economou et al., 2013; Giousmpasoglou et al., 2016; Palli et al., 2020; Papanlanis et al., 2016; Tsouvelas et al., 2018). Featherstone (2014) noted that no other European state has undergone such pain in the last fifty years or more, whereas Kolodko (2015) characteristically referred to the 'Africanisation' of Greece. Similarly, the effects of the Greek Crisis particularly on young people have been repeatedly underscored (Chalari & Sealey, 2017; Chalari & Serifi, 2018; Kretsos, 2014; Tsekeris et al., 2015). On the one hand, Malkoutzis (2011) described young people in Greece as well-educated, well-travelled and politically aware, but on the other hand, Papavasiliou and Lyons (2015) noted that an increasing number of Greek Millennials have lost traditional family support due to parents' reduced incomes or unemployment. The main areas of young people's lives that have been substantively altered regard a) unprecedented youth unemployment rates (Karakioulafi, 2017; Kretsos, 2014) and b) massive migration waves of qualified and overqualified young people (Chalari & Koutantou, 2020; Koniordos, 2017).

Greek youth has been experiencing the consequences of the prolonged crisis in a rather intense manner, due to the shrinking of the economy, the lack of employment opportunities both generally and in one's field of specialisation, and the rapid rise of unemployment (Labrianidis, 2011, 2014; Pelliccia, 2013; Theodoropoulos et al., 2014; Triandafyllidou & Gropas, 2014). Malkoutsis (2011) and Mitsakis (2017) add lack of meritocracy, deterioration of employment rights and working conditions, and limited opportunities for career progression. Youth unemployment (up to 24 years of age) peaked at 57% in 2014, gradually dropping to around 40% in 2019, with young women being worst affected by the crisis (ELSTAT, 2019). The combination of the above has formed an uncertain socio-economic reality described by Karakioulafi (2017) as 'lived precarity'. Such unstable reality has serious well-being and psychological repercussions (Mouzakis & Μουζάκης, 2017), especially on youth (Tsekeris et al., 2015). In the Greek case, the pervasive sense of uncertainty and lack of security led a large part of young active workforce to seek employment abroad, a phenomenon called 'Greek Brain Drain' (Chalari & Koutantou, 2020; Giousmpasoglou et al., 2016; Koniordos, 2017; Koulouris et al., 2014; Labrianidis & Pratsinakis, 2017; Mitsakis, 2017).

Although the Greek case may be perceived as an extreme example of prolonged austerity, young people in contemporary Europe are perceived as the first generation to do worse than their parents; moreover, in their quest to 'navigate transitions to

adulthood' they need to adjust to transitions that are enormously altered, compared to previous generations. Although the number of young people participating in higher education has increased (Bynner, 2005), the transition from education to labour market has become more flexible, including long periods of unemployment (Papadakis et al., 2022). In Great Britain, for example an extensive number of young University graduates begin their employment prospects while needing to repay huge educational loans/debts (Chalari & Sealey, 2017). There is a consensus in literature that, in contrast to previous generations, young people in contemporary Europe experience a fragmented, de-standardised and uncertain reality (Antonucci et al., 2015). Volontè (2012) adds that Europe is facing the risk of losing a whole generation. This reality has formed as the result of increasing unemployment due to the Global economic recession which leads to lack of 'a universal path to a [...] normal maturity' (Antonucci et al., 2015, p. 15). The Greek case represents the extreme result of this Global recession. The Greek crisis context forms a distinctive example in relation to the ways emerging adults have reached adulthood.

3.6 Consequences of the Prolonged Greek Crisis for Emerging Adults

No matter if we refer to youth or emerging adulthood, young generation or young people in general, once we specify the social, cultural and historical context of the Greek crisis, we end up referring to a specific group of young people, who navigate their way through adulthood during a period of prolonged austerity and crisis. This group has primarily suffered from disproportionate unemployment while trying to cope with all difficulties related to it (Chalari, 2012, 2015), or has already left Greece, trying to cope with the ideas of migration, nostos and integration (Chalari & Koutantou, 2020).

Young people who have reached adulthood during the Greek Crisis (2008–2018) have been defined as the 'Crisis Generation' (Chalari & Serifi, 2018). This term does not only refer to the collection of people born in a given time period (Gilleard, 2004), but to this group of individuals born within the same historical and socio-cultural context, who experience the same formative experiences and develop unifying commonalities as a result (Manheim, 1952; Pilcher, 1994). Tsekeris et al. (2015) very characteristically argued that during the Greek crisis personal suffering and intense feelings of indignity and humiliation have been forming a common ground especially for young people. In fact, several studies have repeatedly confirmed the ongoing struggle of Greeks to live a different kind of life, less secure, stable or safe, whereas the feelings of pessimism leading to migration, disappointment and negativity have been reported repeatedly (Tsekeris et al., 2015; Kretsos, 2014, Papavasiliou & Lyons, 2015; Rudig & Karyotis, 2014; Chalari, 2014; Chalari & Sealey, 2017). Such shared experiences of unique historical context(s) associated to 'collective memories of a crisis' (Schuman & Scott, 1989) is particularly relevant

regarding the 'Crisis Generation'. In this vein, it would be fair to acknowledge the fact that learned helplessness, depression, pessimism, disappointment and a wider experience of migrating due to social and personal challenges has been predominating among Greek youth (Chalari, 2015; Chalari & Serifi, 2018; Knight, 2012; Economou et al., 2013; Vandoros et al., 2013; Zavras et al., 2013). Coping strategies employed during the Greek crisis include support received by family and community (Lahad et al., 2016), although further research is needed on that respect.

A distinct category of youth emerged particularly during the crisis, associated with the term of NEETs 'not in employment, education or training'. It describes a group of young people usually up to 24 years old, who do not belong actively to the process of education or employment force (European Commission 2011). As Zagkos (2019) argues various terms have been used in the past to describe this group of youth, like «quitters», «escapists», «settlers» or «rebels» (European Commission, 2008). Demetreades (2018) maintains that out of the 1.7 million of Greek youth (15–24 years old) NEETs represent the 26.7%. Greek NEETs belong to an age group between 20–24, they are not married, they do not have children, they live with their parents, they are mostly graduates of secondary education, they do not work, and rely financially on their parents. A significant percentage of them suffer from chronic illness and/or depression (Koniordos, 2017; Papadakis et al., 2015).

Ryder (1965) explains that although people might experience the same historical events, they may respond to those events differently. Tsianos (2014), for example explains that Greek youth exhibit high amounts of energy and passion, however they are given the wrong opportunities to use their energy and passion. Demertzis and Tsekeris (2018) refer to a rather pessimistic Greek young generation strongly dependent on family and unable to connect with society while Demetreades (2018) adds that Greek youth's transitions to adulthood and the labour market follow different trajectories and have become more complex. According to Papadopoulos and Colleagues' (2022) study, Greek youth acknowledge educational capital as a main resource in navigating life, although they also acknowledge that the Greek educational system fails in linking education with labour market. Notably, as Leontopsoulou (2006) suggests, family remains a core resource among youth in multiple levels, before, during and after University life.

Another common element of Greek youth identified by literature relates to social or collective action or reaction, which has been reported as limited by Demertzis and Tsekeris (2018) whereas Chalari and Serifi (2018) have described the 'Crisis Generation' as passive. However, both studies also agree that young people are not apathetic. Demertzis and Tsekeris (2018) conducted a quantitative study showing that the participants clearly desire to get involved in forms of social or collective action. Another qualitative study (Chalari & Serifi, 2018) further confirmed this evidence, highlighting that participants displayed profound awareness and aversion of the current crisis, ability to consider themselves in relation to the crisis on a personal and collective level, and plan their present and future place in the Greek crisis. In this vein, Tsekoura (2016) further maintains that Greek youth can be seen as passive but certainly not apathetic. The author maintains that there are possibilities for Greek youth that open up space for participation promoting the empowerment of

youth. Youth is not a homogeneous group and can engage with diverse participatory activities. Tsekoura observes that certain creative opportunities for youth participation can offer safe spaces enabling potential of empowerment. Youth participation is thus seen as an ongoing process, and in this way, it may reveal its empowering potential of young people being perceived as co-creators of reality rather than passive receivers of it. Listening to what youth has to say can be translated into action, no matter whether it is manifested as an action per se or as creative expression found in specific spaces.

Such findings reveal the sharing of common experiences among young people (Briggs & Turner, 2012; Bynner, 2005), which perhaps signifies a specific ‘youth lifestyle’ (Miles, 2000) of the ‘Crisis Generation’, related to the ways young people interact with and negotiate their everyday lives. Similarly, the current COVID-19 pandemic contributes an additional shared socio-cultural reality, which should be studied as a distinct factor affecting the transition to adulthood. Indicative findings (Chalari & Koutantou, 2022) reveal a plurality of resources utilised by Greeks during the COVID-19 crisis, although such findings do not specifically focus on emerging adults. Such resources are primarily utilised by those who have accepted COVID-19 crisis as a loss of their prior life, and attempted to move on without trying to recreate reality as experienced before the pandemic. Those who managed to embrace such attitude, ultimately adopted more smoothly to a significantly altered reality, by acknowledging its difficulties and limitations (e.g. the multiple consequences of lockdown) and trying to support, help and encourage themselves along with the ones close to them.

The Greek economic crisis might have entailed commonalities with the COVID-19 crisis and comparable coping strategies, including creating supporting networks primarily based on family, may be relevant. One of the main differences between the two has to do with their duration. Although the latter is still ongoing, its duration so far has been about three years (2020–today). The former lasted ten years (2008–2018) and shortly after its completion the COVID-19 crisis emerged (2020) causing additional difficulties for everyone including emerging adults.

This means that the duration of crisis in Greece has expanded beyond a decade allowing the formation and development of emerging adulthood through multiple generations during an expanded period of precarity, uncertainty, vulnerability and adversity. Therefore, crisis in the Greek case (as far as emerging adults is concerned), may not only be about fear, danger, disruption and unsettlement, as the relevant literature indicates. Crisis may entail the formation of multiple young generations through shared experiences of precarity, vulnerability and uncertainty, derived primarily from the prospect of unemployment and immigration, but also from the prospect of a health-threatening pandemic.

3.7 Discussion

Following a synthesised perspective of the approaches illustrated so far, it can be argued that collective meaning of emerging adulthood entails a wide variety of characteristics including i) cohort characteristics, ii) social, cultural and historical circumstances as well as iii) the intensity of social transformations experienced during the period and the process of emerging adulthood.

The meaning making of Greek crisis among Greek youth/emerging adults relates specifically to:

1. Shared experiences among the youth generational cohort reaching adulthood during the Greek Crisis (2008–2018).
2. Shared experiences of the socio-cultural and historic circumstances deriving from austerity measures implemented during the period of the Greek Crisis.
3. Shared experiences of the intensity of the social transformations experienced by youth, and primarily associated with i) disproportionately high unemployment rates among Greek youth and ii) a massive brain drain wave.

Young people in Greece have been trying to cope with a rather complex and painful reality through which the ‘Crisis Generation’ has been revealed, including the most vulnerable group of NEETs. Notably though, this group of young people has been numerically expanding for the duration of Greek crisis (2008–2018) and even the COVID-19 Crisis (2020–today). This Greek youth experiences socialisation while reaching and mastering adulthood within a clearly disadvantaged (and in some cases even hostile) social context forcing a large part of this generation to leave homeland.

Corsaro (2011) maintains that identity formation is a process, which may last a lifetime but the first cornerstones are certainly formed in early steps in life. Therefore, the Greek ‘Crisis Generation’ (which probably has multiplied into ‘Crisis Generations’) once moved on to form adulthood, should eventually organise a new social reality significantly affected by the shared experiences of the social context formed during the prolonged Greek crisis, characterised by fear and prospects of unemployment and the option of migration. Certainly, different youths are raised in different ways but, as this chapter has shown, the impact of the Greek crisis may shape common attitudes, feelings, ways of thinking and living. Such shared experiences will accompany young people during their own journeys in life, while shaping their own dreams, expectations and anticipations, and possibly, even their interaction with other young people who have been sharing similar world views and understandings about the forms their future lives could and should take. Thus, although each emergent adult has been raised differently, they have all been exposed to a prolonged crisis which will ultimately and collectively determine their future paths in life.

Experienced prolonged crisis during the significant years of emerging adulthood may have unanticipated and unforeseen impact in the formation of future society. In the case of Greek crisis, such impact is related to the collective meaning making,

which has been formed by emerging adults while experiencing and coping with the situation. This meaning making entails two dominant features: employment prospects and immigration prospects. In other words, Greek crisis has been interpreted as a reality which may be experienced or confronted in two ways: either through the precarity and uncertainty of unemployment or through the unsettlement and ambiguity of immigration. Coping strategies and resources entail family support and educational capital, although each young person is asked to find a path in life as adult with limited external support.

Understanding, empathising and supporting emerging adults within the context of the Greek ‘Crisis Generations’ is not merely a matter of humanism towards less advantaged and empowered individuals, but a matter of the ultimate responsibility adults hold towards their own children as well as the future of their own society, reality and being.

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Chapter 4

Mental Health and Interpersonal Relationships in Emerging Adults During the COVID-19 Pandemic: An International Overview



Artemis Z. Giotsa

Abstract Sars-Cov-2 was identified in China in December 2019 and in three months it expanded exponentially; The related disease, labeled as COVID-19, generated a condition of global pandemic affecting in many ways and at many levels human life, especially the social distancing between people and the social relationships in emerging adulthood. During April and May 2020, governments all over the world announced drastic measures to keep the spread of the virus under control and to avoid the further propagation of the virus. The World Health Organization recommended a mix of preventive measures such as testing, rapid diagnosis, self-isolation (quarantine), social distancing, lockdowns, travel restrictions, social activities cancellations, closure of schools and universities, remote working. The present chapter focuses on the effects of the COVID-19 pandemic on youth mental health and on interpersonal relationships during the crisis period in different countries. Special attention is paid to the relationships between emerging adults with their parents and the way they entered romantic relationships. Literature results show that changes and conflicts within different types of relationships are due to lack of communication and intimacy, emotional detachment between family members and partners. Also, positive aspects of the pandemic crisis period are investigated in this international overview.

Keywords Emerging adults · COVID-19 pandemic · Family communication · Interpersonal relationships · Mental health

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4.1 Introduction

Sars-Cov-2 was identified in China in December 2019 and in three months, it expanded exponentially. Due to the diffusion and severity of the related disease, labeled as COVID-19, on March 11, 2020, a condition of global pandemic was declared by the World Health Organization (Germani et al., 2020). The COVID-19 pandemic has influenced peoples' life at many levels. During April and May 2020, governments all over the world announced drastic measures to keep the spread of the virus under control and to avoid the further propagation of the virus. The World Health Organization recommended a mix of preventive measures such as testing, rapid diagnosis, self-isolation (quarantine), social distancing, lockdowns, travel restrictions, social activities cancellations, closure of schools and universities, remote working. Consequently, everyday life was influenced; social distancing and quarantines were imposed, while children and adults had to remain home to work or to attend online classes. By June 2020, approximately 1.18 billion students worldwide had to stay away from schools and to continue their education via distant learning (UNESCO, 2020). Commercial businesses and industries shut down. As a result, from one day to the next, many economic, financial problems, and mental health difficulties affected people, and daily family routine got disrupted (Cassinat et al., 2021). This global pandemic suddenly acquired a substance in everyday life, became the invisible threat, the enemy that spies everywhere, that can hide in every object, every surface, that can be found among families, among close relationships, with the danger of not only disturbing them but of destroying them forever. People expressed anxiety and instability about the present, and uncertainty about the future. According to Briem (2020), the only certainty was uncertainty.

The literature shows that during this pandemic, as during previous epidemics, healthy individuals expressed stress and anxiety symptoms due to fear and insecurity, and that preexisting psychological disorders were intensified (Fardin, 2020; Germani et al., 2020; Limcaoco et al. (2020); Shigemura et al., 2020). The outbreak of the COVID-19 pandemic brought additional instability, insecurity, and fear in people's life. New limitations were implemented in different areas of individuals, including the physical, social, and mental health areas (Park et al., 2021). Every country started to adopt its own measures to protect the population, closed and open the borders accordingly to the numbers of deaths and contaminated people.

In research, a strong interest surged regarding the impact of the pandemic on emerging adults' life and perceptions about their future and relationships. Emerging adulthood differs from what was traditionally considered as the transitional period from adolescence to adulthood; it is rather conceptualized as a separate developmental stage for people aged 18 to 29 years, "a state of being in between, neither an adolescent nor an adult" (Arnett, 2007, 2010, 2012, 2014; Vehkalahti et al., 2021, p.42). During this period, young adults feel instability, insecurity and being in-between; they are mostly self-focused and need to explore their identity and possibilities (Arnett, 2007, 2010, 2012, 2014; Arnett et al., 2011, 2014; Galanaki & Leontopoulou, 2017; Leontopoulou et al., 2016; Žukauskienė, 2015).

4.2 Emerging Adulthood During the COVID-19 Pandemic in Different Countries: Research Findings

Much research showed that the pandemic had a strong impact on the mental health and the relationships of emerging adults (Salari et al., 2020; Tanner, 2016; Vindegaard & Benros, 2020), who are in transition to adulthood and need to build their own social networks by differentiating themselves from their parents. During the COVID-19 pandemic emerging adults had to reorganize their lives, their everyday routine, their relationships in family, social, and intimate levels. The meaning of safety took another dimension. Safety measures implied social distancing (Vehkalahti et al., 2021), and emerging adults feared not only to be affected themselves by the disease, but also to transmit it to parents, grandparents, and other vulnerable people in their families (Child & Lawton, 2019; Griffin, 2010; Richard et al., 2017).

Research highlighted recurrent results about the prevalence of loneliness in young people, compared to older ones. Many students felt their cozy student apartment as a trap of loneliness (Groarke et al., 2020; Killgore et al., 2020; McGinty et al., 2020).

In the family context emerging adults, especially students, due to the closure of universities and colleges campus had to return home and interact again daily with their parents and other members of the household, in ways preceding their going away from home to study. Consequently, stay-at-home measures offered to emerging adults the opportunity to spend more time with their parents, and to their parents the opportunity to know better the daily life routine of their children (Cassinat et al., 2021).

In the social context, the quality of social life was affected (Szczepeńska & Pietrzyka, 2021). Emerging adults reported stress and anxiety, as well as concerns for their health status, and the health of family members and friends (Shanahan et al., 2020; Vehkalahti et al., 2021). Many felt that their life was in parenthesis.

4.2.1 Evidence from the USA

At the intraindividual level, research showed that emerging adults in the USA expressed symptoms of anxiety (45.4%), depression (43.3%), and PTSD (31.8%) in higher percentages than before the pandemic (Liu et al., 2020; Van den Berg et al., 2021). Additionally, they failed to cope successfully with all the negative feelings of anxiety, depression, fear, and anger (Hall & Zygmunt, 2021).

At the family level, research conducted among US students showed that young people who returned home after closure of universities reported negative family interactions with their parents: more specifically, they got low autonomy and perceived more rejection and less acceptance from their parents. Also, they felt fear about their health and their family's members' health. As far as family life is concerned, a longitudinal study in the USA examined the changes in daily routine

and interactions before and after the pandemic, focusing—among other issues—on the changes in family dynamics, including parent–child relationships (Manning & Payne, 2021).

At a social level, results indicated that during the pandemic emerging adults felt more lonely than older adults, they tried to address loneliness through greater use of social media, and they were seeking lower social support (Lisitsa et al., 2020).

Another research with US emerging adults, aiming to explore the changes of the relationships at the beginning of the pandemic, found that 69% of the participants reported relationship changes, 77% of which were considered as negative changes. In detail, youths reported higher physical distancing and less emotional contact. They tried to substitute this distance from their social contacts with the aid of the social media, but the absence of the physical contact increased feelings of loneliness. Concerning other feelings, they experienced more tension, less affection, emotional disconnection, and had many conflicts in the family context due to the precautions and measures imposed by the government (Dotson et al., 2022).

4.2.2 Evidence from China

In China, a research study on young adults aged 21–25 years reported that they experienced high symptoms of depression, anxiety, and PTSD during the first weeks of the pandemic and during the months of quarantine imposed by the government during March and April 2020 (Sun et al., 2020; Van den Berg et al., 2021; Wang et al., 2020). The same results emerged from another study which also found evidence of sleeping problems (Liu et al., 2020).

4.2.3 Evidence from Europe

In Europe, research studies were conducted in different countries during the pandemic. Italy was one of the countries most affected in terms of morbidity and mortality rates (Dong et al., 2020; Germani et al., 2020). At the beginning of the pandemic, COVID-19 was considered mostly a disease of the elderly. In Italy—as in many other countries—young people paid less attention and ignored preventive measures, such as keeping social distances and staying at home when affected, and they expressed less preventive health behavior (Barari et al., 2020). It is interesting that another study in Italy, conducted two weeks after the beginning of the pandemic, emerging adults reported higher scores of anxiety related to the health of their relatives and lower worries concerning themselves (Germani et al., 2020).

In several European countries, media and news emphasized the risky behavior of young people. Emerging adults did not seem to follow official guidelines to keep social distances and stay at home. On the contrary, they tried to find excuses to go out in order to meet friends, engage in sports, and escape from family disputes. A

possible interpretation could be that they denied the threat of the pandemic, using this as a mechanism of avoidant coping. According to Balbo et al. (2020), families were not prepared for this type of crisis, which meant that all family members lived together under the same roof, for a long time, worked, ate, and were together 24/7, under the pressure of illness and the threat of the death.

In Greece, a study was conducted by Golemis and Colleagues (2021) with young people aged 18–30 years to investigate a number of issues around the pandemic, including compliance with instructions, the level of loneliness and coping strategies. Results showed that women felt more loneliness than men, and a 46% of the sample followed the instructions imposed by the government often or always (48%). Also, more females than males created new accounts in social media during the quarantine period to contact family and friends and increased the use of social media to 5 hours a day (Golemis et al., 2021). Additional data from the same study in Greece, concerning the romantic relationships during the pandemic, showed that the 74.8% of the participants reported avoidance of physical contact such as kisses, hugs, and sex; these were mostly female participants. The positive impact of social media was highlighted by the fact that 64.8% of the examined youth reported that they had the opportunity to contact people with whom they did not have much contact before the pandemic. Nevertheless, according to Towner et al. (2021), research results concerning virtual contacts and social interactions showed that there was no association between well-being and the frequency of social interactions by the social media.

Many emerging adults in Finland had to return to their homes, especially to rural areas, to be safer from possible contamination; they faced financial problems due to isolation and the lockdown in many areas (Vehkalahti et al., 2021). In the field of family interactions, research with young adults showed that the return to their parental home took a positive meaning, giving them the opportunity to discuss with their parents and other relatives and to have more time to spend with (Vehkalahti et al., 2021).

4.2.4 What Helped Emerging Adults

A coping strategy is defined as “an action, a series of actions, or a thought process used in meeting a stressful or unpleasant situation or in modifying one’s reaction to such a situation. Coping strategies typically involve a conscious and direct approach to problems, in contrast to defense mechanisms” (American Psychological Association, 2020). Various studies investigated coping strategies related to stress and loneliness during the pandemic.

In a Greek study many young adults shared their feelings and thoughts (41.6%), and used humor either a bit (43.9%), or a lot (35%) (Golemis et al., 2021). Also, practicing sports constituted a positive coping factor for 40% of them. Another study conducted in Switzerland with young adults (from the Zurich Project on the Social Development from Childhood to Adulthood) assessed different behavioral coping

strategies during the COVID-19 period, such as daily routine, physical activity, and exercise, helping others and seeking professional mental health (Shanahan et al., 2020). Results showed that people who were more distressed by the lockdown during the pandemic sought social support, engaged in distractions, and looked for professional help as coping strategies. Also, results showed that people used other helpful coping strategies, such as keeping a daily routine, exercising and engaging in physical activity, keeping contact with family members and friends, strengthening family relations, feeling accepted and accepting others, and giving a positive meaning to their difficulties (Cassinat et al., 2021; Golemis et al., 2021; Harach & Kuczynski, 2005; Heath et al., 2020).

4.3 Discussion

A historical look shows that all pandemics, such as the 1347 Black Death, the 1520 epidemic of new world smallpox (Milton, 2012), and the 1918 Spanish flu pandemic caused many problems to individuals and communities at the health, social, and economic levels. Feelings of uncertainty, insecurity, uncontrollability, and incomprehension dominated people's life throughout the centuries (Morens & Taubenberger, 2006). After the Spanish flu of 1918, COVID-19 represented the first pandemic period requiring a worldwide urgent intervention to prevent the spread and the transmission of the disease. In our days, scientific and medical progress allowed us to cope with the disease by identifying the virus, and to find scientific and medical solutions during the pandemic period and one year after the beginning (Patterson et al., 2021).

The aim of the current chapter was to investigate the effects of the COVID-19 pandemic on emerging adults' mental health and interpersonal relationships (social and family) in different countries. Emerging adulthood constitutes a critical stage in human development. Emerging adults experience different and often conflicting feelings during the transition from adolescence to adulthood (Arnett, 2007, 2010, 2012, 2014). Many must leave home for studies or for work reasons. They try to find financial independence, to reach a balance between work or study life and personal choices. Their well-being and life satisfaction is associated with their social and intimate relationships. They try to be independent, to have more opportunities for personal and professional growth (Arnett et al., 2011).

During the period of the pandemic, the closure of the universities was a measure of prevention internationally. Consequently, students had to attend classes online, to skip regular meetings with peers, to move and to return home. First year students did not have the opportunity to adapt to their new academic environment in presence and graduating students could not experience dissertation and graduation ceremonies in person. Other young adults with professional activity lost their jobs due to COVID-19 lockdown or had financial problems (Tümen Akyildiz, 2020; Wieczorek et al., 2021).

Considering the importance of emerging adulthood and the risks of the pandemic period of COVID-19, in this chapter, we have looked at the life changes of emerging adults, specifically focusing on the mental health level, family interactions and romantic relationships during the COVID-19 pandemic in different countries.

Through different research results, the pandemic developed new limits in human lives at many levels. At the *physical level* (distinction between big and small cities, crowded and less crowded areas, green and red countries, etc.), at the *social level* (social distancing, contact with standard people, keeping stable everyday contacts, etc.), at the *mental health level* (anxiety symptoms, being afraid of others health, stress disorder).

The literature concerning the effects of COVID-19 pandemic in the mental health of emerging adults shows that during the quarantine period all the restrictions and prevention measures had an enormous impact on the mental health level and in everyday behavior. It is worth pointing out that at the level of mental health, the norms of psychopathological symptoms must be changed maybe in the future. Someone who unconsciously takes distance while meeting other people shows an attentive and responsible behavior. Before the pandemic period, a behavior like this could have been characterized as common behavior lacking social politeness. Also, the opinion of vaccine deniers, arguing that governments try to control their minds through chips inserted into their bodies with the vaccine, is considered under a different light, whereas in the past, it would have been considered a paranoid idea that would have given us a suspicion of psychopathology (Giotsa, 2022). There is a great need in the future for additional research focusing on the psychological consequences of this pandemic and the effects on the mental health of emerging adults.

Concerning the family relationships, the pandemic brought not only negative thoughts and feelings in emerging adults, but also led them to think about priorities, family values, spending time with family members and taking profit of the present (Giotsa, 2022). As found in a study conducted during another major crisis, namely the socio-economic crisis in Greece, emerging adults with a high sense of purpose in life managed to overcome the multitude of challenges they experienced and envision a positive future. A major role in this case was played by their relationships with friends and families, as well as with the wider community (Bronk et al., 2019). Vigilance about the health of every member in the family and constructive support in the family context will improve the quality of life and the quality of care.

4.3.1 Post-COVID-19 Period: What Can We Do?

After a long stressful period during the pandemic, it is imperative for governments to incorporate mental health programs and interventions in the healthcare services. Science can play a vital role in identifying appropriate ways to deal with the virus at the psychological level. The first step to fight the fear is to learn about the disease. Governments can implement preventive programs by diffusing information through

teaching of coping strategies adapted to different life stages (from childhood to adulthood). The second step to combat the fear associated with the disease is to encourage people to develop groups in different contexts (family, social, academic/professional) and to work with other members to reduce the stress derived by financial and interpersonal difficulties. Participating in a counseling group constitutes a very important issue to help cope with stressful factors. This may have a twofold advantageous outcome: building personal resilience through self-control strategies and developing systemic resilience through interactions among group members (Giotsa, 2010, 2014; Giotsa et al., 2011; Heath et al., 2020). Moreover, according to general systems theory (von Bertalanffy, 1972), when a person participates in a group, be it a counseling or a therapeutic one, emotional changes take place that may bring other changes in the family system (Baron et al., 2013; Giotsa, 2014; Goldenberg & Goldenberg, 2005). So, it is important for emerging adults and/or other members of their families to participate in prevention programs, and emotional coping groups, groups that they can get and give support to (Goldenberg & Goldenberg, 2005).

Concerning romantic relationships, and more specifically the lack of physical contacts due to the COVID-19 lockdown, emerging adults found in social media an outlet to cope with loneliness and give themselves the opportunity to meet new people or maintain existing social relationships. More hotlines must be implemented to encourage people to talk when they feel alone or have a strong psychological burden. Also connecting people with others, teaching people to offer and receive help and social support can empower psychological well-being (Bao et al., 2020). These findings suggest the potential usefulness of counseling programs aiming at improving self-esteem, thus empowering emerging adults to be more confident in their relationships and to develop more communication skills.

Regarding the Post-COVID-19 period, current research shows that there is a prevalence of fatigue and anhedonia (El Sayed et al., 2021). To decrease levels of psychological maladjustment, protective factors must be emphasized, such as sharing with others, working in groups, interdependence, and sociability. Further research must be conducted during the post-covid period among emerging adults, to identify changes in mental health, coping strategies and personal relationships in different social contexts such as family, friends, and partners. It is interesting to explore the sharing of feelings and how young adults try to connect with people, communicate with each other and enter an intimate relationship.

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Part II
Challenges and Resources in Coping
with Crisis: The Experience of Emerging
Adults Across Nations

Chapter 5

Mental Health and Daily Experience of Italian College Students During the COVID-19 Pandemic



Silvia Sanzò, Flavia Borgonovo, Giuseppina Bernardelli, and Antonella Delle Fave

Abstract Research shows that college students are more vulnerable to affective disorders than the general population. Studies conducted during the COVID-19 pandemic highlighted the positive association of students' affective disorder symptoms with restriction measures and demographic features, whereas well-being dimensions and daily life experiences were rarely explored. To partially fill this gap, during the first national lockdown 1252 Italian emerging adults attending university courses in health professions were invited to complete the Mental Health Continuum—Short Form (MHC-SF), assessing positive mental health levels, and to answer optional open-ended questions concerning challenges perceived in the pandemic condition, abilities and skills required to face it, and everyday situations of most intense satisfaction. Results obtained from MHC-SF allowed to classify 25.96% of the participants as flourishing and 8.07% as languishing, conditions reflecting high and low levels of mental health, respectively. Analysis of the qualitative data revealed that the domains more frequently associated with both challenges and satisfaction were education, inner life (reflections, emotions, planning), family and social interactions, while the competences deemed as relevant to face the pandemic were adaptive coping strategies, resilience, hardiness, and optimism. Significant differences in answer distribution across domains were detected according to participants' gender and mental health level. These findings suggest that learning activities and interpersonal relationships, together with individual

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efforts to reorganize daily routine and achieve effective time management, represented key resources enabling emerging adults attending university to adaptively cope with the pandemic-related challenges.

Keywords COVID-19 pandemic · College students · Positive mental health · Challenges · Resources

5.1 Introduction

The implications of the COVID-19 pandemic and related restrictions have been investigated across disciplines. In the psychological domain, studies involved adults from the general population, as well as specific groups, such as health workers and college students (Robinson et al., 2022; Saragih et al., 2021), and they were primarily focused on the assessment of depression, anxiety, and stress. To the contrary, as highlighted by a recent review (Robinson et al., 2022), only 10% of the studies included the assessment of well-being dimensions.

Although the prolonged emergency conditions may justify researchers' primary focus on related problems and challenges, these findings underscore the persistent tendency to consider mental health as absence of pathological symptoms, despite the availability of models developed to conceptualize and assess mental health as a set of positive indicators (see Delle Fave & Negri, 2018 for a review). In particular, the Dual Continua Model (Keyes, 2002) is grounded in the view of mental health and mental illness as unfolding along two distinct, though correlated, continua. In this model, mental health comprises positive indicators, referring to three constructs developed from the hedonic and eudaimonic well-being research perspectives (Huta & Waterman, 2014; Keyes et al., 2002). The hedonic construct, *subjective well-being* (Diener, 2000), comprises the prevalence of positive emotions versus negative ones (hedonic balance, Tugade & Fredrickson, 2007), and the cognitive dimension of satisfaction with life (Diener et al., 2003). The two eudaimonic constructs are *psychological well-being* (Ryff, 1989) and *social well-being* (Keyes, 1998). The former includes the six dimensions of autonomy, environmental mastery, purpose in life, personal growth, positive relations, and self-acceptance; the latter includes the five dimensions of social coherence, acceptance, actualization, integration, and contribution. The Dual Continua Model therefore conveys a view of mental health as a multifaceted state, combining hedonic feelings of well-being and dynamic processes of positive functioning, personal growth, and fruitful social exchange.

The condition of complete mental health, in which both hedonic and eudaimonic well-being are experienced, is labeled as *flourishing* (Keyes, 2002); the opposite state is *languishing*, characterized by the prevalence of negative affect and an overall experience of disengagement, stagnation, and meaninglessness (Keyes, 2007). Cross-sectional and longitudinal studies conducted across countries have recurrently

detected this pattern. Flourishing individuals show positive functioning at the psychological and social levels, they can successfully adapt to and thrive under adverse circumstances. Languishing individuals, instead, though not exceeding the threshold for clinical diagnosis of mental disorders, are at higher risk for developing them; they report low engagement in daily activities and lower levels of hedonic balance; they are more vulnerable to diseases and less equipped to adequately face adversarial events (Bassi et al., 2021; Keyes, 2007; Keyes et al., 2010; Wissing et al., 2019).

5.1.1 Mental Health in Emerging Adulthood: Evidence from the COVID-19 Pandemic

The college years coincide with emerging adulthood (Arnett, 2003), a developmental period characterized by exposure to the challenges and opportunities of the wider social context, including higher learning demands, higher autonomy and responsibility, and involvement in decision processes related to the professional, relational, and personal future life (Credé & Niehorster, 2012).

In times of social stability and prosperity, the exposure of emerging adults to such a multifaceted set of challenges can per se represent a risk factor for developing mental health issues (Storrie et al., 2010), which often go untreated (Pedrelli et al., 2015). A higher prevalence of affective disorders, stress, and anxiety was detected in this group compared to the general population across countries (Fiori Nastro et al., 2013; Larcombe et al., 2016). Anxiety is the most common symptom reported by students attending mental health services (Center for Collegiate Mental Health, 2020). Protective factors include a healthy lifestyle (Mazurek Melnyk et al., 2016), social support (Hefner & Eisenberg, 2009), and civic engagement (Fink, 2014; Tzankova et al., 2017).

Research conducted during previous health emergencies, such as the SARS epidemic, confirmed the peculiar vulnerability of college students to mental health issues (Main et al., 2011; Wong et al., 2004). During the COVID-19 pandemic college students reported high distress, depression, and anxiety levels (Cao et al., 2020; Essadek & Rabeyron, 2020; Karing, 2021); moreover, symptoms' levels were higher compared to adult workers (Romeo et al., 2021). A prospective study conducted before the pandemic and during the national lockdown highlighted a worsening in Italian college students' mental health (Meda et al., 2021), even though an improvement was detected after the partial removal of social restrictions. Maladaptive coping strategies such as avoidance, previously identified as predictor of depressive symptomatology in young adults (Dyson & Renk, 2006), were also detected. They included ignoring COVID-19-related news, sleeping longer, drinking and smoking (Son et al., 2020).

Different pandemic-related factors may have contributed to students' vulnerability. Universities had to suddenly shift to online teaching, facing challenges

concerning both technological equipment and human competencies. Uncertainty about procedures, evaluation methods, and academic future may have increased students' distress levels (Sahu, 2020; Son et al., 2020). Social distancing and restrictive measures affected college students' lifestyle choices as well. A study conducted in China showed that 68.1% of the participants woke up later than usual, 24% went to bed later, and 23.7% changed the amount of food intake (Xiao et al., 2020); a worsened sleep quality could generate negative emotions, stress, and anxiety (Zhang et al., 2020). At the relational level, living alone, lacking direct contacts with family, perceiving lower family support, having a weaker social network, living in poor socio-economic conditions, and having been in physical contact with infected people were associated with higher vulnerability to mental health problems (Cao et al., 2020; Elmer et al., 2020; Essadek & Rabeyron, 2020; Mariani et al., 2020).

Enhanced exposure to contagion represented per se a risk factor for developing mental disorders, as suggested by the higher prevalence of depression and anxiety detected among University students in Wuhan than in Beijing (Xiao et al., 2020). In a highly affected French region, nearly 40% of college students manifested symptoms of affective disorders, with half of the participants in this group reporting severe anxiety; having a job and being male represented protective factors (Essadek & Rabeyron, 2020). This gender difference was however not confirmed by other studies; discrepancies might be due to cultural, social, or demographic features not specifically investigated (Cao et al., 2020; Essadek & Rabeyron, 2020; Liu et al., 2020).

Due to the substantial implications of the pandemic for public health and healthcare systems, specific attention was devoted to emerging adults attending medicine and healthcare courses. Previous research detected higher rates of depression and anxiety and a more frequent use of psychotropic substances among medical students, compared with students attending other courses (Mirza et al., 2021; Sampogna et al., 2020; Tian-Ci Quek et al., 2019). During the pandemic affective disorder symptoms were indeed reported by these students (Liu et al., 2020; Mechili et al., 2021), but at lower levels compared to students attending other courses (Miao et al., 2021; Xie et al., 2020).

Only few studies were aimed at identifying protective factors that could support college students' mental health during the pandemic. Physical activity and healthy lifestyle were associated with better quality of life and lower affective symptoms (Chen et al., 2020; Slimani et al., 2020; Wolf et al., 2021). Proactivity, positive thinking, and resilience were associated with more effective coping strategies (Son et al., 2020; Yang et al., 2020).

5.1.2 Aims of the Study

As summarized above, studies involving college students during the pandemic were primarily focused on the assessment of affective disorders and risk factors, whereas

limited information was collected about youth's well-being and resources. Moreover, most studies relied on a quantitative approach.

This study is aimed at filling this twofold gap, by reporting findings collected during the pandemic among Italian emerging adults attending college through (a) a quantitative measure of positive mental health, and (b) a set of open-ended questions exploring participants' perceived challenges, positive experiences, and personal resources.

5.2 Methods

5.2.1 Study Sample and Procedure

The sample comprised 1252 emerging adults aged between 19 and 29 years (M age = 22.01, SD = 2.16), attending the medical school or other health professions' courses at the University of Milano, Italy. After approval of the project by the Ethics Committee of the University of Milano, participants completed an online survey between April 15 and May 18, 2020, during the first COVID-19 outbreak. Due to the national lockdown imposed on March 8, they were attending classes from remote.

5.2.2 Measures

Mental Health Continuum-Short Form (MHC-SF) (Lamers et al., 2011). The MHC-SF is a 14-item scale measuring mental health as the combination of emotional or hedonic well-being (EWB, 3 items; e.g., "feeling happy"), psychological well-being (PWB, 6 items; e.g., "feeling good at managing the responsibilities of daily life"), and social well-being (SWB, 5 items; e.g., "feeling that people are basically good"). Participants are asked to rate the frequency of occurrence of each item during the previous month on a 6-point Likert scale, ranging from 0 ("never") to 5 ("everyday"). Ratings can be summed up to a score for each component (EWB, SWB, PWB) and to a total score. Lamers et al. (2011) showed that the scale has high internal reliability (α = 0.89) and confirmed its three-factor structure. Adequate internal reliability was detected for the Italian version of the scale (Petrillo et al., 2015).

Participants are classified as *languishing* if they report having experienced at least one EWB item and six of the PWB and SWB ones "never" or "only once or twice" during the last month; and *flourishing* if they report having experienced at least one EWB item and six indicators of psychological and social well-being "everyday" or "almost every day." Participants not fitting the criteria for these two conditions are classified as having moderate mental health.

Optional open-ended questions and socio-demographic information. Besides scaled questionnaires, an optional interview invited participants to freely express their own opinions, concerns, and expectations. To the purpose of this study, three questions will be considered: (1) “What are the main challenges that you are facing during this period?”; (2) “In your opinion, what are the most important abilities and skills to cope well with the pandemic condition?”; (3) “In which situations do you experience the most intense satisfaction?”. These questions offer an overview of the challenging aspects of the situation, on the one hand, and of the perceived personal resources and daily opportunities for well-being, on the other hand.

Participants were also invited to report their gender, age, occupational status, cohabitation context, and degree type.

5.2.2.1 Statistical Analyses

Quantitative analyses were conducted using SAS 9.4. Demographic data were analyzed using descriptive statistics. MHC-SF total and subscale scores were calculated. Internal consistency was high for the scale as a whole ($\alpha = 0.89$) and for its three components: EWB ($\alpha = 0.81$), SWB ($\alpha = 0.78$), PWB ($\alpha = 0.85$). Participants were classified as languishing, having moderate mental health, or flourishing.

Qualitative answers were often articulated, and they had to be first partitioned into semantic units. Each unit was assigned a numeric code, using coding systems employed in previous studies (Delle Fave et al., 2011; Delle Fave et al., 2015). A maximum of four units per answer were retained. Two raters performed the coding work; discrepancies or doubts were discussed with a third rater, with expertise in qualitative research.

The coding systems were organized in categories. Challenges and situations of intense satisfaction were categorized in the major daily life domains. Abilities and skills were instead categorized as coping strategies, individual and relational resources. Following a bottom-up approach, the pre-existing coding systems were expanded to accommodate new items, most of them specific for the pandemic condition.

After attributing a category to each item, the frequency and percentage distribution of the answer units across categories were first calculated. Secondly, the number and percentage of participants referring to a single category in *at least one* of the four available answer units was computed. This twofold approach provides information on both the most frequently quoted categories, and the association between categories and specific groups of participants. More specifically, calculating the number of participants who mentioned a category at least once allowed for building contingency tables, in which differences in participants' distribution across answer categories according to their gender and mental health level were investigated through the χ^2 statistics.

5.3 Results

5.3.1 *Participants' Demographic Features and Mental Health Level*

As illustrated in Table 5.1, the majority of participants were women, in line with the typical profile of Italian students in health professions degrees (AlmaLaurea, 2021). Most of them (88.86%) lived with their family of origin, while only small percentages reported living with a partner (3.84%), with roommates (3.92%) or alone (3.36%).

Most participants were full-time students attending bachelor's degrees in nursing and rehabilitation professions, or the medical school. Due to the intensive learning schedule, including mandatory attendance to both classes and clinical internship, very few participants performed even part-time jobs. Half of the students attending master's degrees were already working as health professionals, and they could opt for a part-time program.

Participants' distribution across mental health categories is also illustrated in Table 5.1. Students with moderate mental health were the majority, a quarter were flourishing and a very limited percentage was languishing.

No significant gender differences were detected in demographic features and mental health levels. Moreover, neither occupational status nor degree type was associated with significant differences in participants' mental health level.

5.3.2 *Qualitative Findings: Challenges, Situations of Most Intense Satisfaction, Abilities, and Skills*

Since the qualitative section of the survey was optional, not all participants provided answers. More specifically, 888 students (70.93%) described perceived challenges,

Table 5.1 Participants' demographic characteristics and mental health level ($N = 1252$)

		<i>N</i>	%
Gender	Women	1008	80.51
	Men	244	19.49
Occupational status	Not working	1054	84.19
	Working	198	15.81
Degree type	Bachelor	922	73.64
	Master	42	3.35
	Medical School	270	21.57
	Dentistry	18	1.44
Mental Health level	Languishing	101	8.07
	Moderate	826	65.97
	Flourishing	325	25.96

905 (72.28%) reported situations associated with the most intense satisfaction, and 985 (78.67%) identified abilities and skills deemed as relevant to cope with the pandemic. A total of 1810 answer units referred to challenges, 1664 to situations of intense satisfaction, and 2628 to abilities and skills.

In the following pages, for each question the distribution of the answer units across categories will be first provided. Subsequently, comparisons by gender and mental health levels will be performed through the χ^2 statistics, based on the percentage distribution of students providing at least one answer in a specific category. Cramer's V value will be reported as effect size measure. Comparisons are marked as N/A (Not Applicable) if the expected count in any given cell was below 5.

5.3.2.1 Answer Unit Distribution across Categories

As reported in Fig. 5.1, the categories more frequently associated with both challenges and intense satisfaction were inner life, education, family/partner, and social interactions.

Challenges related to *inner life* referred to planning, reflections on self and life, and emotions. Around 25% of the answers concerned difficulties in managing the high amount of unstructured time generated by the lockdown. Exemplary answers were “overcoming apathy and laziness,” “being organized and not wasting time,” “finding activities to get engaged and escape boredom,” “finding a new daily routine” and “accepting the pandemic related restrictions.” At the emotional level, challenges included handling feelings of loneliness, helplessness, uncertainty and fear, and trying to focus on the positive side of things. As concerns *education*, about

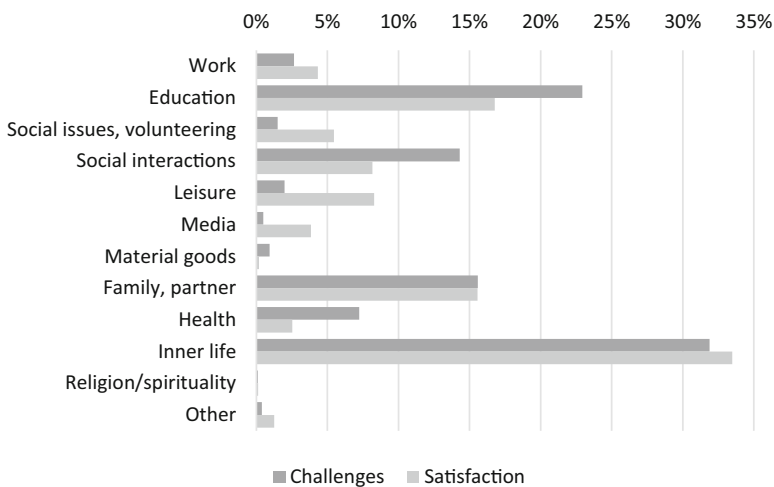


Fig. 5.1 Perceived challenges and situations of intense satisfaction: Percentage distribution of answers

60% of the answers referred to studying alone, at home. Participants expressed difficulties in maintaining concentration, and in re-organizing deadlines related to exams. The lack of proper interaction with teachers and classmates due to distance learning, and the impossibility to attend clinical internship in presence were also reported. In the *family/partner* domain, both cohabitation and distance represented a challenge. Since most students were living with their family of origin, several answers concerned being forced to share daily life and limited space with parents and siblings. Answers such as “finding a balance between family/loved ones and the need for freedom,” “finding privacy,” “getting along with family,” and “keeping good relationships” exemplify the struggle of emerging adults during lockdown. Students also complained about forced separation from their partners (often peers living with their own family of origin), and relatives, especially older and frailer ones, who were also at higher risk of experiencing severe infection symptoms, in case of contagion.

The situations associated with most intense satisfaction in the *inner life* category included feelings of engagement in daily activities, appropriate time management, and successful planning, with answers such as “taking time for myself”; “organizing my daily life”; “not wasting time.” These situations allowed students to feel productive, put themselves to the test and perceive positive daily achievements. Over one-third of the answers referred to goal pursuit and optimistic expectations about the future. In the domain of *education*, in over 50% of the answers satisfaction derived from achieving good results. Students referred to “mastering difficult learning contents,” “being able to keep up with deadlines and learning schedules,” and “passing an exam,” despite distance learning. Other answers referred to study as intrinsically rewarding, and as a source of personal growth and self-actualization. The occasions of satisfaction with *family/partner* referred in about 40% of the answers to feelings of relational closeness and serenity, substantiated through shared activities, either in person or online: “living together,” “talking during meals,” and “a nice video call with my beloved ones.” Other answers referred to helping parents in daily chores, and appreciating that all family members enjoyed good health.

As reported in Fig. 5.2, the abilities and skills deemed as most relevant to face the pandemic condition were adaptive coping strategies (primarily problem management and problem appraisal) and the individual resources of resilience, hardiness, and optimism.

Problem management included answers about self-organization and autonomy in planning and performing daily activities. Participants also valued problem-solving skills, and the ability to face problems as they come, without worrying too much about future difficulties. The adoption of responsible behaviors and attitudes, such as “respecting norms,” “taking responsibility and not blaming others,” and “being patient,” as well as the importance of setting long-term goals and trying to reach them, despite adversities, were also mentioned. The most frequent answers pertaining to *resilience* were the ability to adapt to unfavorable circumstances, to activate creativity and flexibility, and to remain enthusiastic and active despite the adverse situation. Almost 70% of the answers in the *hardiness* category referred to determination, perseverance and “not giving up.” The remaining answers focused on

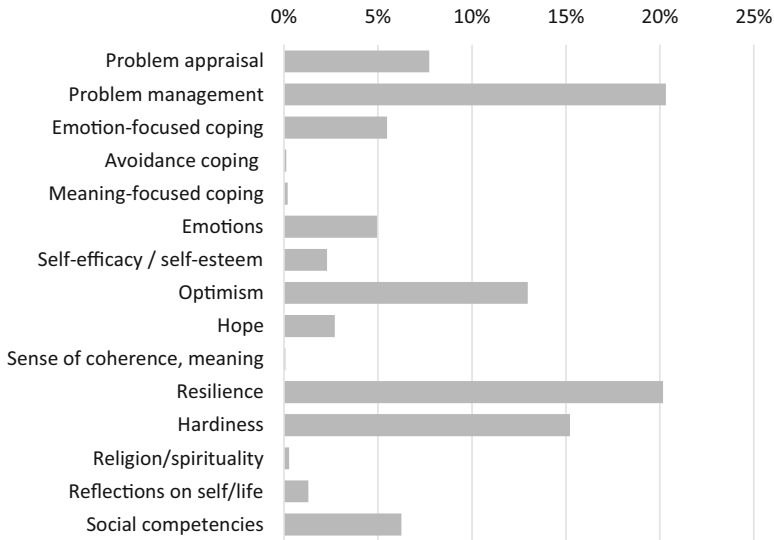


Fig. 5.2 Relevant abilities and skills: Percentage distribution of answers

working on oneself with diligence, resourcefulness, and willpower. Finally, *optimism* was almost unanimously described as a positive life outlook.

5.3.2.2 Participants' Distribution across Answer Categories by Gender

As highlighted in Table 5.2, the domains associated with perceived challenges by the highest percentages of participants in both genders were inner life and education. Significantly more women referred to family and social interactions, but both effect sizes were very low ($V = 0.108$, and $V = 0.080$, respectively).

Similar results were obtained concerning the situations of most intense satisfaction (Table 5.3): inner life and education were mentioned by the highest percentages of participants of both genders, followed by family and social interactions. Inner life was quoted by a higher percentage of women and leisure by a higher percentage of men ($V = 0.078$ and $V = 0.103$, respectively).

Finally, as reported in Table 5.4, a similar percentage of men and women mentioned problem-focused coping (in the two facets of problem appraisal and management), resilience, and hardiness as the abilities and skills deemed as most relevant to face the situation. Optimism was instead mentioned by a significantly higher percentage of women ($V = 0.177$).

Table 5.2 Perceived challenges: Percentage of participants mentioning each category by gender

Categories	Gender				χ^2	<i>p</i>
	Women (<i>N</i> = 737)		Men (<i>N</i> = 151)			
	<i>N</i>	%	<i>N</i>	%		
Work	34	4.61	12	7.95	2.84	0.092
Education	280	37.99	68	45.03	2.61	0.106
Social issues, volunteering	15	2.04	8	5.30	N/A	N/A
Social interactions	222	30.12	31	20.53	5.66	0.017
Leisure	21	2.85	8	5.30	N/A	N/A
Media	5	0.68	3	1.99	N/A	N/A
Material goods	16	2.17	1	0.66	N/A	N/A
Family, partner	205	27.82	23	15.23	10.40	0.001
Health	110	14.93	15	9.93	2.58	0.108
Inner life	362	49.12	66	43.71	1.47	0.226
Religion/spirituality	2	0.27	–	–	N/A	N/A
Other	5	0.68	2	1.32	N/A	N/A

The bold numbers indicate significant values

Table 5.3 Situations of intense satisfaction: Percentage of participants mentioning each category by gender

Categories	Gender				χ^2	<i>p</i>
	Women (<i>N</i> = 745)		Men (<i>N</i> = 160)			
	<i>N</i>	%	<i>N</i>	%		
Work	60	8.05	6	3.75	3.61	0.057
Education	200	26.85	45	28.13	0.11	0.741
Social issues and volunteering	70	9.40	11	6.88	1.03	0.311
Social interactions	102	13.69	20	12.50	0.16	0.689
Leisure	93	12.48	35	21.88	9.57	0.002
Media	51	6.85	12	7.50	0.09	0.768
Material goods	3	0.40	–	–	N/A	N/A
Family, partner	195	26.17	33	20.63	2.15	0.142
Health	34	4.56	7	4.38	0.11	0.917
Inner life	383	51.41	66	41.25	5.44	0.020
Religion/spirituality	2	0.27	–	–	N/A	N/A
Other	16	2.15	5	3.13	N/A	N/A

The bold numbers indicate significant values

Table 5.4 Relevant abilities and skills: Percentage of participants mentioning each category by gender

Categories	Gender				χ^2	<i>p</i>
	Women (<i>N</i> = 803)		Men (<i>N</i> = 182)			
	<i>N</i>	%	<i>N</i>	%		
Problem appraisal	139	17.31	30	16.48	0.07	0.789
Problem management	365	45.45	81	44.51	0.05	0.816
Emotion-focused coping	112	13.95	21	11.54	0.74	0.391
Avoidance coping	–	–	3	1.65	N/A	N/A
Meaning-focused coping	4	0.50	1	0.55	N/A	N/A
Emotions	104	12.95	26	14.29	0.23	0.631
Self-efficacy / self-esteem	50	6.27	10	5.49	0.14	0.709
Optimism	301	37.48	29	15.93	30.93	<0.001
Hope	58	7.22	11	6.04	0.32	0.574
Sense of coherence, meaning	2	0.25	–	–	N/A	N/A
Resilience	329	40.97	74	40.66	0.006	0.938
Hardiness	266	33.13	58	31.87	0.11	0.744
Religion/spirituality	4	0.50	3	1.65	N/A	N/A
Reflections on self/life	29	3.61	5	2.75	0.33	0.564
Social competencies	117	14.57	27	14.84	0.008	0.927

The bold number indicates significant value

5.3.2.3 Participants' Distribution across Answer Categories by Mental Health Level

As illustrated in Table 5.5, languishing participants reported in higher percentage family-related challenges, and in lower percentage challenges associated with social interactions ($V = 0.094$, and $V = 0.091$).

As concerns situations of intense satisfaction, (Table 5.6), compared with the other two groups a significantly higher percentage of flourishing students mentioned social issues and volunteering ($V = 0.126$), whereas languishing ones referred in higher percentage to health ($V = 0.095$) and in lower percentage to family ($V = 0.094$).

Finally, as Table 5.7 shows, regardless of their mental health level most participants referred to problem-focused coping, hardiness and resilience as relevant abilities and skills. Optimism and social competencies were reported by a significantly lower percentage of languishing students ($V = 0.091$ and $V = 0.083$, respectively).

Table 5.5 Perceived challenges: Percentage of participants mentioning each category by mental health level

Categories	Mental health level						χ^2	<i>p</i>
	Languishing (<i>N</i> = 74)		Moderate (<i>N</i> = 574)		Flourishing (<i>N</i> = 240)			
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%		
Work	2	2.70	26	4.53	18	7.50	N/A	N/A
Education	28	37.84	219	38.15	101	42.08	1.16	0.560
Social issues, volunteering	2	2.70	14	2.44	7	2.92	N/A	N/A
Social interactions	11	14.86	171	29.79	71	29.58	7.36	0.025
Leisure	1	1.35	20	3.48	8	3.33	N/A	N/A
Media	–	–	6	1.05	2	0.83	N/A	N/A
Material goods	2	2.70	9	1.57	6	2.50	N/A	N/A
Family, partner	26	35.14	154	26.83	48	20.00	7.92	0.019
Health	12	16.22	82	14.29	31	12.92	0.57	0.753
Inner life	41	55.41	272	47.39	115	47.92	1.70	0.428
Religion/spirituality	–	–	1	0.17	1	0.42	N/A	N/A
Other	–	–	3	0.52	4	1.67	N/A	N/A

The bold numbers indicate significant values

Table 5.6 Situations of intense satisfaction: Percentage of participants mentioning each category by mental health level

Categories	Mental health level						χ^2	<i>p</i>
	Languishing (<i>N</i> = 72)		Moderate (<i>N</i> = 581)		Flourishing (<i>N</i> = 252)			
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%		
Work	4	5.56	41	7.06	21	8.33	0.77	0.679
Education	21	29.17	156	26.85	68	26.98	0.18	0.916
Social issues, volunteering	6	8.33	38	6.54	37	14.68	14.33	0.001
Social interactions	7	9.72	73	12.56	42	16.67	3.48	0.175
Leisure	10	13.89	84	14.46	34	13.49	0.14	0.933
Media	2	2.78	37	6.37	24	9.52	4.82	0.090
Material goods	–	–	1	0.17	2	0.79	N/A	N/A
Family, partner	8	11.11	154	26.51	66	26.19	8.24	0.016
Health	8	11.11	24	4.13	9	3.57	7.96	0.019
Inner life	28	38.89	294	50.60	127	50.40	3.60	0.165
Religion/spirituality	–	–	2	0.34	–	–	N/A	N/A
Other	6	8.33	14	2.41	1	0.40	N/A	N/A

The bold numbers indicate significant values

Table 5.7 Relevant abilities and skills: Percentage of participants mentioning each category by mental health level

Categories	Languishing (<i>N</i> = 81)		Moderate (<i>N</i> = 638)		Flourishing (<i>N</i> = 266)		χ^2	<i>p</i>
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%		
Problem appraisal	15	18.52	98	15.36	56	21.05	4.39	0.111
Problem management	37	45.68	302	47.34	107	40.23	3.84	0.147
Emotion-focused coping	10	12.35	91	14.26	32	12.03	0.90	0.637
Avoidance coping	1	1.23	1	0.16	1	0.38	N/A	N/A
Meaning-focused coping	–	–	5	0.78	–	–	N/A	N/A
Emotions	12	14.81	93	14.58	25	9.40	4.60	0.100
Self-efficacy / self-esteem	4	4.94	34	5.33	22	8.27	3.04	0.218
Optimism	16	19.75	216	33.86	98	36.84	8.24	0.016
Hope	3	3.70	46	7.21	20	7.52	1.50	0.471
Sense of coherence, meaning	–	–	2	0.31	–	–	N/A	N/A
Resilience	28	34.57	253	39.66	122	45.86	4.46	0.107
Hardiness	30	37.04	209	32.76	85	31.95	0.74	0.690
Religion/spirituality	–	–	4	0.63	3	1.13	N/A	N/A
Reflections on self/life	5	6.17	18	2.82	11	4.14	2.93	0.231
Social competencies	8	9.88	85	13.32	51	19.17	6.74	0.034

The bold numbers indicate significant values

5.4 Discussion

The aim of this chapter was to assess positive mental health levels, perceived challenges, positive daily experiences and resources among Italian emerging adults attending medical and healthcare college courses, during the national lockdown characterizing the first outbreak of the COVID-19 pandemic. The results, obtained through both scaled and open-ended questions, complement the available research evidence, primarily focused on the evaluation of affective disorders and ill-being indicators.

Considering that emerging adulthood is an “age of instability” by definition, the pandemic may have exposed college students to higher uncertainty (Arnett, 2004; Germani et al., 2020). Nevertheless, our findings provided a globally positive picture of participants’ mental health: less than 10% were languishing, while the majority were classified as moderately or completely mentally healthy. The qualitative results concerning perceived challenges, situations of intense satisfaction, and skills/abilities deemed as useful to cope with the pandemic highlighted participants’ awareness of personal and contextual problems and resources. In particular, the abilities and skills deemed as most relevant to face the situation were primarily cognitive resources, such as problem-focused coping strategies, hardiness, and resilience. Participants recognized the possibility of making the most of adverse situations and were oriented to manage problems proactively and flexibly.

The domains more frequently associated with both perceived challenges and situations of intense satisfaction were inner life, education, and family. All these domains were heavily impacted by the pandemic. The sudden increase in unstructured time led students to spend more time focusing on their emotions, needs, goals, and projects, in both problematic and appreciative terms. This process of self- and life exploration is a core characteristic of emerging adulthood (Arnett, 2004), but it is also consistent with the eudaimonic view of well-being as a lifelong process of personal growth and expressiveness (Huta & Waterman, 2014; Massimini & Delle Fave, 2000).

As concerns education, universities switched to remote teaching, with consequences on learning contents and outcomes, interactions with classmates and professors, and interruption of clinical internships. Distance learning activities emerged as concerns, but also as resources helping participants to fruitfully structure their daily life and offering them opportunities for experimenting new learning methodologies (Bao, 2020). This lesson from the pandemic may open new approaches to college learning in the future: the combination of face-to-face, distance and self-learning activities may promote individual initiative and responsibility, relevant developmental tasks for emerging adults.

Since most students lived with their family of origin, the lockdown was perceived as an opportunity to spend more time together enjoying shared activities, but also a challenge due to lack of privacy and autonomy. In general, participants in this study showed awareness of the family needs and resources, making efforts to actively contribute to family connectedness. These findings are consistent with the multiple roles played by family for Italian emerging adults, including the contribution to their identity and life satisfaction (Crocetti & Meeus, 2014).

Some differences emerged according to gender and mental health level, albeit their effect sizes were small. Significantly more women perceived challenges in family and social interactions, possibly based on gender roles prescriptions: women are supposed to be communal and nurturing, and failure to match these expectations elicits negative emotions and decreases self-esteem (Eagly & Wood, 2012). A higher percentage of languishing participants reported challenges in the family domain, and a lower percentage in social interactions. Family support was found to mitigate depressive symptoms during the pandemic (Mariani et al., 2020), but relational worries and weaker connections could be amplified in individuals with poor mental health, who—on the other hand—struggle to cultivate relationships and thus have fewer friends to be concerned about (Elmer et al., 2020).

Significantly more men perceived intense satisfaction during leisure, while more women associated it with inner life. Leisure allows emerging adults to explore new areas of interest and to cultivate competences, representing a relevant context for their identity development (Layland et al., 2018), but previous findings showed that young women enjoy less free time than men for several reasons, such as higher involvement in domestic chores (Dotti Sani, 2016) and study (Greene & Maggs, 2015). Women also tend to be more focused on their inner life, scoring higher in purpose in life and personal growth measures (Matud et al., 2022). As concerns mental health, a higher percentage of flourishing participants associated intense

satisfaction with socially useful activities and volunteering, in line with research identifying civic engagement as a protective factor for mental health (Fink, 2014; Tzankova et al., 2017). A significantly lower percentage of languishing individuals associated family interactions with satisfaction (rather perceiving them as challenging), while a significantly higher percentage provided answers in the health category, suggesting an increased attention to physical conditions by individuals more vulnerable than flourishing ones to a variety of diseases (Keyes, 2007).

Regardless of gender and mental health level, most participants deemed cognitive resources and adaptive coping strategies as the prominent assets to face the pandemic. Only optimism was mentioned by a higher percentage of women. Overall, however, research on gender differences in optimism is inconclusive (Cabras & Mondo, 2018; Koliouli & Canellopoulos, 2021; Yue et al., 2017) and therefore no clear-cut interpretation of this result can be provided. Not surprisingly, instead, significantly more flourishing or moderately mentally healthy students reported optimism and social competencies, compared with languishing ones, who experience a condition of disengagement and low purpose in life (Keyes, 2002).

5.4.1 Strengths and Limitations

This study contributes to the scanty literature concerning positive mental health and resources of emerging adults during the COVID-19 pandemic (Robinson et al., 2022). Its strengths include a large sample size and the use of both quantitative and qualitative measures.

A limitation of the study is the uneven distribution of the sample according to gender, occupational status, and degree level. Data was collected in Lombardy, an Italian region deeply affected by the first pandemic outbreak; finally, all participants attended health professions' degrees, preventing result generalization to students attending courses in other disciplines.

5.4.2 Conclusions

Overall, this study suggests the importance to assess positive mental health, perceived resources, and well-being-related domains in adversity conditions. As expected among emerging adults, the participants showed awareness of both the challenges posed by the pandemic, and their own potential to adjust to them with responsibility and proactivity. Paying more attention to resources besides disorder symptoms can shed a more comprehensive light on the experience and self-perception of emerging adults. At the clinical level, interventions' effectiveness can be strengthened by the evaluation and mobilization of the available personal assets and optimal functioning areas. Moreover, the identification of languishing

individuals may promote early intervention, thus preventing the onset of clinical symptoms that can undermine youth's setting and pursuit of long-term goals.

As a general consideration, it must be acknowledged that the emerging adults involved in most psychological surveys are typically college students: easy to be recruited in universities; used to complete questionnaires; open to professional and personal learning opportunities; and living in WEIRD (western, educated, industrialized, rich, and democratic) countries (Henrich et al., 2010), or representing an élite minority in other regions (Arnett, 2016). Research on youth who are workers, parents, or live in contexts preventing them from autonomously exploring life is still limited (Dimitrova, 2017). Even less information is available on their experience during the pandemic, calling for the necessity of higher efforts and resource investments to make psychological research truly universal.

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Chapter 6

Well-Being of Greek University Students During the COVID-19 Pandemic



Eirini Karakasidou, Georgia Raftopoulou, Anna Papadimitriou, Christos Pezirkianidis, and Anastassios Stalikas

Abstract The COVID-19 outbreak has affected mental health worldwide, and especially among university students, who stopped attending lessons and had a long break from their social life. The present chapter presents the findings of a study aiming to investigate the relationship between distance learning during the COVID-19 pandemic and well-being dimensions (gratitude, life satisfaction, subjective happiness, positive and negative affect, depression, anxiety, stress) in this population. The sample consisted of 79 Greek university students, all emerging adults aged between 18 and 29 years. Participants completed self-report questionnaires including the satisfaction they experienced regarding distance learning, DASS-21, SHS, SWLS, GQ-6, and mDES. Overall, results showed that Greek university students experienced moderate levels of life satisfaction and positive affect and high levels of subjective happiness and gratitude, moderate stress levels, low anxiety and depression symptoms, and moderate negative affect levels. An important finding of the study is that there is an interaction between satisfaction with distance learning and all well-being indices, except subjective happiness. The findings provide suggestions for further research and applications in the field of education and counseling in emerging adulthood.

Keywords COVID-19 · Distance learning · Gratitude · Well-being · Emerging adults

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6.1 Introduction

6.1.1 *COVID-19 and Education*

The unexpected outbreak of COVID-19 in 2019 led to many changes in everyday life; restrictions such as lockdowns led to the cessation of learning activities and gatherings (Piguillem & Shi, 2020) and the emergence of distance jobs. Among the required changes and adjustments, the pandemic significantly shaped the educational process (Gao et al., 2020; Rajab et al., 2020). While distance learning was first expected to last for a limited period of about six months, in many countries it was eventually extended by two years, as health conditions did not allow for a smooth and safe return to daily life (Nussbaumer-Streit et al., 2020).

6.1.2 *Emerging Adulthood and the COVID-19 Pandemic*

In 2000, Arnett made an important distinction between adulthood and emerging adulthood, recognizing that social-economic factors, studies extension, and the continuous development and specialization delay the autonomy and independence of young people. So, adulthood does not begin at the age of 18, and the period from 18 to 25 years of age can be defined as emerging adulthood (Arnett, 2000). In the light of the continuous social changes, emerging adulthood was subsequently expanded to the age of 30 (Hotez et al., 2021). During COVID-19, emerging adults had to deal with a series of challenges, like isolation, financial problems, and unemployment (Pocuca et al., 2022). They experienced stress (Hotez et al., 2021), especially for their relatives, as well as social worries (Germani et al., 2020), depression, anxiety (Kujawa et al., 2020), and substance use (Pocuca et al., 2022). Moreover, some studies found that about one third of them reported suicidality (Halliburton et al., 2021).

In university, the COVID-19 pandemic led to the transfer of academic courses from an in-vivo environment to an online one and the interaction with fellow students and academic staff via chat and through screens. This new reality has positively and negatively affected students' learning experiences (Nambiar, 2020). Factors such as coexistence with other people in the same space at the time of the lecture, lack of familiarity with computers and distance learning (Surani & Hamidah, 2020), and poor internet connection (Ferdig et al., 2020) prevented the active participation of students resulting in absences, gaps, and difficulties. The transition was even more difficult for students enrolled in courses involving internships and laboratory attendance, as many of these activities were postponed for a later period. While all students were affected, the adverse effects appear to be more pronounced in students facing socio-economic difficulties due to a lack of available resources (Aucejo et al., 2020). This situation had a negative impact on their academic progress and performance (Aucejo et al., 2020). On the other hand, this change

also brought positive results: for example, students were able to stay focused on their goal and manage their new daily life more effectively (Rahiem, 2021).

6.1.3 Stress, Anxiety, Depression, and Negative Emotions During the COVID-19 Pandemic

The effects of quarantine have also been noted in mental health. Quarantined individuals reported psychological difficulties and symptoms of post-traumatic stress disorder, depression, and anxiety (Cullen et al., 2020; Pfefferbaum & North, 2020). A study conducted during quarantine showed that the well-being of students decreased, while there was an increase in perceived stress (Savage et al., 2020). A long-term survey conducted among students in China during two waves of the pandemic showed differences between the two phases. In the second wave, stress on students was lower, but depression and anxiety were higher (Li et al., 2021).

According to a survey in Spain, 60% of first-year psychology students reported no way out and experiencing depression, anxiety, and distress (González-García et al., 2021). A similar increase in the levels of stress experienced by university students has also been observed in Greece (Konstantopoulou et al., 2020).

Similar results were also obtained for anxiety measures. In Greece, 35.8% of the university students participating in a survey reported anxiety during the pandemic (Sazakli et al., 2021). Another study conducted with Greek students showed a 42.5% increase in anxiety symptoms (Kaparounaki et al., 2020), while another study showed that 19.5% of Greek participants had moderate and severe anxiety symptoms (Kornilaki, 2021). High levels of stress and anxiety were observed among students worldwide (Aslan et al., 2020; Debowska et al., 2020; Gritsenko et al., 2020; Husky et al., 2020; Islam et al., 2020; Ye et al., 2020). In addition, female students from Poland had higher levels of anxiety than men, and students aged 18 to 24 reported higher levels of anxiety than their older co-students (Debowska et al., 2020). In the same study, psychology students had lower stress levels than medical and other students.

Compulsory quarantine during COVID-19 marked an increase in depression, with a significant risk of suicidality (Troutman-Jordan & Kazemi, 2020). According to one study in Greece, 12.4% of university students reported depressive symptoms (Patsali et al., 2020), while another study showed a 74.3% increase in the rate of depression and a 63.3% increase in suicidal ideation (Kaparounaki et al., 2020). However, no increase in suicidal behaviors was observed (Kaparounaki et al., 2020).

Similarly, moderate to severe depression levels were reported by university students all over the world (Debowska et al., 2020; Islam et al., 2020; Maia & Dias, 2020; Nakhostin-Ansari et al., 2020). In Poland, female students reported higher scores on depression than men (Debowska et al., 2020), while students aged 18 to 24 also reported higher depression and suicidality than students over 25 (Debowska et al., 2020).

Regarding the experiencing of negative emotions during the quarantine, Greek university students primarily experienced concern and anger about the lockdown, followed by anxiety and fear about the pandemic. In lower percentages, participants reported loneliness and indifference, and despair and panic (Karasmanaki & Tsantopoulos, 2021). Another study focusing on Greek university students (Kornilaki, 2021) showed that the participants experienced several negative emotions; most of them reported feeling distressed, upset, and nervous. Conflicting findings emerged from studies in other countries. Overall, students experienced negative emotions during the COVID-19 period (Alemany-Arrebola et al., 2020; Zhang et al., 2020); however, Chinese students experienced low levels of negative emotions (Wang et al., 2020).

In general, previous research was mainly focused on the association between the pandemic-related distance learning, as a social distancing measure, and negative affective symptoms. There is instead limited data on the positive psychological states experienced during the COVID-19 period. Moreover, the existing studies are mostly focused on adults from the general population, rather than emerging adults.

6.1.4 Well-Being Indices During the COVID-19 Pandemic

6.1.4.1 Life Satisfaction

Life satisfaction refers to the cognitive assessment of whether a person's quality of life converges with the criteria that the person sets and considers ideal (Shin & Johnson, 1978). During the COVID-19 period, the results of a global survey showed a reduction in life satisfaction by 16%, while almost 17% of the participants reported being completely dissatisfied with their lives (Ammar et al., 2020). In Greece, a survey showed that over one third of the participants were not satisfied with their lives. These findings however referred to the general population (Anastasiou & Duquenne, 2021). In the Greek literature, there are no studies focused on life satisfaction in the student population during the COVID-19 pandemic. The results obtained from other countries have shown conflicting findings. Some research findings suggest that students experienced life satisfaction (Labrague, 2021; Rogowska et al., 2020), while other studies detected dissatisfaction (Çelik, 2020). Generally, it seems that during the COVID-19 period the levels of life satisfaction decreased (Ammar et al., 2020), possibly due to life changes in many domains and the experience of negative emotions.

6.1.4.2 Subjective Happiness and Gratitude

Two positive concepts that have not been sufficiently studied in the population of emerging adults during the COVID-19 pandemic are subjective happiness and gratitude.

Subjective happiness refers to a state of well-being (Diener, 2000; Lyubomirsky et al., 2005; Sagiv et al., 2004; Sheldon & Lyubomirsky, 2004) and it has two components: the hedonic one and contentment. The first refers to the degree to which the experiences of a person are pleasant, while the second is the degree to which individuals perceive their aspirations to be met (Brülde, 2007; Chekola, 2007; Haybron, 2003; Kashdan, 2004; Sirgy et al., 2006; Veenhoven, 2005). Subjective happiness seems to have been significantly affected during the COVID-19 period. Findings from a prospective study aimed to assess pre-medical students' subjective happiness and perceptions of the educational environment before and during the pandemic (Lin et al., 2021) showed an increase in happiness and educational environment's perception after the pandemic onset, as well as the role of educational environment as predictor of subjective happiness. Another study investigating subjective happiness and psychological well-being among college students during the pandemic (Warrier et al., 2021) indicated that subjective happiness was above average, especially in women. All in all, it seems that subjective happiness in college students was high.

Gratitude refers to the pleasant feeling that individuals may experience for a person from whom they have been benefited (Lambert et al., 2009). To feel gratitude, it is important to recognize the benefits received (Graham & Weiner, 1986). Gratitude is recognized as a temporary feeling after receiving benefits or as a character strength (Pezirkianidis et al., 2020). In the first case, the duration is limited, while as a character strength the person has the predisposition to experience it (Emmons & McCullough, 2003).

In a study with Mexican students, participants reported the experiencing of positive emotions, such as gratitude during the COVID-19 period (Gaeta et al., 2021), while in another one, conducted in the USA, students who did not experience gratitude scored higher on stress levels (Biber et al., 2020). Finally, gratitude's protective role during the COVID-19 was highlighted in another study conducted among US students (Bono et al., 2020). Specifically, gratitude seems to facilitate the management of COVID-19 effects and favor subjective well-being, as well as participants' academic functioning.

6.1.4.3 Positive Emotions

Positive emotions can help people regulate their negative ones (Fredrickson et al., 2000; Fredrickson & Levenson, 1998). Moreover, the existence of negative emotions does not imply the absence of positive emotions and vice versa (Diener & Emmons, 1984).

Positive emotions may have a protective role against health and mental health issues (Tugade et al., 2014). The Broaden and Build Theory explains the functional value of positive emotions for mental health (Pezirkianidis & Stalikas, 2020), positing that positive emotions, such as joy, interest, pride, and love, broaden people's thinking and action repertoire and build long-term personal, mental, and

emotional resources (Fredrickson, 1998, 2001; Fredrickson et al., 2000; Fredrickson & Branigan, 2005; Fredrickson & Joiner, 2002).

The theory suggests the existence of an upward and perpetual spiral interaction between the experience of positive emotions and the expansion, i.e., the enrichment of personal resources (Fredrickson & Joiner, 2002). Moreover, positive emotions may act as “antidotes” to cancel out the negative consequences of negative emotions, by counterbalancing the arousal of the autonomic nervous system elicited by negative emotions (Fredrickson & Levenson, 1998) and by facilitating the restoration of flexible and fruitful thinking (Fredrickson, 1998).

There is limited research on positive emotions experienced by emerging adults during the COVID-19 period. Greek university students reported overall low levels of positive emotions, but also the experience of some specific positive emotions, like optimism and interest, although to a lesser extent (Karasmanaki & Tsantopoulos, 2021; Kornilaki, 2021). Different findings were detected in other countries. Specifically, Mexican students, besides reporting negative emotions, also experienced positive ones, like joy and hope (Gaeta et al., 2021). University students from China reported moderate levels of positive emotions and low levels of negative emotions (Wang et al., 2020).

6.1.5 The Current Study

In Greece, universities remained closed from March 2020 until September 2021, a long period which affected students severely. The lockdown took place suddenly and no one was prepared for it. There was no logistical infrastructure to support distance learning, and some households did not have the equipment or internet to allow for participation from remote. Apart from the technical parts, the students were not very familiar with the process. Students had to face the fear of the unknown regarding major health issues and, at the same time, they had to adjust to the new educational setting.

The current study is aimed to examine both the negative and positive well-being dimensions among Greek university students engaged in distance learning during the COVID-19 pandemic. While negative well-being dimensions were extensively investigated both in the general population and among emerging adults during the pandemic, the positive well-being dimensions were not sufficiently studied. Also, there are limited data in Greece about satisfaction with distance learning during the COVID-19 pandemic and its association with the positive and negative well-being dimensions. The study is thus aimed to answer the following research questions:

1. Is the Gratitude Questionnaire a valid and reliable tool to measure gratitude in Greece?
2. During the COVID-19 pandemic, in which levels did Greek students experience
 - (a) anxiety, stress, depression, and negative emotions?
 - (b) life satisfaction, subjective happiness, positive emotions, and gratitude?

3. Do negative and positive well-being dimensions
 - (a) relate to satisfaction with distance learning?
 - (b) differ according to the levels of distance learning satisfaction?

6.2 Method

6.2.1 Design, Participants, and Procedure

An observational and cross-sectional study was conducted on Greek university students to study the emotions the participants felt during the COVID-19 pandemic.

The present study involved 79 Greek university students, 39 males and 40 females, aged between 18 and 29 years. The demographic characteristics of the participants are reported in Table 6.1.

Following the research ethics principles, students participated voluntarily, and the recruitment method was snowball sampling. Informed consent was obtained before participation and individuals could withdraw at any time. Except for the demographic features, private data were anonymous as no identifying information was collected. Participants were invited to fill a survey distributed in Google form through e-mails and social media. The survey lasted 2 months.

Table 6.1 Demographic characteristics of the participants ($N = 79$)

Demographic variables	University students ($N = 79$)
<i>Age</i>	
18–29	79 (100.00%)
<i>Gender</i>	
Male	39 (49.4%)
Female	40 (50.6%)
<i>Marital status</i>	
Single	72 (91.1%)
Married	7 (8.9%)
Divorced	–
Widow	–
<i>Education</i>	
College student	65 (82.3%)
University Graduate	14 (17.7)
<i>COVID diagnosis</i>	
Diagnosed	9 (11.4%)
Not diagnosed	70 (88.6%)
<i>Family member's diagnosis</i>	
Diagnosed	15 (19.0%)
Not diagnosed	64 (81.0%)

6.2.2 Materials

The data collection included the self-report questionnaires described below, and a set of questions concerning demographic characteristics.

6.2.2.1 Satisfaction with Distance Learning

This questionnaire investigates distance learning satisfaction. It is a single item developed by the research team: “Satisfaction I gained from distance learning.” The statement is rated on a three-point Likert scale (low, moderate, and high).

6.2.2.2 Depression Anxiety and Stress Scales 21 (DASS-21)

This questionnaire investigates depression, anxiety, and stress symptoms; in this study, the 21-item version of the scale was used and validated in a Greek sample by Pezirkianidis et al. (2018). Each statement is rated on a four-point Likert-type scale (0: Did not apply to me at all, 3: Applied to me very much or most of the time). Cronbach’s alpha for this sample was adequate ($\alpha = 0.94$).

6.2.2.3 Subjective Happiness Scale (SHS)

This 4-item scale investigates the subjective perception of happiness (Karakasidou et al., 2016; Lyubomirsky & Lepper, 1999). Responses are rated on a 7-point Likert-type scale, with highest scores indicating a happy person. In this study, the Cronbach’s alpha was adequate ($\alpha = 0.88$).

6.2.2.4 Gratitude Questionnaire (GQ-6)

This instrument assesses the predisposition of people to experience gratitude (McCullough et al., 2002). It consists of six items on a scale from 1 to 7 (1 means “strongly disagree” and 7 “absolutely agree”). Two items are reverse scored to inhibit response bias. The structural validity and reliability of the scale in Greek were evaluated in this study.

6.2.2.5 Satisfaction with Life Scale (SWLS, Diener et al., 1985)

The instrument measures an individual’s level of satisfaction, using 5 items on a 7-point Likert-type scale, ranging from “Strongly Disagree” to “Strongly Agree.”

SWLS was standardized in the Greek population by Galanakis et al. (2017). The internal consistency for this study was adequate ($\alpha = 0.81$).

6.2.2.6 Differential Emotions Scale (mDES)

The mDES measures positive and negative emotions, consists of 20 items (Fredrickson et al., 2003), and asks participants to recall the past two weeks and rate their strongest experience on a 5-point Likert-type scale (1: Not at All to 5: Extremely). It was standardized in Greek by Galanakis et al. (2016). The internal consistency index for the two subscales in this study was satisfactory ($\alpha = 0.85$ and 0.88).

6.2.3 Data Analysis

Regarding the validation of the GQ-6, first one professional translated the items into Greek and another one back to English. IBM SPSS Statistics 25 was used for the analyses. Exploratory factor analysis was used to assess the structural validity and reliability of the GQ-6. Then, descriptive statistics (means and standard deviations) were calculated for all the investigated dimensions. Pearson correlation indices were calculated to investigate the relationship between the research variables after checking the assumptions of normality ($p > 0.05$). A MANOVA was used to compare the positive dimensions (gratitude, life satisfaction, subjective happiness, positive affect) and the negative ones (stress, anxiety, depression, negative affect) across three groups of students, based on their levels of satisfaction with distance learning (low, moderate, and high).

6.3 Results

The factor structure of the GQ-6 was examined using EFA. The value of the Kaiser-Meyer-Olkin (KMO) index, with which the adequacy of the sample was assessed, was 0.82, and the value of the Bartlett's sphericity index was statistically significant [$\chi^2(15) = 214.779, p < 0.001$]. The analysis revealed a single factor, which explained 53.2% of the total variance, based on the criteria of Kaiser and Cattell. The factor loadings of the six items ranged between 0.53 and 0.84. The reliability of the GQ-6 scale was calculated with the Cronbach's internal consistency coefficient, indicating an acceptable reliability ($\alpha = 0.80$).

Then, the means (M) and standard deviations (SD) of each scale were calculated (see Table 6.2).

Participants reported moderate stress levels, low anxiety and depression symptoms, and moderate negative affect levels. Regarding positive well-being

Table 6.2 Means and standard deviations of each scale

Variables	M (SD)
Satisfaction with distance learning	1.94 (0.82)
Stress	10.54 (5.05)
Anxiety	7.47 (5.70)
Depression	9.48 (5.34)
Life Satisfaction	20.30 (5.83)
Subjective Happiness	17.34 (5.32)
Gratitude	28.06 (7.21)
Positive Affect	28.48 (6.75)
Negative Affect	24.29 (6.85)

Table 6.3 Correlations of well-being factors with satisfaction with distance learning (SWDL)

Variables	SWDL
Stress	-0.582**
Anxiety	-0.639**
Depression	-0.531**
Life Satisfaction	0.338**
Subjective Happiness	0.143
Gratitude	0.492**
Positive Affect	0.563**
Negative Affect	-0.357**

Note: * $p < 0.05$, ** $p < 0.011$

dimensions, participants reported moderate levels of life satisfaction and positive affect and high levels of subjective happiness and gratitude.

The Pearson correlation test was applied to investigate the relationship between the well-being variables and satisfaction with distance learning, after checking the assumptions of normality ($p > 0.05$).

Significant relationships emerged; in particular, positive well-being dimensions were positively correlated with SWDL, and negative ones negatively (Table 6.3).

A series of multivariate tests were conducted to examine the interaction of the 3 groups of students differing in satisfaction with distance learning (independent variable) with the eight well-being variables. The three groups were: students with low distance learning satisfaction ($N = 29$), students with moderate distance learning satisfaction ($N = 26$), and students with high distance learning satisfaction ($N = 24$). The 8 dependent variables were stress, anxiety, depression, life satisfaction, subjective happiness, gratitude, positive affect, and negative affect. The observed covariance matrices of the dependent variables were equal across groups.

MANOVA analysis showed a significant multivariate effect of the level of satisfaction with distance learning on the eight dependent variables [Pillai's trace = 0.64, $F(78) = 4.14$, $p < 0.01$, $\eta^2 = 0.321$], indicating a statistically significant difference across groups. The univariate F tests showed significant group differences for stress $F(78) = 21.53$, $\eta^2 = 0.362$, $p < 0.01$, negative affect: $F(78) = 5.69$, $\eta^2 = 0.130$, $p < 0.01$, anxiety: $F(78) = 32.46$, $\eta^2 = 0.461$, $p < 0.01$, depression: $F(78) = 17.32$, $\eta^2 = 0.313$, $p < 0.01$, life satisfaction: $F(78) = 6.77$,

$\eta^2 = 0.151, p < 0.05$, gratitude: $F(78) = 15.41, \eta^2 = 0.289, p < 0.01$, and positive affect: $F(78) = 22.56, \eta^2 = 0.373, p < 0.01$. No statistically significant difference between groups was instead found for subjective happiness.

Finally, a series of post-hoc analyses (Fisher's LSD; significance at $p < 0.05$) were performed to compare mean values of all positive dimensions (gratitude, life satisfaction, subjective happiness, positive affect) and the negative ones (stress, anxiety, depression, negative affect) across the three groups of students based on their levels of satisfaction with distance learning (low, moderate, and high).

The results revealed that, on average, students in the low satisfaction group ($M = 14.38, SD = 3.87$) presented significantly higher stress levels than the moderate satisfaction group ($M = 9.23, SD = 5.24$), who, in their turn, reported higher stress levels than the high satisfaction group ($M = 7.33, SD = 2.67$). Regarding negative affect, participants in the low satisfaction group ($M = 27.31, SD = 6.41$) presented higher negative affect levels than those in the moderate satisfaction group ($M = 21.42, SD = 5.71$), $p < 0.05$. Regarding anxiety, students in the low satisfaction group ($M = 12.45, SD = 4.39$) presented significantly higher anxiety levels than those in the moderate satisfaction group ($M = 5.35, SD = 4.83$), who however reported higher anxiety levels than the high satisfaction group ($M = 3.75, SD = 3.26$). Regarding depression, participants in the low satisfaction group ($M = 13.31, SD = 3.70$) presented significantly higher depression levels than those in the moderate satisfaction group ($M = 7.92, SD = 5.16$) who, in their turn, presented higher depression levels than the high satisfaction group ($M = 6.54, SD = 4.56$).

Regarding life satisfaction, students in the low satisfaction group ($M = 17.34, SD = 4.62$) presented lower life satisfaction levels than those in the moderate satisfaction group ($M = 22.04, SD = 5.50$), who presented higher life satisfaction depression levels than students in the high satisfaction group ($M = 22.00, SD = 6.24$). Regarding gratitude, the low satisfaction group ($M = 23.03, SD = 5.54$) presented lower gratitude levels than the moderate satisfaction group ($M = 30.54, SD = 6.59$); the latter presented lower gratitude levels than the high satisfaction group ($M = 31.46, SD = 6.40$), $p < 0.05$. Finally, regarding positive affect, participants in the low satisfaction group ($M = 23.14, SD = 4.29$) presented lower positive affect levels than the moderate satisfaction group ($M = 31.04, SD = 5.54$), who presented lower positive affect levels than the high satisfaction group ($M = 32.17, SD = 6.42$).

6.4 Discussion

Constant restrictions and lockdowns marked the period of the pandemic in Greece, which greatly affected citizens' mental health. The focus of the present study was to investigate whether Greek students experienced positive and negative well-being dimensions during the COVID-19 period, and how these dimensions were related to distance learning satisfaction, both globally and after grouping the participants

according to their level of distance learning satisfaction. Overall, results demonstrated that students experienced both negative and positive well-being during the pandemic; well-being dimensions and distance learning were shown to be related to each other; in addition, negative and positive well-being levels differed according to distance learning satisfaction.

First, the psychometric properties of the Greek version of the Gratitude Questionnaire, a measure included in the study, were assessed (question 1). Findings showed adequate validity of the scale for this population.

As concerns the negative side of the pandemic experience (question 2, part a), participants reported moderate stress levels, low anxiety and depression symptoms, and moderate negative affect levels. These results are consistent with other studies conducted during the pandemic to investigate students' levels of stress (Aslan et al., 2020; Debowska et al., 2020; Gritsenko et al., 2020; Konstantopoulou et al., 2020; Ye et al., 2020) and anxiety (Aslan et al., 2020; Debowska et al., 2020; Gritsenko et al., 2020; Husky et al., 2020; Islam et al., 2020; Kaparounaki et al., 2020; Sazakli et al., 2021). The findings concerning depressive symptoms and negative emotions were also consistent with previous studies conducted in the same period with university students (Alemany-Arrebola et al., 2020; Konstantopoulou et al., 2020; Konstantopoulou & Raikou, 2020; Kornilaki, 2021; Zhang et al., 2020). The pandemic-related difficulties in combination with the lack of social contact and support may explain these results (Elmer et al., 2020).

Answering part (b) of question 2, the participants experienced moderate levels of life satisfaction and positive affect, and high levels of gratitude and subjective happiness during the COVID-19 period. In line with the literature (Labrague, 2021), a negative correlation was detected between life satisfaction and stress. Students reported moderate levels of life satisfaction during the pandemic; the lack of previous evidence, however, does not allow for drawing any comparative conclusion.

Overall, the study participants experienced moderate levels of positive affect. Even if positive emotions have not been studied sufficiently, previous studies showed that during the pandemic the levels of positive emotions were moderate (Wang et al., 2020) or minimal (Karasmanaki & Tsantopoulos, 2021; Kornilaki, 2021). The current study participants experienced both positive and negative emotions at a moderate level; it is worth noting that the existence of the negative emotions does not cancel the existence of the positive ones and vice versa (Diener & Emmons, 1984).

In the current study, participants experienced high levels of gratitude. These results are consistent with previous surveys (Gaeta et al., 2021). The cultivation of gratitude is particularly important as it helps students face difficulties and overcome obstacles (Bono et al., 2020). Also, gratitude presents a negative relationship with stress (Biber et al., 2020). During the COVID-19 period, people faced problems and difficulties in different domains (e.g., health, social distance, economic difficulties); on the other hand, they started to reframe the situation and feel more grateful for small things in their lives (Jans-Beken, 2021).

Subjective happiness was high in the current survey. The same results were observed in other studies (Lin et al., 2021; Warrier et al., 2021). Literature found specific factors which may influence subjective happiness during the COVID-19 period. Higher happiness scores were detected among women compared to men (Warrier et al., 2021) and among those who had a good aspect and were satisfied with the educational environment (Lin et al., 2021). Perceived happiness can help students cope with their academic duties and have better academic achievement (Datu et al., 2017).

The third research question investigated the interplay between negative and positive well-being factors and distance learning satisfaction. As concerns part (a) of the question, a moderate positive relationship was detected between distance learning and depression; this result may be related to feelings of sadness experience by students during the compulsory lockdown due to the sudden lack of social contacts and abrupt and drastic changes in their daily lives (Elmer et al., 2020). Student identity is a crucial point of reference for emerging adults, which is enriched through the acquisition of knowledge and the development of social skills (Long, 2012). The lockdowns during the pandemic limited contact and connection, which was reflected in the present study results.

The comparison of the values of negative and positive psychological dimensions across groups of students with different levels of distance learning satisfaction (part b) highlighted significant group differences for stress, negative affect, anxiety, depression, life satisfaction, gratitude, and positive affect, but not for subjective happiness.

As this study constitutes one of the few attempts to understand and describe Greek students' mental health and distance learning satisfaction during COVID-19 pandemic, additional studies are needed in the future to better clarify these findings.

This research also presented some limitations. Self-report questionnaires are often biased because individuals may provide socially desirable answers. One further limitation concerned the low loading value of the sixth item of the Gratitude Questionnaire; moreover, the Cronbach's alpha of mDES was only minimally acceptable (DeVellis, 1991). One possible explanation for these low values is the small sample. So, larger samples should be included in future studies.

6.4.1 Implications

Overall, results from this study suggest the coexistence of negative and positive well-being dimensions in Greek students' experience during the pandemic, as well as their relationship with distance learning satisfaction. A better understanding of the role and interaction of these dimensions could help researchers and therapists to design appropriate intervention plans to treat depression, anxiety, and stress and to enhance well-being in problematic conditions involving distance learning. During the lockdown, distance learning has become an everyday habit of education. The present findings showed its negative relation to well-being for students perceiving it

as unsatisfying and suggest that this specific group may benefit from interventions implementing both distance learning procedures and students' technological competences.

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Chapter 7

Exploring Meaning-Making Among University Students in South Africa During the COVID-19 Lockdown



Angelina Wilson Fadiji, Shingairai Chigeza, and Placidia Shoko

Abstract Studies have proven that meaning-making in times of crisis serves as a buffer against negative experiences. What is unknown is the extent to which—in the unfamiliar context of a pandemic—meaning-making might have fostered the psychological wellbeing of South African University students during a critical period of emerging adulthood. To address this question, a purposive sample of 40 University students (*Mean age = 23; males = 14; females = 25; non-binary = 1*) was selected across two Universities in South Africa. Findings that emerged from thematic analysis revealed themes such as the re-emergence of value systems, renewed sense of connectedness, self-extension or otherness, acquisition of new skills and accomplishments, and inner strength and growth. The themes demonstrate broadly the role of interconnectedness in the meaning-making process, in terms of ordinary interactions or the desire for generativity. We also emphasise intrapersonal connectedness that allows for self-care, introspection, and self-development within the limits possible, thereby enabling and empowering the individual who is caught in the middle of a pandemic that is inherently disempowering. Wellbeing practice and research among African students can focus on encouraging these meaning-making pathways, as recovery from the pandemic is still on-going and affects different domains of life.

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7.1 Introduction

30 January 2020 marked the beginning of an unprecedented new era, as the World Health Organization (WHO) declared the COVID-19 outbreak a global health emergency, and as a worldwide pandemic on 11 March 2020 (Cucinotta & Vanelli, 2020; WHO, 2021). Most activities in South Africa—including non-essential commercial activities, all levels of education, and all forms of gatherings—were summarily brought to a halt on 23 March 2020 (SA coronavirus.co.za). The country implemented different lockdown phases, from Level 1 (involving minimal restrictions) to Level 5 (hard lockdown) characterised by the most stringent regulations (McIntosh et al., 2021).

For most emerging adults, navigating student life has always been a stressful maze, brimming with a number of psychosocial challenges, social anxiety, academic overload, lack of academic preparedness and low self-esteem, and financial insecurities (Mason, 2017; Petersen et al., 2009). The waves of fear and helplessness brought about by the COVID-19 pandemic aggravated this already demanding environment and had a particularly negative effect on students' academic experiences, performance, and wellbeing (Dodd et al., 2021). Student life and learning suddenly required adaptation to new ways of learning (online and remote) and interaction (Fawaz & Samaha, 2021; Landa et al., 2021).

According to previous research, psychological resources like hope, living a purposeful life, and experiencing life satisfaction may offer protection against the negative psychological effects of the COVID-19 pandemic (Counted et al., 2020; Genç & Arslan, 2021; Schnell & Krampe, 2020). With respect to meaning-making, studies also show that during the pandemic, many people derived meaning from social relationships that provided emotional support (Ekwoyie et al., 2021; MacDonald & Hülür, 2021). Prosocial acts, shared creative expressions, and the use of character strengths were also seen as sources of meaning that young adults could adopt to reframe stressful challenges related to COVID-19 (Kapoor & Kaufman, 2020; Rashid & McGrath, 2020; Schnell & Krampe, 2020). There is, however, a gap in literature that addresses the process of meaning-making among university students in South Africa in the context of the pandemic. Therefore, this study seeks to explore meaning-making among students during Levels 4 and 5 COVID-19 lockdowns in South Africa, which occurred between March and June 2020.

7.1.1 *Psychological Wellbeing and Meaning-Making*

Wellbeing, commonly defined as inter- and intra-individual optimal experience and positive functioning (Burns, 2015; Deci & Ryan, 2008), is broadly manifested

through two distinct yet related and overlapping constructs, namely hedonic and eudaimonic wellbeing (Delle Fave et al., 2011; Wilson Fadiji et al., 2021). The backbone of the eudaimonic approach is a multidimensional theoretical model of psychological wellbeing proposed by Ryff (1989), which comprises six distinct components: autonomy, environmental mastery, personal growth, positive relations with others, self-acceptance, and purpose in life (Ryff, 1989; Ryff et al., 2018; Ryff & Keyes, 1995). Based on this model, researchers echo the importance of meaning in life as a key component to psychological wellbeing, particularly in the face of adversity (Costin & Vignoles, 2020; Ryff & Singer, 2008).

Meaning-making has been defined as ‘the ability to integrate challenging or ambiguous situations into a framework of personal meaning using value-based reflection’ (Van Den Heuvel et al., 2009, p. 509), thus permitting individuals to confront their challenging experiences (Cavanaugh et al., 2020; Petrou et al., 2017; Wilson et al., 2021). Recent research has emphasised creating meaning and direction in life as a protective buffer against traumatic losses wrought by the COVID-19 (Kapoor & Kaufman, 2020; Walsh, 2020; Yang et al., 2021). The cognitive process of reinterpreting undesirable events through meaning-making involves understanding what has been lost and how to rebuild or adjust to the new realities (Cohen & Cairns, 2012; Neimeyer & Sands, 2011). This process of creating meaning instils positive experiences, functioning, self-connection and mindfulness, and thereby fosters resilience, personal growth, and life satisfaction (Heintzelman, 2018; Khumalo et al., 2014; Klussman et al., 2020; Lin & Shek, 2018).

Traumatic experiences linked to the current pandemic and enforced by the lockdown—such as loss of physical contact, jobs, livelihoods, and financial security—continuously shred the delicate meanings and understandings one holds on to and threaten the usual meaning-making systems (Castiglioni & Gaj, 2020; Walsh, 2020). Various studies have shown that experiencing meaning in life contributes to wellbeing and health (Costin & Vignoles, 2020; Li et al., 2021; Martela & Steger, 2016). In this study we investigated how students, particularly university students, have been experiencing and making sense of the new realities around them in the midst of the COVID-19 pandemic.

7.1.2 Meaning-Making in Emerging Adulthood

Meaning-making has been identified as an adaptive coping mechanism throughout individuals’ lifespan (Lawford & Ramey, 2015; Scott et al., 2014; Steger et al., 2009). University life marks a monumental transitioning for most students—from being dependent on their parents to a life of complete independence (Burns et al., 2020; Finan et al., 2018; Hanna-Benson, 2019). Most of these students find themselves in the crucial period of ‘emerging adulthood’ (Stukus et al., 2016), during which individuals begin to experience diverse and complex changes and develop mental, social, emotional, and cognitive characteristics that are necessary for them to become self-sufficient and transit into adulthood (Galanaki & Leontopoulou, 2017;

Wood et al., 2018). Furthermore, emerging adulthood is generally characterised by the search for meaning, whereas presence of meaning has been reported to be more in older adults (Eivers & Kelly, 2020; Steger et al., 2009).

Self-growth, hope, and positivity emerge in the process of searching for meaning and serve as a buffer during times when students experience depressive situations and feel uncertain about their future (Bhattacharya, 2011; Eivers & Kelly, 2020). Ratner et al. (2019) found that prosociality (the ability to positively influence other people), the presence of motivation and inspiration (having something to wake up to and to fight for), social connectedness, coherence, significance, identity, and spirituality were central to conceptualising meaning-making. Previous studies with emerging adults enrolled at a South African university highlight how academic, social, inter- and intrapersonal experiences form part of the process of meaning-making towards the development of self-authorship and the management of stress (Du Toit & Naudé, 2020; Mason, 2017).

The pandemic changed the face of university education nationwide and, as a result, young people now require resilience and adaptability skills to navigate their studies effectively (Mahlaba, 2020). To determine the importance of meaning-making, Yang et al. (2021) conducted a study among Chinese university students and highlighted how reframing—i.e. the ability to study at home—was regarded as one of the positive impacts of COVID-19. It became clear that studying online approximated the reality of the physical learning environment throughout the lockdown period. This was mostly aided by the availability of resources in terms of internet connections and gadgets, as well as supportive tools to enhance students' social interactions (Alghamdi, 2021; Chick et al., 2020; Torres et al., 2020). It is necessary to point out that most of the studies that are available on meaning-making and COVID-19 (Alghamdi, 2021; Burns et al., 2020; Chick et al., 2020; Todorova et al., 2021; Yang et al., 2021) have been conducted in Western countries whose socio-economic conditions differ greatly from those faced by emerging adults from the global south (Mahlaba, 2020).

7.1.3 The South African Case

South Africa has 26 public universities and of these only the University of South Africa (UNISA) is exclusively a distance learning institute. Hence, the majority of the remaining contact universities were familiar only with face-to-face learning (van Schalkwyk, 2021). With the implementation of lockdown in South Africa, most contact universities were forced to transition to distant online learning (Mpungose, 2020). However, the majority of students in South Africa have no access to online resources, internet connections and gadgets like smartphones, laptops, and computers (Le Grange, 2020). In an endeavour to support them, some universities—with the aid of the National Student Financial Aid Scheme (NSFAS)—made devices (laptops) and data available to students and staff and also implemented zero-rated applications and educational websites (DHET, 2020;

Mhlanga & Moloi, 2020; USAf, 2020). This effort unfortunately did not accommodate students who had to return to their rural homes or those who lived in remote areas or informal settlements where there is an inconsistent electricity supply and poor network coverage (Hedding et al., 2020). It has been emphasised that not all students were able to participate in digital learning, due to the differences in socio-economic class and levels of computer literacy, as well as other psychological difficulties posed by eLearning (Mhandu et al., 2021). The current study is therefore warranted as it had these challenges in mind and addressed the paucity of evidence on meaning-making among South African students in the context of the pandemic.

This study is embedded in the meaning-making model designed by Park and Folkman (1997). The model suggests two levels of meaning, global and situational. Global meaning refers to the general orientation by which individuals interpret their experiences and self-identity (Park, 2017). Situational meaning refers to a specific occurrence whereby the global meaning is compromised and the individual needs to re-engage in the process of making sense of the events or situations (Park et al., 2010, 2013). According to Park and Folkman (1997), meaning-making typically involves searching for a more favourable understanding of the situation and its implications, by reconsidering global beliefs and revising goals. Given that stressful events that involve loss and trauma can distort the global meaning, initiating the process of meaning-making can reduce the discrepancy between situational and global meaning (Ferreira-Valente et al., 2021).

7.1.4 The Present Study

The overall aim of the study was to explore meaning-making among students staying in university residences and those who relocated to rural homes during either the Level 4 or 5 COVID-19 lockdown in South Africa. The specific objectives of the study can be summarised as follows:

1. To explore meaningful experiences of students in university residences and those returning to their rural homes during the COVID-19 lockdown.
2. To investigate how meaning was engendered among students during the COVID-19 lockdown.

7.2 Method

7.2.1 Research Design

A basic descriptive qualitative research design was adopted. This design provided a nuanced understanding of the meaning-making process among university students in South Africa within the context of the COVID-19 pandemic.

7.2.2 *Sampling and Participants*

Purposive sampling was used to select participants from two universities in South Africa, one of which is a historically disadvantaged institution. Participants had to be 18 years or older, a registered student for at least a year, and either had to have stayed at a university residence or returned to a rural home during the initial lockdown that occurred between March and June 2020 in South Africa. The inclusion criteria were designed to tap into the experiences of students who stayed on the university campus as well as those who returned home during the lockdown. There was the likelihood of a lack of access to learning resources or interaction with individuals who could provide learning support to those who returned home, particularly in rural areas. A group of 40 participants eventually took part in our study. Table 7.1 provides a summary of participants' demographic profile.

7.2.3 *Research Instruments*

7.2.3.1 *Sociodemographic Questionnaire*

A sociodemographic questionnaire was administered that gathered data on age, gender, level of education, province of origin, and residence during the COVID-19 lockdown.

7.2.3.2 *Semi-structured Interview Guide*

The interview schedule explored two major issues. First, it delved deeper into student experiences of meaning-making. Second, the schedule explored sources of meaning in the context of the pandemic in South Africa. Sample questions included: How did you make sense of your life during your lockdown experience? What were the most important things for you during this period? What were your most meaningful experiences?

7.2.4 *Procedure and Ethical Considerations*

Ethics clearance to conduct the study was obtained from the Ethics Committee for Human Research, Faculty of Education (EDU01/21) at the University of Pretoria. Additional institutional permission to gather data was also obtained from the University of the Western Cape. Participants signed informed consent forms prior to participating in the study. Participation was voluntary and participants were informed of their right to withdraw at any time during data gathering without any

Table 7.1 Demographic profile of participants

N	Mean Age	Age range	Gender			Level of Education		Residence during lockdown		
			Male	Female	Non-binary	Under graduate	Post graduate	Home	Campus	Missing data
40	23	21-27	14	25	1	29	11	4	26	10

negative consequence. To ensure anonymity, participants' responses were reported using interviewer-assigned pseudonyms. Confidentiality of information was guaranteed by limiting access to research data to the primary investigators and research assistants involved in the project.

Participants were recruited from two universities in South Africa through advertisement and snowball sampling. Advertisements on online platforms such as Twitter, Instagram, and WhatsApp were used to create awareness about the project. The universities' housing departments were also contacted in an endeavour to reach the targeted group of students, namely those who stayed in student housing during one or more of the lockdown periods. Data were collected between August and September 2021 by means of semi-structured individual interviews—telephonically via mobile networks, via WhatsApp calls, and via Zoom calls, with each interview lasting approximately 30–45 minutes.

7.2.5 Data Analysis

Thematic analysis using ATLAS.ti software was done for the purposes of coding and organising the codes into themes (Muhr, 1991) and the coding process occurred in line with the recommendation by Braun and Clarke (2006). In the current study, participants were identified according to their participant number (P9), gender (male/female) and age (M/F21), and level of education (undergraduate/postgraduate) (UG/PG), for example P9 F21 UG.

7.3 Results and Discussion

To address the question of meaningful experiences recounted by South African university students, six themes emerging from our analysis are presented next. Since the findings obtained from students residing on campus and at home at the time of lockdown were similar, we combined them in the presentation of emerging themes.

7.3.1 Re-emergence of Value Systems

In this study, the term re-emergence describes the renewal or reinventing of values that already existed but became increasingly important because of the changing socio-economic and cultural landscape linked to the pandemic. One of these is an appreciation of 'people and things'. The COVID-19 pandemic placed most of the students in our study in a position where the value of gratitude was elevated as a salient and meaningful experience.

[...] I think we all learnt something new about each other and just appreciating each other more because just realising that some people don't have that it was ja, it was really a blessing in disguise (P4 F21 UG)

The lockdown experience provided this undergraduate student an opportunity to appreciate the worth in the people within her social circles, something that had previously been taken for granted. Seeing the people around us in a different light emerged as a meaningful experience, because it highlighted anew the value placed on social connections. The notion of gratitude is commonly researched in positive psychology (Gottlieb & Froh, 2019) and is regarded as a key contributory factor to wellbeing. Our study revealed how gratitude, expressed as appreciation, contributes to wellbeing through a process of meaning-making.

The emphasis on values was not only outward but also inward looking, since it created a renewed sense of purpose, self-discipline and being at peace with the 'self'. The following excerpts capture these renewed value systems:

I guess everybody during an experience of life gets a sense of purpose of who they are and finds who they are more and I think that somehow somewhere with the lockdown did give you a breather to start to look at life, and reflect which I feel like it's very important . . . , it forced you to reflect whether you wanted to or not, ja I think it's important in any one person's life (P4 F22 UG)

To be disciplined in the things that I'm doing and to just look at the bigger picture in terms of my goals and where I want to be at the end of the day, even if it's not at the time that I want, but to just still keep going and keep the end goal in mind, despite everything else that's happening around me (P9 F21 UG)

The context of the pandemic inadvertently allowed for further introspection and determination to fulfil individual purpose. Participants indicated that it allowed them to discover how comfortable they were with themselves and what they regarded as important in life. Despite being inherently negative, difficult and uncharted territories such as the pandemic emerged as a space for positive experiences of purposefulness and self-acceptance. This finding reiterates the notion of the dialectical nature of functioning, where researchers need to begin to consider both the negatives and positives of life in their understanding of wellbeing (Lomas & Ivztan, 2016). In line with the second wave of positive psychology, it would seem that the negative context of the pandemic—although highly undesirable—provided South African students with a space to rediscover themselves, their potential, and what is attainable despite the challenges encountered. It has been argued that meaning-making during a negative experience and the reframing of negative situations in a positive way can help individuals to cope with the pandemic (Yang et al., 2021), which resonates with the meaning-making model of Park and Folkman (1997). In studies on meaning, there is a preponderance of evidence on purpose serving as a core aspect of meaning (see Martela & Steger, 2016). What this study has shown is that while the pandemic is a public health crisis to be managed, it has not stopped the individual processes necessary for functioning. In fact, it might even have engendered such processes including the value of purpose in life.

7.3.2 *Order, Coherence, and Semblance of the Familiar*

In answering the question of experiences of meaning-making, we found that finding order in the chaos was quite salient. This is consistent with the studies on sense of coherence, showing that individuals tend to define life as meaningful when they can create some form of order out of their lived reality, especially under stressful circumstances (Antonovsky, 1993). To create order and coherence, some students emphasised doing what they love and trying to return to normalcy, despite COVID-19. However, there is nothing normal about a pandemic, and engaging in pleasurable activities definitely does not eradicate the public health crisis. Yet, we found that it reframes the bleak worldview to become more manageable and to allow for a more favourable understanding of the unfortunate situation (Park & Folkman, 1997).

I feel like if [...] I can work hard and still do things that I enjoy, things that I love. I think that's what kept me going, the fact that I could still work hard, and still do things that I enjoy you know [...] (P9 F21 UG)

In conceptualising meaning in life, research has pointed to notions of coherence (Martela & Steger, 2016), the creation of order and a consistent worldview (Ratner et al., 2019) as guidelines for the way individuals make sense of their lives. Being able to do what a person loves provides that semblance of familiarity and even a degree of control, which is a key aspect of psychological wellbeing (Ryff & Singer, 1998). This implies that meaning-making is grounded in feelings of control and ownership of the world, no matter how unfamiliar it gets.

So on Saturday that was the day where okay I know I don't have any lectures, if anything is due was probably be due on Sundays, I can always do it then, and I won't have to worry about work, I didn't have to look at my phone, those were the days where I could just sit down and relax and then basically switch my mind off, and I have to worry, those were the days yeah. That's what made them special (P3 M23 UG)

In the excerpt above, the participant notes the importance of mental balance by relaxing and finding an escape from the typical life stressors. For another student, it was the ability to feel at ease despite the need to be confined to a particular space. One of the negative impacts of the pandemic was limited opportunities for normal social interaction, and given the latter's importance, it was difficult to cope with restrictions. As a result, meaningful experiences were seemingly crafted from the ability to create a suitable mental space, despite the restricting physical circumstances. Meaning-making was further facilitated by the ability to see the new environment as an opportunity to relax. The creation of mental balance resonates with the need for order and control—all of which are central to the meaning-making process (Ratner et al., 2019).

7.3.3 *Renewed Importance of Relationships*

I think it was the times when we came together, me and my relatives, at several occasions to . . . , we had conference calls, and to just pray about everything, we just got around to pray for our lives, for safety, I think that was most meaningful for me (P1 M27 PG)

As mentioned earlier, the disruption of social interaction was one of the major impacts of the COVID-19 pandemic. Thus, opportunities to enjoy social contact proved to be salient meaningful experiences. In our study, we found that when students could gather and spend time together—for different purposes and through any available platform—such occasions were regarded as meaningful. Such interactions with friends were also emphasised.

Apart from simply enjoying social interaction as an end in itself, there were instances where connections were preserved for the benefits they provided.

For me is the relationships I had. I think those are the most meaningful things, it's very important that as a person you don't isolate yourself you know and think you will be fine on your own if you don't involve other people, if you don't get in touch with other people. I think it was a matter of just opening myself up mentally and emotionally, so that I can be able to relate, like in terms of the question that you had initially asked me, to be able to relate to the people I'm with and also to learn something (P9 F21 UG)

Participant 9 expressed the need to open herself up to relationships because isolation would limit possible learning opportunities. Relationships were also important because of the support they provide. Given that these students, especially those who stayed on campus, had supportive relationships, this made schoolwork and the challenging pandemic situation more manageable. Supportive relationships are central in meaning in life research (Khumalo et al., 2014; Mason, 2013). Research from South Africa has demonstrated the role of interconnectedness not only in cultivating cultures of positivity, but also for serving as sources of meaning in multicultural African contexts (Wissing et al., 2019, 2020).

7.3.4 *Focus on Others*

This theme emerged from South African students' focus on the wellbeing of others as a source of meaning-making. In the excerpt below, the student intimates how making sure everyone else was okay enabled her to make sense of her experiences in the context of the pandemic.

But making sense of it was just making sure that everyone was okay, my family is okay, my friends are okay, we are fine, no one actually in my family contracted the virus, to us like, no one actually contracted the virus, so ja that made sense that I'm okay, my friends are okay (P2 F22 UG)

Previous research has suggested that concern for others is a form of generativity (Wilson et al., 2018); however, they based this finding on a study among a sample of older adults. Linked to this, in a multicultural sample of urban adults, relationships

emerged as an important source of meaning (Wissing et al., 2020), although the findings centred mostly on the support such relationships provided. This finding is in contrast to that of Arnett (2003), who argued that young people in the USA frame their understanding of transition into adulthood by using individualistic criteria of self-sufficiency and learning to stand alone.

According to Rashid and McGrath (2020) prosocial acts help individuals to reframe and manage stressful events. Reframing aligns with situational meaning, which involves re-engagement with the process of making sense of events—such as the pandemic (Park et al., 2010, 2013). Unique to our study is the dimension of interconnectedness emerging in the midst of a pandemic—participants seemed not so much concerned about providing for their own needs, but rather pursued a form of stability in their world by focusing on the wellbeing of others. We adopt this line of argumentation because it appears that students located their source of meaning in lived experiences that remained stable (such as the wellbeing of significant others in their lives), despite the unpredictable nature of the pandemic. Our findings also show that relationships in and of themselves might not be the source of meaning; instead, meaning was derived from their ability to provide a structure for one’s worldview, in terms of both receiving and giving support.

Beyond and above their need for stability, students wanted to feel capable amidst the crippling and disabling pandemic.

I would say for me, one virtue that I would say was the most important was patience. I took it upon myself to start being there for people, listen to them, and I was in the right mindset for me to actually sit with someone and talk to them without me feeling overwhelmed by stuff (P1 M25 PG).

This excerpt depicts the individual’s attempts at finding ways to feel empowered. Being ‘other-focused’ allowed some students to feel that not everything about the pandemic was ‘too much to handle’. Certain situations were within one’s grasp and focusing on these was found to be essential to the meaning-making process.

7.3.5 From Ordinary to Extraordinary

Other sources of meaning in life were found to be located in activities, experiences, and people that became extraordinary as a result of the pandemic. For instance, academics, which is a basic component of any student’s life, emerged as an important source of meaning, as captured in the excerpt from Participant 8: ‘*Okay most important thing was, well I tried to do well in my academics. Like I really wanted to do well (P8 F23 UG)*’.

Previous studies pointed to the achievement of academic success as a source of meaning, because students saw it as a way of climbing the socio-economic ladder (Mason, 2017). Such finding was particularly common in the case of students from low socio-economic backgrounds. However, participants in our study emphasised efforts exerted in schoolwork rather than academic outcome. Such effort would

typically be regarded ordinary, but because of the context of the COVID-19 crisis it emerged as important for experiencing meaning. Other ordinary experiences included being at home, having cooked meals, being with family and friends, and pursuing healthy habits (movies, reading, music, spirituality). Participant 7 expressed his feelings as follows:

So, my family is really really religious, you know. So well, like I realised that I kind of haven't been doing good, I haven't been doing good with regards to my spiritual life. I have been neglecting that area of my life a lot. So, when I was at home, [...] everybody in the house is reading a bible or my mom is sharing a verse that day, I listened and stuff like that. And I guess that kind of helped me remember about my spiritual life (P7 M23 UG)

7.3.6 Inner Strength and Growth

As a final theme, we highlight intrapersonal and intrapsychic processes that emerged as sources of meaning, besides external activities and being focused on others. There is evidence that highlights the individual at the centre of wellbeing experiences in Africa (Wissing et al., 2019, 2020). In these studies, data showed that although individuals in the African context are typically described as having an interdependent as opposed to an individualistic worldview, such dichotomies do not adequately make room for the dynamic experiences of wellbeing that are located in the person. In our study, students mentioned the ability to encourage themselves, learn a new skill, and start a personal business as facilitators of wellbeing. All of these imply that the pandemic inadvertently allowed students to grow, find their inner strength, and explore their worlds in ways not previously anticipated. For instance, Participant 4 remarked, *'I'd like, I made it a point to learn a skill, even if it was like one'* (P4 F22 UG). This theme further points to the interplay between the individual and connectedness with their external world. Linked to the meaning-making model of Park and Folkman (1997) applied in this study, the presence of inner strength indicates a global and stable identity that was transformed to a situational level of meaning through the growth process that students experienced during the COVID-19 pandemic.

7.4 General Discussion

In this study, data were gathered from 40 emerging adults from two different higher education institutions, one of which was a historically disadvantaged university. However, our findings did not reveal any observable differences in terms of how meaning was engendered by these students during Levels 4 and 5 of COVID-19 lockdown. The re-emergence of value systems became critical in the process of meaning-making and proved important for students across both institutions. We found that the participants also tended to look for stability despite the chaos, through

readopting their values and reframing their lived experiences—in the uncharted territory caused by the pandemic—so as to make life more manageable, coherent, and comprehensible. This process of reframing is in line with situational meaning-making (Park & Folkman, 1997), since the context of the pandemic required the students to readjust their global worldview in order to experience the current world as meaningful. This readjustment also involved ‘the ordinary’ being regarded as extraordinary, focusing on others, and finding opportunities for growth.

Emerging adults search for meaning (Eivers & Kelly, 2020; Park et al., 2010; Steger et al., 2006), and this was true of our participants. In particular, our findings are mostly explained by situational meaning (Park, 2013), because students found different avenues to re-engage in the process of experiencing meaning, through a focus on academic achievement, self-reflection and striving for growth, even in the midst of the pandemic. Our study also shows that students were able to find their inner strength and grow. This is not to say that growth would not have taken place in ordinary times, but the fact that it occurred in spite of the pandemic is noteworthy.

As concerns implications for practice, our study suggests that in clinical and community intervention settings meaning-making can be fostered, by assisting individuals to re-enact and identify important values, and to lean further into things that seem familiar (e.g. doing what they love). To promote the psychological wellbeing of emerging adults, non-clinical interventions in higher education institutions could focus on providing opportunities to learn a new skill, start a business, increase networking, or pursue whatever activity proves to be useful for growth among students. In line with previous research, we found a renewed awareness of the importance of relationship, as well as an appreciation of self and others among this group. Student affairs offices at universities should support young people to further leverage existing relationships in order to make meaning out of their experiences during a pandemic or similar stressful situation.

7.5 Limitations of the Study

One limitation of the current study was its retrospective nature, as participants were expected to recollect a specific time in their lives and describe their experiences of meaning. Perhaps real-time data might have proved to be even more useful in understanding student experiences during the initial waves of the pandemic. The amount of missing data on residence might also have affected the findings and strength of the conclusions drawn, while the virtual nature of data gathering might have affected the level of rapport that could be established or prolonged engagement in the field. Nevertheless, according to Archibald et al. (2019), the techniques of data gathering that were used have the potential of providing equally useful data.

7.6 Conclusion

The COVID-19 pandemic remains a challenge to emerging young adults worldwide, and students in South Africa are not exempted from the hardships caused by it. However, in spite of the challenges faced by the majority of students in South Africa, meaningful experiences were still engendered through a sense of gratitude, finding order in the chaos, and maintaining strong existing relationships. Disruption of their social life resulted in these emerging adults further appreciating their relationships and pursuing other ways of maintaining such connections. Unique sources of meaning revealed in this study such as being ‘other-focused’ (i.e., promoting the wellbeing of others) appeared to have helped these individuals to feel less disempowered in the context of the pandemic. Furthermore, intrapsychic processes of developing oneself seemed to contribute significantly to meaning-making, since it served as both an inner strength and a resource.

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Chapter 8

The Interplay of Growth Mindset and Self-Compassion with Psychological Resilience Among Chinese Emerging Adults During the COVID-19 Pandemic



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Abstract Recent research showed that emerging adults have higher rates of depression and anxiety when facing stress during the COVID-19 pandemic. Growth mindset and self-compassion have consistently been found to be essential to support the resilience of emerging adults. This study is aimed to examine whether growth mindset and self-compassion, as well as their interplay, can predict the psychological resilience of Chinese emerging adults during the first wave of the COVID-19 pandemic. Two hundred Chinese emerging adults aged 18–25 years old completed an online questionnaire during the lockdown. Findings from the hierarchical stepwise regression analysis showed that higher levels of growth mindset and self-compassion independently and significantly predicted higher levels of resilience, while their interaction effect was insignificant. Further analyses indicated that two self-compassion positive components (self-kindness and mindfulness) significantly predicted higher levels of resilience. Furthermore, there was a significant interaction

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effect between growth mindset and the self-compassion component of common humanity (understanding of life hardship and suffering as shared human experiences) in predicting psychological resilience. In other words, the positive association between growth mindset and psychological resilience was significantly stronger for Chinese emerging adults with higher sense of common humanity. These findings suggested that developing culturally-sensitive programs to cultivate growth mindset and self-compassion may contribute to building resilience in life adversities among Chinese emerging adults. Further investigation is needed to better understand the interplay between growth mindset and self-compassion components.

Keywords Emerging adults · Growth mindset · Self-compassion · Psychological resilience

8.1 Introduction

In December 2019, an outbreak of Coronavirus disease (COVID-19) emerged and rapidly spread worldwide. With growing numbers of morbidity and mortality, most nations enforced public health containments, like physical distancing, lockdown, and quarantine (Chinazzi et al., 2020; Ebrahim et al., 2020; Ilesanmi & Afolabi, 2020; Lee et al., 2020). Although such measures contributed to preventing the spread of contagion, they also isolated individuals from their social connections and posed a threat to their well-being (Pfefferbaum & North, 2020). Research consistently showed that people around the globe have been experiencing higher prevalence of stress, depression, anxiety, and post-traumatic symptoms during the pandemic, particularly youth and young adults (Choi et al., 2020; Gamonal-Limcaoco et al., 2021; Kujawa et al., 2020; Marelli et al., 2021; Tang et al., 2020; Varma et al., 2021). Abiding to COVID-19 regulations, educational institutions swiftly changed traditional face-to-face teaching mode to online learning (Bouali et al., 2020; Rose, 2020; Shenoy et al., 2020). Undergoing such profound changes in personal, social, and learning environment, college students have been facing significant adversities (Okunlola et al., 2020). Results showed that over half of Chinese university students found difficulties in online learning (Yeung & Yau, 2021) and they also displayed more mental health symptoms related to uncertainty (Feng et al., 2021; Leung & Mu, 2021; Li et al., 2020; Liang et al., 2020). Considering this pressing mental health needs of emerging adults locally and globally, in this study two protective factors were identified that may support psychological resilience in facing pandemic-related challenges and adversities, namely growth mindset and self-compassion.

8.1.1 *Mindsets and Self-Compassion*

Mindsets come from implicit theories which denote a belief about the changeability of human attributes (Chiu et al., 1997). Based on individuals' views of malleability

and stability of attributes (e.g., intelligence and personality; Dweck & Leggett, 1988; Dweck et al., 1995;), Dweck classified two types of beliefs, which are growth mindset (incremental theory) and fixed mindset (entity theory; Dweck, 2006). While people with fixed mindset are convinced that their personal attributes are relatively fixed and unchangeable, those with a growth mindset see human attributes as changeable and controllable through effort (Dweck, 1999, 2011). Hence, individuals with a growth mindset view challenges and failures as learning opportunities rather than something to avoid, as they believe they can strengthen their own intellectual abilities and effort to overcome these situations. In contrast, people with a fixed mindset see challenges as risks, because they might be exposed to failure (Dweck, 2006, 2012, 2015). Hence, growth mindset helps individuals to display more adaptable cognitive, affective, and behavioral features in facing life adversities (Claro et al., 2016). Applying to the pandemic situation, emerging adults have been encountering various difficulties, like adjustments to online learning, isolation from social situations, and uncertainty about the future. Growth mindset could play a protective role in motivation, proactivity, engagement (Ommundsen et al., 2005), and self-efficacy (Diao et al., 2020) to help them counter academic and life challenges and preserve or enhance well-being (Chan et al., 2021; Howell, 2016; Kern et al., 2015; Zeng et al., 2016). Alvaradoa and colleagues (2019) found that undergraduates with growth mindset were more able to employ abilities to pursue their life values, which supported their subjective well-being during challenges. Zhao et al. (2021) found that growth mindset helped youth to utilize strengths to face learning stress during the pandemic. From these results, it is anticipated that mindsets (growth vs. fixed) can significantly predict psychological resilience of Chinese emerging adults during the pandemic.

Self-compassion refers to being kind toward oneself when facing difficulties, inadequacies, and failures (Neff, 2003; Neff et al., 2007). Neff conceptualized self-compassion as entailing three positive and negative dimensions, respectively (Neff, 2003): treating oneself with warmth and kindness rather than with harshness and criticism (self-kindness vs. self-judgment); seeing one's sufferings as universal rather than isolated experience (common humanity vs. isolation); a balanced perspective and awareness toward negative experience rather than overly involvement (mindfulness vs. over-identification). Several meta-analyses confirmed that self-compassion is negatively associated with psychopathology and positively associated with well-being (MacBeth & Gumley, 2012; Muris & Petrocchi, 2017; Zessin et al., 2015). From the emotional perspective, self-compassion helps emerging adults take care of themselves, being accepting and mindful of current emotional states to deal with maladaptive emotions (Allen et al., 2012) and potential stressors, and facilitate well-being (Inwood & Ferrari, 2018). From the cognitive perspective, young adults with higher self-compassion tend to adopt reappraisal of challenging situation rather than rumination on their negative aspects, which may lead to proactive coping rather than avoidant behaviors (Allen & Leary, 2010; Stutts et al., 2018). Self-compassion predicted higher psychological resilience among university students (Booker & Dunsmore, 2019; Kotera & Ting, 2021), which, in its turn, was positively related to self-efficacy (Soysa & Wilcomb, 2015) and goal pursuit (Hope et al., 2014), and

negatively with mental health symptoms (Fung et al., 2021) and academic burnout (Lee, 2013).

Although previous research consistently showed that growth mindset and self-compassion support emerging adults' well-being during COVID-19, few studies investigated the relations of growth mindset and self-compassion with psychological resilience among emerging adults in Chinese societies, and specifically in Hong Kong, during the pandemic.

8.1.2 Growth Mindset and Resilience

Resilience generally refers to the capacity to “bounce back” against adversities, having psychological adjustments and adaptations (Brooks & Goldstein, 2001; Ryff et al., 1998; Smith et al., 2008). Resilience plays a protective role in facing negative consequences to widely help maintain mental health and well-being among patients, adolescents, children, and elderly (Acciari et al., 2019; Kalaitzaki et al., 2020; Ngui & Lay, 2020; Tomás et al., 2012). Research identified resilience as a strong predictor of well-being among emerging adults, protecting them from mental health symptoms (Chow et al., 2018; Mcdermott et al., 2020; Miranda & Cruz, 2022; Zubair et al., 2018). Resilience is also correlated with proactive coping in adversities (Chen, 2016; De la Fuente et al., 2021). Such empirical evidence indicates the importance of resilience to well-being.

The association between growth mindset and psychological resilience helps young adults to face adversities and developmental obstacles (Hong et al., 1999; Nussbaum & Dweck, 2008). Individuals with growth mindset believe that personal attributes are malleable, and they tend to be more motivated to face challenges through efforts to improve the situation (Liu et al., 2013). Moreover, they show higher hope and self-efficacy (Burnette, 2010), which further encourage them to overcome difficulties by utilizing their own strengths and try new strategies with more self-acceptance, energy, and grit (Claro et al., 2016; Yeager et al., 2019). During the COVID-19 pandemic, university students with growth mindset showed better learning engagement, higher adjustment ability, and lower perceived stress than those with fixed mindset (Wang & Amemiya, 2019; Zhao et al., 2021), because they are able to reframe meaning of negative events and more likely to seek adaptive coping with better emotional regulation (Cooley & Larson, 2018). Hence, individuals with growth mindset seem to be more resilient to cope with challenges and preserve well-being.

Two perspectives can clarify the relationship between growth mindset and resilience. From a motivational perspective, research showed that growth mindset may help students to face adversities based on its association with psychological resilience (Blackwell et al., 2007; Hong et al., 1999; Nussbaum & Dweck, 2008). Individuals with growth mindset view challenges and failures as learning opportunities and focus on developing one's ability through a learning process of personal growth (Dweck, 1986; Nicholls, 1984; Song et al., 2020; Yeager & Dweck, 2012).

Furthermore, students with growth mindset are more psychologically resilient, as they believe they are able to overcome challenge through efforts (Blackwell et al., 2007; Mueller & Dweck, 1998; Yeager & Dweck, 2012).

From an affective perspective, individuals with growth mindset believe that, besides intelligence, emotions and other traits can be malleable as well (Tamir et al., 2007). Studies demonstrated that freshmen with growth mindset had higher positive emotions and social adjustment, less depressive symptoms and loneliness because they were able to reframe negative events through cognitive appraisals and emotion regulation, rather than suppression (Gross, 1998; Gross & John, 2003). Another study showed that during the COVID-19 pandemic young adults with growth mindset had higher grit and lower loneliness, suggesting stronger emotional regulation and adjustment abilities, and thus possible association between growth mindset and psychological resilience (Mosanya, 2021).

8.1.3 Self-Compassion and Resilience

When facing adversities, failures, or setbacks, it is common to experience negative emotions (Bar-Anan et al., 2009). Self-compassion allows individuals to self-soothe their sufferings with self-kindness rather than self-criticism, offering a non-judgmental attitude to view and understand self-inadequacies, sufferings, and failures (Neff, 2003).

From an emotional perspective, not only does self-compassion allow people to treat oneself with self-kindness attitude. According to Neff (2003), it also provides a broad picture to view own sufferings and to reflect on life adversities as universal, which helps individuals to use non-judgmental and mindful attitude rather than rumination and self-criticism to deal with maladaptive emotions, promoting resilience against life's difficulties (Neff et al., 2007; Warren et al., 2016). Neff et al. (2005) demonstrated that self-compassionate students reported more intrinsic motivation in learning and were less likely to fear failure (Breines & Chen, 2012; Iskender, 2009) and avoid failure (Leary et al., 2007; Neff & McGehee, 2010; Williams et al., 2008). Overall, these findings suggest that self-compassionate individuals have higher likelihood to accept failures and challenges, which is associated with stronger psychological resilience to face difficulties.

From a cognitive perspective, self-compassion allows emerging adults to view life experiences and themselves in a more objective way, through cognitive appraisal and proactive coping (Allen & Leary, 2010; Chishima et al., 2018). Research showed that self-compassionate individuals have better emotional regulation in facing adversities (Neff et al., 2007; Trompetter et al., 2017), tend to engage in adaptive coping styles (Neff et al., 2005), display self-efficacy and self-acceptance to counter stress and failures (Ewert et al., 2021; Liao et al., 2021). Recently, self-compassion emerged as a protective factor to buffer trauma and enhance resilience among emerging adults during the COVID-19 pandemic (Shebuski et al., 2020).

8.1.4 Present Study

It is undeniable that the COVID-19 pandemic has considerably impacted on human lives, at the physical, psychological, and social levels. The above literature review suggests the important relation of growth mindset and self-compassion with psychological resilience during adversities, especially among youth and emerging adults. Yet, limited studies directly focus on the interaction of these two dimensions with psychological resilience, particularly in the Chinese context. Hence, the present study aims to explore the interplay between self-compassion and growth mindset in relation to psychological resilience among emerging adults in Hong Kong, during the first wave of COVID-19 pandemic. From the literature review, four hypotheses were formulated:

- H1: Growth mindset has a significant positive relationship with psychological resilience of Chinese emerging adults.
- H2: Self-compassion has a significant positive relationship with psychological resilience of Chinese emerging adults.
- H3: There is a significant interaction between growth mindset and self-compassion in their relation with psychological resilience of Chinese emerging adults.
- H4: There are significant interactions of positive components of self-compassion and growth mindset with psychological resilience of Chinese emerging adults.

8.2 Method

8.2.1 Participants

In this study, an online survey questionnaire was developed and administered to Chinese emerging adults. A total of 227 emerging adults aged 18 to 24 years were recruited via email and social media platforms to participate in this study, using convenience and snowball sampling methods. All recruited participants signed an informed consent form and completed an online questionnaire through the licensed Qualtrics survey system. Participants who did not meet the selection criterion (emerging adults) and did not answer 50% of the items were automatically excluded. After exclusion, 200 respondents with valid data remained in the study. Among them, 123 were females (61.5%) and 77 males (38.5%).

This research was approved by the Human Research Ethics Committee (HREC) at the Hong Kong Shue Yan University. The total time to complete this questionnaire was about 15–20 minutes. This study did not cause any physical or psychological harm to the participants. The survey was anonymous and did not collect any identifiable information. The participants indicated their consent after they read the online consent form and understood the purpose of the study and their rights of participation. All respondents participated in the study voluntarily, and they could drop out at any time without any consequences.

8.2.2 Measures

Resilience. The Chinese version of the 10-item Connor-Davidson Resilience Scale (CD-RISC 10; Campbell-Sills & Stein, 2007) was used to measure the level of resilience. It includes 10 items to be rated on a 5-point Likert scale ranging from 0 (completely incorrect) to 4 (almost always). The total score of CD-RISC10 is between 0 and 40. The higher the total scores, the stronger the resilience. The Chinese version of CD-RISC 10, provided by Zhang and Chen (2014), has been cross-validated in large community samples and across various age groups. CD-RISC 10 has high reliability with a Cronbach's alpha value of 0.91 with test-retest reliability of 0.90 (Wang et al., 2010).

Mindset. The Growth Mindset Scale (GMS; Dweck, 1999) was used to measure participants' growth vs fixed mindset. The GMS contains two subscales, four items on entity self-belief (fixed mindset) and four items on incremental self-belief (growth mindset). Each item is rated on a six-point scale, from 1 (strongly disagree) to 6 (strongly agree). The subscale total scores of entity self-belief and incremental self-belief were computed separately. The higher the score on entity self-belief, the more likely a person has a strong fixed mindset and a firm belief that they cannot change their intelligence (De Castella & Byrne, 2015). The higher the score on incremental self-belief, the more likely a person has a strong growth mindset and an incremental belief that their intelligence can be changed by effort (De Castella & Byrne, 2015). The Cronbach's alphas are 0.9 for the entity self-belief subscale, 0.89 for the incremental self-belief subscale, and 0.93 for the entire scale, indicating high reliability of both subscales (Midkiff et al., 2018). The Chinese version of GMS (Zeng et al., 2016) showed an acceptable reliability (Cronbach's $\alpha = 0.79$).

Self-Compassion. The Self-Compassion Scale (SCS; Neff, 2003) was used to assess participants' level of self-compassion. It comprises 26 items on a Likert scale from 1 (almost never) to 5 (almost always). SCS consists of six subscales (components), including three positive (self-kindness, common humanity, & mindfulness) and three negative ones (self-judgment, isolation, & over-identification). The item scores of the negative components were reversed, and then a grand mean of all six subscales' means was computed, to derive a total self-compassion score. The higher the total scores, the stronger the self-compassion. The Chinese version of SCS (Chen et al., 2011) showed good reliability (Cronbach's $\alpha = 0.84$), with a test-retest reliability of 0.89 (Chen et al., 2011).

8.2.3 Data Analysis

Descriptive statistics of all examined variables were firstly computed and reported. Then, correlations among the variables were computed to test their bivariate relationships, interaction terms of the growth mindset scores with overall self-compassion and each self-compassion component's scores were subsequently calculated. Two

models of hierarchical regression analyses were then conducted to test the three research hypotheses, with resilience scores as the outcome variable. In Model 1, scores of growth mindset, self-compassion, and their interaction term served as predictive variables. In Model 2, scores of growth mindset, three positive SC components, and their interaction terms serve as predictive variables.

8.3 Results

8.3.1 Descriptive Statistics and Correlations

The means and standard deviations of all variables are reported in Table 8.1. The average total resilience score was 22.96 (SD = 4.14), which was slightly above average. The mean scores for the overall self-compassion and its six components were within the moderate range (3.04 for overall self-compassion). Positive self-compassion components showed slightly higher average scores than negative ones, except over-identification. Emerging adults in this study had slightly higher scores on growth mindset than fixed mindset, but both of them were within the moderate range.

Table 8.1 also shows the bivariate correlations among the variables. Resilience scores were significantly and positively correlated with overall self-compassion, mindfulness, and growth mindset. On the contrary, the negative self-compassion components and fixed mindset were not significantly correlated with resilience.

Table 8.1 also shows the correlations between self-compassion components. Growth mindset showed a significant positive correlation with mindfulness and a significant negative correlation with self-judgment. Furthermore, fixed mindset had a significant positive correlation with isolation and a significant negative correlation with common humanity and mindfulness.

8.3.2 Regression Analysis: Growth Mindset and Self-Compassion with Resilience

Based on the correlation analyses, the first multiple regression analysis was conducted to test the main and interaction effects of growth mindset and self-compassion on resilience of Chinese emerging adults. Table 8.2 shows that the interaction effect between growth mindset and self-compassion on resilience was insignificant. Both growth mindset and self-compassion significantly predicted higher resilience of Chinese emerging adults. These results supported the first and second research hypotheses, but not the third hypothesis.

Table 8.1 Descriptive statistics and correlations for all used variables in this study (N = 200)

	1	2	3	4	5	6	7	8	9	10	Mean	S.D.
1. Resilience	1	0.255**	0.310**	-0.124	0.330**	-0.105	0.470**	-0.085	0.209**	-0.129	22.96	4.14
2. Self-compassion		1	0.558**	-0.548**	0.503**	-0.497**	0.540**	-0.502**	0.043	-0.047	3.04	0.83
3. Self-kindness			1	-0.043	0.325**	-0.087	0.374**	-0.060	0.044	-0.011	3.21	0.57
4. Self-judgment				1	-0.119	0.459**	-0.086	0.408**	-0.143**	0.049	3.07	0.52
5. Common Humanity					1	-0.064	0.452**	-0.008	0.095	-0.172*	3.19	0.59
6. Isolation						1	-0.028	0.365**	-0.064	0.183**	3.05	0.57
7. Mindfulness							1	-0.022	0.152**	-0.207**	3.17	0.55
8. Over-identification								1	-0.062	0.002	3.19	0.51
9. Growth Mindset									1	-0.057	3.01	0.52
10. Fixed Mindset										1	2.91	0.60

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 8.2 Multiple regression model predicting resilience of Chinese emerging adults by self-compassion and growth mindset ($N = 200$)

Variables	<i>B</i>	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Growth Mindset	0.209	0.413	0.138	3.004	0.003
Self-compassion	0.247	0.137	0.255	3.655	0.001
Growth Mindset x Self-compassion	0.750	0.011	0.052	0.052	0.454

Table 8.3 Multiple regression model predicting resilience of emerging adults by growth mindset and positive SC components ($N = 200$)

Variables	<i>B</i>	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>p</i>
Growth Mindset	0.209	0.413	0.138	3.004	0.003
Self-kindness	0.137	0.201	0.098	2.047	0.042
Common Humanity	0.117	0.206	0.123	1.673	0.096
Mindfulness	0.344	0.652	0.136	4.800	0.001
Growth Mindset × Self-kindness	-0.120	-0.078	0.045	-1.718	0.087
Growth Mindset × Community Humanity	0.173	0.125	0.049	2.568	0.011
Growth Mindset × Mindfulness	0.750	0.011	0.052	0.052	0.454

8.3.3 Regression Analysis: Growth Mindset and Positive Self-Compassion Components on Resilience

The second multiple regression analysis was conducted to test the main and interaction effects of growth mindset and positive self-compassion components on resilience. Table 8.3 shows that the interaction effect between growth mindset and common humanity on resilience was significant, suggesting that the significant positive relationship between growth mindset and psychological resilience was higher for participants with higher sense of common humanity. Supplementary analysis found that participants with higher scores on both growth mindset and common humanity had significantly higher scores on resilience than those with lower scores on both growth mindset and common humanity (mean difference = 2.83, $p = 0.002$). Growth mindset, self-kindness, and mindfulness significantly predicted higher resilience of Chinese emerging adults. These results partially supported hypothesis 4.

8.4 Discussion

The outbreak of Coronavirus disease (COVID-19) and the long-lasting pandemic have been worsening the well-being of emerging adults (Kujawa et al., 2020; Marelli et al., 2021; Tang et al., 2020; Varma et al., 2021), including those in Chinese context (Feng et al., 2021; Leung & Mu, 2021; Li et al., 2020; Wang et al., 2010). The present study aims to investigate whether the interplay between growth mindset

and self-compassion with psychological resilience of Chinese emerging adults in Hong Kong during the first wave of COVID-19 pandemic.

8.4.1 Growth Mindset and Psychological Resilience

The findings supported the first hypothesis that growth mindset can significantly predict psychological resilience. Consistent with previous findings (Mosanya, 2021), Chinese emerging adults with a growth mindset may have higher cognitive resources to support their psychological resilience during the COVID-19 pandemic. Previous research showed that individuals with a growth mindset showed stronger emotional regulation and could adjust to adversities and challenges during COVID-19 (Tamir et al., 2007). Hoyt et al. (2021) conducted a Bayesian meta-analysis across six studies ($N = 1761$), including cross-sectional and experimental studies. They found that growth mindset can both weaken threat appraisals across a variety of threats and increase flourishing (well-being, resilience, and grit). Schroder (2021) developed a model to incorporate mindset theory to clinical setting; Calvete et al. (2022) designed a growth mindset intervention to enhance resilience of adolescent victims from cyberbullying. In the future, age-appropriate and culture-sensitive growth mindset interventions should be developed to enhance resilience of Chinese emerging adults when facing life adversities or hardships.

8.4.2 Self-Compassion and Resilience

The findings of this study also supported the second hypothesis that self-compassion can significantly predict psychological resilience of Chinese emerging adults. The results were consistent with previous research (Kotera & Ting, 2021; Shebuski et al., 2020) showing that self-compassion can serve as a significant predictor of psychological resilience during the pandemic. One possible explanation is that self-compassion is significantly associated with emotional regulation that may support psychological resilience of emerging adults to face adversity (Neff et al., 2007; Trompetter et al., 2017). Lau et al. (2020) found that negative components of self-compassion intensified the threat impacts and adversely affected the mental health of Chinese youth and adults in Hong Kong during the first local pandemic outbreak. On the other hand, the positive components of self-compassion significantly buffered the risk of threat and supported resilience. Thus, they suggested that brief self-compassion interventions and trainings through mobile apps or websites could possibly enhance resilience of Chinese emerging adults during COVID-19 pandemic.

8.4.3 The Interplay of Growth Mindset and Self-Compassion with Resilience

The findings did not support the third hypothesis, because no significant interaction emerged between growth mindset and self-compassion with the psychological resilience of Chinese emerging adults. Nevertheless, the significant interplay between growth mindset and common humanity suggested that Chinese emerging adults who have higher self-compassion and perceive their own sufferings and life adversities as universal/common human experiences could more adaptively deal with and accept negative emotions to face pandemic-related difficulties and challenges.

From the above discussion, the interplay between growth mindset and self-compassion can be seen as an intercross between the cognitive and emotional perspectives. Tamir et al. (2007) discovered growth mindset promotes college students' resilience to handle difficulties with cognitive appraisals to reframe negative maladaptive emotions (Dweck, 1986; Nicholls, 1984). Moreover, individuals with a growth mindset are more likely to accept and transform negative experiences rather than using suppression and rumination (Tamir et al., 2007), which may promote more self-acceptance in the failure and bounce back (Whittington et al., 2017). On the other hand, self-compassion empowers people to face adversity fostering personal growth. When facing obstacles and failures, self-compassion allows individuals to have more self-acceptance and self-forgiveness (Neff et al., 2005). Such non-judgmental, mindful, and compassionate attitudes may help individuals and transform maladaptive emotions and build enduring personal resources and resilience to face with their life adversities. Certainly, the interplay between growth mindset and self-compassion (its components) on psychological resilience of emerging adults should be further investigated.

Apart from some limitations of this study, such as small sample size, correlational and cross-sectional design, and lack of control variables, the key findings of the present study were consistent with previous studies. Growth mindset and self-compassion had significant positive relationships with psychological resilience of Chinese emerging adults. Also, the three positive self-compassion components (self-kindness, common humanity, and mindfulness) significantly predicted psychological resilience of Chinese emerging adults, but surprisingly, all three negative self-compassion components did not relate to resilience. Furthermore, the interaction between growth mindset and common humanity with psychological resilience was significant. These findings can provide insights to further develop a framework and directions for future research with larger samples, prospective longitudinal design, experimental and interventional studies with control or matching variables, in order to gain more in-depth understanding of the mechanisms behind the interplay between growth mindset and self-compassion on enhancing psychological resilience of emerging adults, both in China and in other countries.

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Chapter 9

Stress, Self-Efficacy, Resilience, and Happiness Among Mexican Emerging Adults During the Confinement Due to COVID-19



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Abstract An empirical investigation is presented of the relationship between perceived stress, self-efficacy, resilience, and happiness among emerging adults during the confinement imposed by COVID-19 pandemic, taking into account age and level of resilience. This cross-sectional study involved 318 young people from the general population aged 18–29 years, 82 men and 236 women. Most of them were university students or had a career, a small number were tradesmen, and some had unpaid jobs. The scales of Perceived Stress, General Self-Efficacy, the Brief Version scales of Resilience and Happiness, and a sociodemographic data sheet were administered online using Google Forms from March 2020 to July 2021. The descriptive data show that people with high levels of resilience have higher self-efficacy and happiness and lower perceived stress. Positive relationships were observed between self-efficacy, resilience, and happiness and negative ones with perceived stress. Longitudinal studies are required to better elucidate the complex interaction between positive and negative well-being dimensions, in order to develop intervention programs that can inform psychological practice, with the aim of supporting and promoting youth's well-being in the face of the pandemic consequences.

Keywords Perceived stress · Self-efficacy · Resilience · Happiness · Emerging adults

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9.1 Introduction

The outbreak of COVID-19 pandemic has represented an economic, social, educational, and, above all, health challenge for the world. Millions of people have fallen ill and even died due to this disease. Among the actions applied in Mexico to prevent the spread of the contagion, there was confinement, characterized by the suspension of academic and work activities in presence (Gobierno de México, 2020). Even though a gradual return has been implemented nowadays, some sectors keep following the recommendation to remain at home.

Research by Brooks et al. (2020) indicates that younger age, female gender, and low grades in school are related to the negative psychological impact of the pandemic. They also mention stressors during and after quarantine that affect the mental health of individuals, such as duration of quarantine, fear of infection, frustration and boredom, inadequate supplies, inadequate information, economic status, and stigma of the disease. During confinement, the fear of sickness and death has undermined people's physical and psychological well-being, with unfavorable consequences on their quality of life. In the case of young people, studies report higher stress and depressive and anxiety symptoms (Arslan et al., 2020; Huang & Zhao, 2020; Tang et al., 2020).

Although in many countries the rate of contagion and severe disease among youth was lower in contrast to older age groups, at least in the first two waves of the pandemic, "they have been blamed for the spread of the pandemic by defying established restrictions" (Benedicto, 2021, p.129). It has to be however noted that young people experienced various negative consequences, especially in the months of confinement and subsequent restrictions, with a worsening in their physical and mental health problems. In almost all countries, and certainly in Mexico, the pandemic affected this population sector at the academic, employment, social, and economic levels. According to the COVID-19 impact measurement survey, more than five million Mexican students did not continue with their courses for the 2020–2021 school year, due to a lack of economic resources, need to work, and not having conditions for learning (INEGI, 2020).

Young people had to modify their lifestyles; the confinement led to severe restrictions in their possibility of socialization and their relationship and interaction patterns with friends, which are of great importance at this stage of life (Benedicto, 2021). These conditions have negatively impacted youth's mental health; in particular, restrictions in movement and leisure led people to feel uncomfortable and anxious (Dagli, 2020), generating emotional discomfort and making usual circumstances likely to become severe stressors (Vallejo-Sánchez & Pérez-García, 2016). Authors such as Seubert and Reiko (2022) refer that 2 years after the beginning of the pandemic, and despite the end of the confinement, the so-called new normality is being experienced; it is still a time of uncertainty and stress, representing a phase of adaptation to the current conditions.

Nowadays, research on emerging adults is relevant since they are mainly concerned about their future regarding education, marriage, work, health, and social

roles; they thus represent a vulnerable group in the face of anxiety which harms their individual and interpersonal functioning (Arnett, 2001; Côté, 2014).

9.1.1 *Perceived Stress*

One of the most frequently reported problems within this age group is stress. Selye (1974) defines stress as a set of physiological responses, and a reaction to non-specific stimuli (stressors). Specifically, the perceived stress appraisal process is defined as the individual's assessment of the degree of stress produced by a stressful situation. According to Moscoso (2009), perceived stress can be understood as the degree to which people perceive situations in their lives as unpredictable and uncontrollable, hence deeming them as stressful. It is recognized that perceived stress can affect mental and physical health when a person feels overwhelmed by a situation and when this level of stress is sustained over time (Lazarus, 2009). Folkman and Lazarus' (1988) transactional theory of stress posits that the person and the environment are in a constantly changing dynamic relationship, and this relationship is bidirectional. "When faced with a stressful stimulus from the environment, the organism makes an evaluation and provides coping strategies along with emotional expressions, and it acts accordingly by giving a series of responses" (Zavala et al., 2008, p. 165). Reactions to stress can be a) physiological, b) emotional, and c) cognitive, and the sources of stress can come from positive and adverse events. Stress is a normal response to uncertainty, so it is common for people to experience it in a pandemic context.

The COVID-19 pandemic has been stressful for people worldwide (Tamayo, 2020). As reported by Bowen et al. (2020) in Spain, 49.2% of people consider that COVID-19's impact on their lifestyle has been very or entirely negative. According to Valero et al. (2020) "social distancing has caused people to feel isolated and lonely and may increase stress, anxiety, and fear of disease outbreaks" (p. 64). In addition, it has been reported that women are twice as likely to convey stress and anxiety (Caraveo-Anduaga & Colmenares, 2000). Studies conducted with Mexican samples to investigate emotional dimensions during the pandemic suggest that although women reported lower affective symptoms, they get significantly burdened with caring for people, so they are the ones who frequently present more negative emotions (Ramos-Lira et al., 2020).

The young people's life has been in crisis, not only because of their age but also because of the new conditions of uncertainty that may generate a high perception of daily stress, resulting in emotional discomfort. Therefore, it is essential to inquire about the possible daily stress they may be experiencing in this pandemic confinement environment.

9.1.2 *Self-Efficacy*

Even under stressful circumstances, people may develop adaptive behaviors which allow them to control the demands of the environment. In this regard, it has been observed that young people face crises with a certain optimism and are confident that they will achieve success, “they believe that they will be able to get ahead because of their abilities and skills” (Benedicto, 2021, p.135). The study done by Megías et al. (2021) indicates that three out of five young Spaniards had an optimistic view of their future. They believed that their personal and work situation would improve compared to their current one in the coming years and expressed a high level of confidence in achieving their social and life integration. These findings suggest that many young people have been active agents during the pandemic. The situation does not necessarily negatively affect them because they have psychological resources to cope better with stressful situations. Scientific research has shown that self-efficacy acts as a protective factor in response to psychological stress (Cascio et al., 2014).

Bandura (1986) defines self-efficacy as “the judgments of each individual about their capabilities, based on which they will organize and execute their actions in a way that will enable them to achieve a desired performance” (quoted in Guillén, 2007, p.373). He also indicates that a person’s beliefs in their capabilities to organize and execute courses of action will produce specific results (Bandura, 1997). Self-efficacy is a dynamic state, which, unlike other fixed personality traits, can change over time according to new knowledge or expectations (Luthans & Peterson, 2002).

Self-efficacy comes mainly from achievements in previous executions: the more effective behaviors an individual has had in the past, the more effective they will feel to solve a new given situation, which results in a person capable of better managing stress and anxiety (Calderón et al., 2017). In addition, self-efficacy beliefs represent an essential factor for the sense of achievement (Cleary & Kitsantas, 2017); people with high levels of self-efficacy show greater self-confidence to face situations, such as the COVID-19 pandemic (Gaeta et al., 2021). Above all, it has been observed that it has a protective effect against stress, and it is associated with emotional well-being (Rodríguez et al., 2018). As a result, the self-efficacy construct reflects personal confidence to carry out behavior in challenging situations, such as home confinement by COVID-19.

9.1.3 *Happiness*

During the last three decades, contributions from positive psychology have provided extensive empirical evidence regarding the relevance of the study of happiness, even more so in times of pandemic.

According to Seligman (2008), there are two reasons to address the issue of happiness concerning health: (1) human beings desire well-being for their own sake, beyond alleviating their suffering; and (2) working on well-being can be one of the

best strategies to treat mental disorder. Thus, several research studies have documented that positive emotional states, such as happiness and subjective well-being, favor health status (Kok et al., 2013).

Happiness is generally considered a component of subjective well-being. Alarcón (2001, quoted by Ardila, 2010) defines it as a state of satisfaction, more or less lasting, which is experienced subjectively by the individual in possession of a desired good. According to Lyubomirsky (2008), happiness can be obtained directly from a person's self-report as a subjective state; thus, its study is relevant during confinement.

Happiness has been related to perceived stress (Victorio, 2008). It has also been reported that, in the case of COVID-19 (Satici et al., 2021; Zhang et al., 2020), fear of this disease is negatively connected to happiness. Empirical evidence suggests that people who perceive themselves happy respond adaptively in the recovery of negative events (Lyubomirsky, 2008). Regarding the relationship between perceived stress and subjective happiness, an inverse and significant relationship was detected (Chávez-Amavizca et al., 2020; González & Landero, 2014). In a study with Korean university students, McMahan et al. (2016) conducted a study that detected an inverse and significant correlation between perceived stress and subjective happiness, suggesting that well-being can strengthen immune functioning and buffer the impact of stress (Howell et al., 2007). It has "positive effects on health and personal and social well-being, which improve quality of life" (Caballero & Sánchez, 2018; Vargas Pacosonco & Callata Gallegos, 2021, p. 113).

Regarding the relationship between happiness and age, Myers and Diener (1995) indicate that there is no period during which people are happier or unhappier; however, "the emotional background does change, since what makes people happy or unhappy changes with age" (Salgado, 2009, p. 134). The relationship between happiness and age was investigated among a large sample of US citizens between 25 and 74 years old (Mroczek & Kolarz, 1998). Findings showed that negative affect was highest among younger adults and lowest among older adults, suggesting that well-being increases with age because older adults regulate their emotions more effectively than younger or middle-aged adults. Labouvie-Vief and Blanchard-Fields (1982) argued that with maturity, positive affect is maximized, negative affect is minimized, and cognition is restructured, leading to greater happiness. Other researchers, such as Ryff (1989), have reported that young people were less happy than middle-aged and older people.

9.1.4 Resilience

According to Fernet (2018), in psychology resilience is "the ability to bounce back after a disturbing agent or a stressful event" (p.168). For González-Arratia (2018), it involves an interaction of risk and protective factors, both internal and external, brought into play to modify the effects of adverse life events. It implies a set of intrapsychic (internal), social, and cultural (external) attributes that enable a person

to interact positively in the environment and adjust to changes and demands of different situations.

Research has shown that resilience allows people to cope adequately with stressful situations, increases the capacity for achievement, and boosts self-efficacy (Chacón et al., 2016; Forés & Grané, 2008). Research also suggests that resilience contributes to health, well-being, and quality of life (Reyes-Rojas et al., 2021). Beyond promoting a healthy adaptation to adverse conditions, resilience consists of a proactive attitude focused on the positive connotation of events from a more extensive view of existence, with more appropriate and proactive coping strategies (González-Arratia et al., 2009; Páez, 2019) and generates positive modifications in favor of health and well-being (Grotberg, 2006). Likewise, resilience makes it possible to have a healthy life despite living in an unhealthy environment (Rutter, 1987).

In Mexico, a study by González et al. (2021) recently evaluated a structural model on the perceived impact of COVID-19 confinement on different areas of a person's life, including stress tolerance and life satisfaction as predictors. The results confirm that stress tolerance and life satisfaction may protect emotional well-being, physical condition, health, happiness, and peace of mind from the impact of confinement. Research on people's experience during confinement due to the COVID-19 pandemic is however still limited in Mexico, even more so among emerging adults, since most studies are aimed to understand the effects on mental health in older adults. The limitation of youth's daily activities, such as the closure of academic, cultural, and sports activities, are described as factors that generate stress, anxiety, and depression among emerging adults, potentially interfering with their development and well-being (Barrera-Herrera & Vinet, 2017; García-Alandete et al., 2018; Monteiro et al., 2009; Sánchez-Boris, 2021). For this reason, it is important to investigate the negative and positive psychological dimensions reported by youth in this age group during the pandemic confinement, in order to develop and implement health policies addressing their needs. Analyzing positive dimensions and resources mobilized during the COVID-19 pandemic is also vital, because this disruptive event is likely to activate potential assets in favor of people's well-being.

There are currently no studies involving young Mexicans with the aim of analyzing the stress they perceived during the period of confinement, as well as self-efficacy and their association with happiness and resilience. This study represents an attempt to fill this gap; it is framed in a Positive Psychology perspective, which was developed to investigate the human mind's positive qualities and characteristics (Vera, 2006). Evidence suggests a close relationship between self-efficacy and resilience (González-Arratia et al. 2021) during confinement, especially in young people. According to Carbajal and Delgado (2020), the relationship between self-efficacy and resilience was proven since resilience allows for overcoming adverse situations (Forés & Grané, 2008). Furthermore, it enables behaviors that bring about desired results, decrease stress, and generate subjective well-being and happiness.

Hence, the central questions of this study are: what is the link between perceived stress and self-efficacy with resilience and happiness in a group of emerging adults?

Will there be differences between these variables concerning the participant's age? Are there differences among stress, self-efficacy, and happiness based on the level of resilience?

Therefore, the following objectives were established:

1. To describe the level of perceived stress, self-efficacy, resilience, and happiness in the sample under study
2. To determine the degree of the relationship between perceived stress, self-efficacy, resilience, and happiness
3. To compare the values of stress, self-efficacy, and happiness in relation to the level of participants' resilience and age ranges

Likewise, the following hypotheses were formulated:

1. If there is more perceived stress, there is less self-efficacy, resilience, and happiness.
2. Perceived stress, self-efficacy, resilience, and happiness are different depending on the age.
3. Perceived stress and self-efficacy differ according to a low, moderate, and high level of resilience.

9.2 Method

9.2.1 Participants

This cross-sectional, descriptive, and correlational study involved 318 people aged between 18 and 29 years ($M_{age} = 22.39$, $SD = 3.67$). Among them, 64.8% were women, and 35.2% were men. Participants were enrolled using non-probability purposive sampling. Data collection and participants in this research are from Toluca, the state capital of the State of Mexico located in central Mexico. This city is 2600 meters above sea level and has 873,536 inhabitants, 47.9% men and 52.1% women; it is the fifth most populated area in Mexico. It connects 66 kilometers to the east with the Valley of Mexico, composed of Mexico City and its metropolitan area. It is known for its industrial and cultural development and natural attractions. It is also the location of the Autonomous University of the State of Mexico (Universidad Autónoma del Estado de México). Concerning the youth population from the city, within a range of 20–24 years old, 9.8% (41,104) are men, whereas 9.2% are women (42,064) (EBCO, 2018).

Inclusion criteria for participating in this study were being of legal age and signing the informed written consent. On the other hand, the exclusion criteria were not agreeing to participate, whereas the elimination criteria were filling out the instruments incompletely.

9.2.2 *Measures*

Every participant answered the following self-report scales:

1. Sociodemographic datasheet. Made for this purpose, it includes information on age, sex, marital status, schooling, occupation, and follow-up of health measures.
2. Perceived Stress Scale (Sanz-Carrillo et al., 2002). It measures the degree to which people value life situations as stressful; it includes six factors: F1—tension, irritability, and fatigue; F2—social acceptance; F3—energy and fun; F4—overload; F5—satisfaction with self-fulfillment; F6—fear and anxiety. It consists of 30 items and four response options. The internal consistency is adequate, with a Cronbach's alpha value of 0.90 and a test-retest reliability coefficient of 0.80.
3. General Self-Efficacy Scale (Baessler & Schwarzer, 1996). This scale evaluates the stable feeling of personal competence for the effective management of various situations. It is a unidimensional scale, and it consists of 10 items and four response options, with a Cronbach's alpha internal consistency of 0.87.
4. Brief Scale of Resilience (González-Arratia et al., 2019). It measures the degree in which a person has the ability and resources that allow he or she to resist in the face of adversity. This version consists of 14 items, its psychometric evaluation with Mexican samples indicates three dimensions (Internal Protective Factors, External Protective Factors, and Empathy) that explain 44.63% of the total variance and an absolute Cronbach's alpha reliability of 0.86.
5. Subjective Happiness Scale (Lyubomirsky & Lepper, 1999). This scale is a global measure of subjective happiness. It consists of 4 items with a Likert-type response; the total score is obtained from the sum of every item and divided by the total number of items. Two items ask respondents to characterize themselves using absolute intervals and intervals relative to pairs. The other two items are a brief description of happy and unhappy individuals and ask the respondent to answer the extent to which each characterization describes them. Vera-Villaruel et al. (2011) reported a one-factor solution of 61.65% of the explained variance and a Cronbach's alpha value of 0.87 in Chilean samples.

9.2.3 *Procedure*

This study was conducted during the first and second periods of confinement in Mexico from March 2020 to July 2021. Participants living in Mexico were contacted through an invitation on social networks. First, they were informed about the research aims, and those who agreed to participate signed an informed consent form and accessed the online survey in Google forms.

9.2.4 Data Analysis

Descriptive analyses were carried out; the mean and standard deviation was obtained, and the normality of the data was evaluated using a K-S test. Levels were obtained from the total scores of each scale and classified according to the author's indications. Validity data were obtained through exploratory factor analysis, and reliability was calculated using Cronbach's alpha. A Pearson correlation coefficient test was carried out to determine the degree of relationship among variables. The studies were carried out with the program SPSS, version 23.

9.2.5 Ethical Considerations

The protocol is registered with the UAEM (6337/2021SF) and the University's Institute of Studies Ethics Committee (2021/P05). Every participant filled out an informed consent form as per the ethics of research involving human subjects; their participation was voluntary, anonymous, and confidential.

9.3 Results

As concerns participants' sociodemographic features, the majority reported being students, 26.7% were career people, a fewer percentage were tradesmen, and some had unpaid jobs. The marital status reported by the majority was single (85.8%) (Table 9.1).

The descriptive results show a moderate level of self-efficacy and stress, average happiness, and high resilience. The number of factors obtained for each scale through exploratory factor analysis is consistent with the pattern detected for the original version of the scales. Cronbach's alpha coefficient was used to obtain reliability, which was acceptable for three scales, according to the criteria of Campo-Arias and Oviedo (2008), except for the happiness scale, characterized by low reliability (alpha below 0.65) (Table 9.2).

Pearson's correlations highlighted significant relationships between self-efficacy, happiness, and resilience, whereas there was an inverse relationship with perceived stress (Table 9.3).

The total score in the Resilience Scale was used to group participants according to the levels in this variable, which were then considered as percentile referents. Three levels of resilience resulted from this criterion. An ANOVA was carried out to determine the differences in Self-Efficacy, Stress, and Happiness values, across the three groups identified by the resilience levels: high, moderate, and low. As reported in Table 9.4, the group classified as High Resilience presents greater self-efficacy,

Table 9.1 Participants' sociodemographic data

Sociodemographics	Frequency (%) <i>N</i> = 318
<i>Age</i>	
18–23	206 (64.8)
24–29	112 (35.2)
<i>Gender</i>	
Men	82 (25.78)
Female	236 (74.22)
<i>Marital status</i>	
Single	273 (85.8)
Married	31 (9.7)
Divorced	2 (0.6)
Other	12 (3.8)
<i>Occupation</i>	
Student	208 (65.4)
Professional	85 (26.7)
Housewife	5 (1.6)
Tradesmen	20 (6.3)

Table 9.2 Descriptive statistics and scales' reliability

Variables	Min-Max	Mean	SD	% total variance	No. of factors	α coefficient
Self-efficacy	19–40	32.71	4.43	53.29	1	.847
Stress	51–106	75.05	11.02	54.95	4	.804
Happiness	1–7	4.81	3.43	61.16	1	.329
Resilience	42–70	61.70	5.80	48.20	3	.851

SD standard deviation

Table 9.3 Intercorrelations for self-efficacy, stress, happiness, and resilience total scores

	1	2	3	4
1. Self-efficacy	–			
2. Stress	–.25**	–		
3. Happiness	.30**	–.28**	–	
4. Resilience	.51**	–.18**	.36**	–

Note: Every coefficient is significant to $p < .01$

happiness, and lower perceived stress in contrast to the other two groups. The effect size varies from medium to high (Table 9.4).

As for age group, a Student's *t*-test revealed only differences in the happiness variable. The perceived stress average score was slightly lower in younger participants, without being significant (Table 9.5).

Table 9.4 Self-efficacy, stress, and happiness values across groups with different resilience levels

Variable	Low resilience group <i>n</i> = 136		Moderate resilience group <i>n</i> = 115		High resilience group <i>n</i> = 67		<i>f</i>	<i>p</i>	η^2
	Mean	SD	Mean	SD	Mean	SD			
Self-efficacy	30.30	3.85	33.87	3.60	35.59	4.31	50.16	.001	1.2
Stress	77.91	10.57	75.88	11.48	72.59	10.41	5.37	.005	.05
Happiness	18.22	3.39	19.80	2.96	20.58	3.63	13.67	.001	.06

SD standard deviation; *f* variance ratio; *p* significance level; *n* sample size; η^2 square eta/effect size

Table 9.5 Comparison of variables' levels between age groups

Variable	Group 1 18–23 years <i>n</i> = 206		Group 2 24–29 years <i>n</i> = 112		<i>t</i>	<i>p</i>	η^2
	Mean	SD	Mean	SD			
Self-efficacy	32.50	4.40	33.09	4.48	-1.14	.25	-
Stress	76.15	11.30	75.89	10.55	.20	.83	-
Happiness	18.98	3.38	19.86	3.46	-2.19	.02	.02
Resilience	61.53	5.94	62.01	5.55	-.71	.47	-

SD standard deviation; Student's *t* value *p* significance level; *n* sample size; η^2 square eta/effect size

9.4 Discussion

The study's objective was to analyze the relationship between well-being dimensions and stress during the COVID-19 pandemic confinement in a group of Mexican young adults.

It was possible to observe a moderate stress in the sample under study, possibly related to the uncertainty regarding the pandemic and its evolution. Although the evaluation of daily stressors done through the subjective perception of suffering a stressor is the broadest trend, in this case, the frequency of a stressful experience was evaluated. Therefore, timely follow-up of the participants is required since individuals respond in multiple ways to a stressful situation over time. If it is not resolved, the situation may be prolonged and become a source of chronic stress. This monitoring would provide more information regarding stress management; similarly, it is essential to evaluate the stress coping styles used, which allow for an adequate functioning in the current circumstances and determine the tendency toward vulnerability or resilience.

These results are coherent with those obtained by Díaz Loving et al. (2022), who detected moderate levels of stress and resilience in Mexican adults during the first period of voluntary confinement.

Participants in the present study reported high levels of self-efficacy. This suggests that they were prone to make a more significant effort in their activities and to be more persistent in their execution (Baessler & Schwarcer, 1996). Another

characteristic of high self-efficacy is that people keep their goals and continue trying to achieve them no matter the failures encountered along the way.

The scores obtained on the happiness scale in this study are moderate, a finding which coincides with the study by Vera-Villarreal et al. (2011) in Chilean participants. Likewise, Lyubomirsky (2008) pointed out that “when applying the subjective happiness scale to many different groups of people, the average score ranges from 4.5 to 5.5, which means that people evaluate themselves as moderately happy” (p. 50). The same author indicated that happiness levels can be increased, which is essential, since people who perceive themselves to be happy respond more adaptively in decision-making and in recovery from negative events. It should be considered that “most people have their idea of what it is to be happy, when they are happy or when they are not, and are able to report it accordingly” (Lyubomirsky, 2008, p.48).

An encouraging 54% of the participants in this study showed high levels of resilience, concurring with Rutter’s results (1987), who reported a prevalence of resilience ranging from 15 to 50% depending on the population under study. Participants show qualities that allow them to adapt more safely to challenging situations, such as a pandemic. This result is also consistent with Del Rio Saavedra’s (2018) findings, showing high levels of resilience in the age group from 18 to 30 years.

In the face of a health crisis, this study found that self-efficacy is positively related to happiness; Rosales-Castillo (2017) suggests that strengthening self-efficacy is essential, as people develop multiple skills to attain optimal development and mental health. Similarly, the presence of a low level of stress is associated with higher happiness (Morillo, 2013; Tafet, 2018).

The relationship between perceived stress, self-efficacy, resilience, and happiness is consistent with the results of Lopez-Walle et al. (2020). The fact that these variables are associated means that the lower the stress, the higher the self-efficacy, resilience, and happiness will be in this group of young people. These findings are also consistent with Gómez et al. (2007) in Colombian samples; as well as with the investigations by Fernández-Millán & Bretones (2021) and Miralles (2021) in Spanish samples and Palomera et al. (2022) in Polish samples.

Numerous studies (Liu et al., 2013; Plomecka et al., 2020; Uchida & Oishi, 2016) have detected similar associations among these variables; perceived stress, self-efficacy, resilience, and happiness are constructs of great interest to psychology due to their theoretical, empirical, and practical value. However, most studies have not helped to clarify their interaction in an extraordinary situation such as a pandemic. Hence, our findings not only provide the knowledge on how they are linked but also shed light on the relationship between the COVID-19 pandemic and the psychological functioning of Mexican emerging adults.

These results highlight the importance of investigating stress in times of global crisis, as well as recognizing which psychological resources are available to people within these age groups, in order to appropriately face these events, overcome difficulties and, better yet, get stronger (Tapia et al., 2021). These results also provide useful suggestions for designing public policies that contribute to individual

and social well-being improvement. In praxis, it is beneficial to plan appropriate strategies according to individual needs, based on positive psychology, which focuses on human strengths, virtues, and healthy features that allow for enhancing people's optimal functioning to respond to the environment's demands.

Concerning the objective to investigate differences in stress and happiness across groups with different levels of resilience, results showed that highly resilient participants reported lower stress, as well as higher self-efficacy and happiness. These findings are consistent with those obtained in other Latin-American studies, such as the resilience study performed by Villalba and Avello (2019) in Peruvian samples, who report that 60% of the participants showed a medium-high level of resilience, 30% a high level and 10% a low level; additionally, they indicate that a significant relationship exists between resilience and happiness. They also support the view of Suh et al. (1996), suggesting that adaptation capacity is crucial in determining subjective well-being, and the findings by Schwartz et al. (2011), showing that it is true especially in emerging adults' samples.

As concerns age differences in happiness and stress, only for happiness a difference was detected, in favor of the older group aged between 24 and 29 years. This result is in line with findings reported by other Latin-American authors, suggesting that the older the age, the greater the happiness (Alarcón, 2001; Castilla et al., 2016; Romero, 2015), marking the need to analyze with even greater emphasis the differences of the other variables regarding age. More specifically, this result suggests that a person's self-referent thoughts regarding their competence to handle a wide variety of stressful situations effectively is what allows them to trust their ability to manage daily life stressors adequately (Baessler & Schwarzer, 1996; Ortiz et al., 2022), which makes the manifestation of resilient behaviors more likely.

Regarding resilience, it is necessary to investigate it among emerging adults, as it helps people to perform effectively and healthily. Further exploration is required, since in Mexico there is still higher interest in the study of stress and the concomitant psychosocial risks, rather than in the systematic analysis of personal resources to face health crises. From our point of view, self-efficacy development and resilience promotion would undoubtedly buffer the significant costs high-stress levels have on people, their families and their social, school, and work environment.

It is important to note that people's reactions to the pandemic may vary from one population to another. In general, it was observed that, despite the circumstances, people somehow have psychological resources to cope with adversity, which should be studied in other age groups. However, nowadays it is crucial to study the individual's background, in particular the presence of social, family, and friend support, which represents a significant pillar in the face of the pandemic (Valero et al., 2020). Furthermore, it is necessary to analyze other psychological factors that could be involved in young people's resilience and happiness in order to have more articulated evidence on this matter.

9.5 Study Limitations and Research Directions

Among the limitations of the present study, it should be noted that most of the participants are women, and in this regard, it has been observed that women have higher levels of resilience than men (Betancourt et al., 2021). Therefore, it is necessary to be cautious in interpreting the results, making it essential to expand the sample of male participants to learn more about how these variables interact, which will be the subject of further study by the authors.

Another limitation concerns the reliability of the subjective happiness scale scores in the sample under study, which turned up below the pointed criteria (Campo-Arias & Oviedo, 2008). Therefore, we should be cautious regarding its interpretation and it is advisable to perform an in-depth scale review and analysis for its use within the Mexican context.

The data analysis so far allows us to draw some conclusions about resilience in emerging adulthood, and about its association with self-efficacy and happiness. Nonetheless, experience indicates that obtaining more information regarding coping styles usually used in a pandemic situation is crucial. It should not be forgotten that both risk and protective factors depend on the individual, family, and social context, as well as elements such as age and life cycle (Claver & Pereda, 2011). Psychological tools and resources must be provided to individuals, in order to allow them to develop life skills in the face of crises like the COVID-19 pandemic. Based on the framework of positive psychology, we suggest that the identification of strengths and their use in daily life could increase personal safety (Vázquez & Hervás, 2009). The investigation of these variables is undoubtedly helpful in strengthening adaptive and functional behaviors in the current context, since it is necessary to reinforce young people's emotional state, physical and mental health to benefit their individual and social well-being.

Further research is also needed to understand the impact of the pandemic on different populations (Gausman & Langer, 2020), especially in Spanish-speaking countries, and to further analyze differences due to gender and estimate more accurately each of the variables in the pandemic.

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Chapter 10

Perceived Parental Rearing Behaviors, Resilience, Loneliness, and Life Satisfaction Among Greek Emerging Adults During the COVID-19 Pandemic



Antonia Papastylianou and Vasileia Zerva

Abstract The present study investigates emerging adults' life satisfaction during COVID-19 pandemic in Greece and its association with perceived parental rearing behaviors as well as resilience and loneliness. According to literature review, it was expected that parental emotional warmth would be positively correlated with emerging adults' life satisfaction, while parental rejection and overprotection would have a negative correlation with it (Özdemir and Sağkal. *Psychological Reports* 122(5): 1720–1743, 2019). Furthermore, it is hypothesized that resilience would be positively correlated with life satisfaction (Kavčič et al. *Psychiatric Quarterly* 92:201–216, 2020; Paredes et al. *Personality and Individual Differences*, 170, 2020), while loneliness would be negatively correlated with it (Anderson and Malikiosi-Loizos. *Psychology: The Journal of the Hellenic Psychological Society* 2(1):108–126, 1995). The sample of the study consisted of 292 students aged 18–28 who were administered a self-report questionnaire measuring the above variables. Hierarchical regression analysis's results partly confirmed the study hypotheses. Findings from hierarchical regression analysis indicate that resilience and loneliness (negative association of the latter) predicted participants' life satisfaction, while parental rearing behaviors did not emerge as significant predictors in the final model. The results are discussed in light of the recent literature of the COVID-19 pandemic and furthermore research limitations are presented.

Keywords Emerging adulthood · COVID-19 pandemic · Parental rearing behavior · Life satisfaction · Resilience · Loneliness

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10.1 Introduction

10.1.1 *The COVID-19 Pandemic*

About hundred years after the Hispanic Influenza (1918–1920), a new pandemic outbreak was announced by World Health Organization (WHO) in March 2020, after the rapid worldwide spreading of Sars-CoV-2 from China. In Greece the increase of cases of COVID-19 in February 2020 was followed by several restraining orders, taken by the government to inhibit the rapid expansion of the disease and alleviate the burden on the national health system. Greek citizens experienced both strict measures and lockdown orders whenever COVID-19 incidence was getting higher, while during summer months restrictions were lifted.

This pandemic can be considered as a disaster, in line with the definition provided by the United Nations International Strategy for Disaster Reduction (UN-ISDR, 2004): “a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources” (p.43). Similarly, WHO defines disaster as a sudden ecologic phenomenon of sufficient magnitude to require external assistance. In this sense consequences stemming from the pandemic can be examined from the perspective of psychology of natural disasters, a field aimed at developing intervention strategies to reduce distress, promote and improve short-term and long-term adaptive functioning for both individuals and societies following these critical events (American Psychological Association, n.d.). Both definitions underline that individuals need to develop strategies to cope with the impact of a crisis.

Previous findings reported that subjective well-being of individuals who have experienced a natural disaster or a crisis is mostly maintained at normal levels in all age groups (Bonanno et al., 2010; Lau et al., 2008); similar findings were obtained in a recent study regarding the pandemic (Zacher & Rudolph, 2020). Yet, Bonanno et al. (2010) suggested that a number of affected individuals may experience physical symptomatology and mental disorders. The impact deriving from a disaster or a crisis is mainly short-term, though long-term social and psychological effects are possible as well (Reyes, 2006). Recent studies reported that individuals with higher levels of resilience were less prone to pandemic’s compounding effects and that resilience was related to lower anxiety levels and lower negative impact on subjective well-being (Kavčič et al., 2020; Paredes et al., 2020).

Findings also suggest that social support and meaningful relationships represent additional resources that protect the individual against life’s adversity (Bonanno et al., 2010). Moreover, recent studies revealed that loneliness was positively correlated with both reduced ability to cope with stress factors and higher likelihood of experiencing depression symptoms and post-traumatic stress disorder (Groarke et al., 2020; Liu et al., 2020; Palgi et al., 2020). Concerning family, Liu et al. (2020) claimed that social support among family members was related to lower levels of depression prevalence, stress, and post-traumatic stress disorder. However,

increased mental health problems among children and adolescents during the pandemic were associated with parents' higher hostility levels, lower emotional warmth levels, and lower levels of perceived family attachment (Whittle et al., 2020).

Considering the unprecedented conditions brought about by the COVID-19 pandemic worldwide, the present study is aimed to investigate emerging adults' life satisfaction in the context of the pandemic in Greece, and more specifically its association with perceived parental rearing behaviors. Furthermore, the association of emerging adults' loneliness and resilience with their life satisfaction will be investigated.

10.1.2 The Family in Greece

In Greece the traditional type of family was extended. However, following the socioeconomic changes and the development of urban centers, the nuclear family became predominant in urban contexts. Nuclear family is comprised of married partners and their offspring living under the same roof (Lila et al., 2020), but the core values of the extended family, like close connections between family members and keeping regular contact with them, have been preserved even in modern Greek society (Mylonas et al., 2006).

Furthermore, in Greek urban centers relatives often chose to live close to each other, thus maintaining aspects of traditional family type through proximity and regular contact (Georgas, 1999). The cohesion and dependence observed had both social and economic characteristics, indicating rather interdependence among the family members. Recent observations yet suggest that in the near future the changes occurred in the traditional Greek model of family cohesion will require deep adjustments and reforms. In fact, further changes have already been detected as for example the increase of single-parent families, families out of the wedlock, cohabitation, etc. These changes are currently unfolding in Greece and will appear much more intense in the coming years (Moysis, 2021).

10.1.3 Parenting Practices

Baumrind (1991) proposed to classify parenting in authoritarian, authoritative, permissive, and rejecting-neglecting styles. Numerous studies suggest that children (Baumrind, 1991, 2013; Lamborn et al., 1991) and adolescents (Georgouleas & Besevegis, 2003; Hovee et al., 2011) of authoritative parents achieve optimal development comparing to children who grow up with parents adopting other styles. Respectively, authoritative parenting was positively correlated with adolescents' life satisfaction (Raboteg-Saric & Sakic, 2013; Sarizadeh & Akbari, 2021). Lastly, rejecting-neglecting parents' children reasonably scored the most negative results among all in Lamborn and colleagues study (1991).

Examining perceived parental rearing behaviors, Arrindel et al. (1999) reported three main parenting practices: rejection, emotional warmth, and overprotection. Rejection is characterized by a perceived punitive, shaming, abusive behavior, and criticism toward the child; emotional warmth is described as an affectionate and praising behavior; overprotection is associated with (over)involvement and a rather intrusive attitude. Both parental rejection and overprotection were positively correlated with childhood anxiety (McLeod, Wood, et al., 2007; Muris et al., 2003) and depression (McLeod, Weisz, et al., 2007). Further, while parental acceptance was associated with positive psychological development, rejection was positively correlated with psychological disorders (Dwairy, 2009) and depression (Hale et al., 2005) among adolescents.

Concerning emerging adults, Özdemir and Sağkal (2019) found that higher levels of parental emotional warmth were significantly associated with lower levels of self-criticism and psychological distress, while the opposite association emerged for higher levels of rejection and overprotection. Fulton et al. (2014) reported as well that overprotection was positively associated with anxiety in young adults. Furthermore, parental care and less overprotection were found crucial for students' successful college adjustment (Klein & Pierce, 2009) and were associated with increased self-confidence, less distress, and less depressive symptoms (Avagianou & Zafropoulou, 2008). Finally, it was reported that lack of care and parental overprotection were significantly correlated with the prevalence and the onset of various mental disorders among adults (Overbeek et al., 2006).

10.1.4 Family and Emerging Adulthood

Emerging adulthood, according to Arnett (2001), is an intermediate developmental stage between adolescence and adulthood that the individual goes through from the 18th till the 25th or the 29th year of his/her life on average. During this stage, characterized by instability and uncertainty, the individual searches his/her identity.

Studies conducted among students in Greece supported the existence of emerging adulthood as a transitional stage between adolescence and adult life, defined by the characteristics referred by Arnett et al. (2014) and consistent with other industrialized countries' findings. Particularly, Greek students were defined by identity exploration, expansion of new chances and possibilities, being self-focused, and feelings of being in an intermediate stage between adolescence and adult life (Galanaki & Leontopoulou, 2017; Galanaki & Sideridis, 2018). Conversely, the ability to create a family, compliance with norms, and financial independency were featured as the most important factors that signify adult life for Greek students, showing a mixture of collectivistic and individualistic views regarding the transition from adolescence to adult life (Galanaki & Leontopoulou, 2017; Petrogiannis, 2011).

10.1.5 Loneliness

Perlman and Peplau (1985) defined loneliness as “the unpleasant experience that occurs when a person’s network of social relationship is significantly deficient in either quality or quantity” (p. 15). Loneliness is significantly associated with lack of social support received by the person (Segrin & Passalacqua, 2010; Segrin & Domschke, 2011). More attention needs to be paid to the quality of relationships that the individual builds and maintains, as this defines substantially the loneliness experience (Segrin & Passalacqua, 2010). Concerning parenting practices, feeling rejected and neglected by parents was positively associated with adolescents’ feelings of loneliness (Ayhan & Beyazit, 2021; Mousavi & Dehshiri, 2021), while parental warmth and acceptance was negatively associated with loneliness (Mousavi & Dehshiri, 2021)

Earlier, Perlman and Peplau (1985) claimed that chronic loneliness experience is negatively related to individuals’ mental health and well-being while persistent loneliness experience is positively related to depression, suicidal ideation, and suicidal tendencies. Beutel et al. (2017) further added mental distress, generalized anxiety disorder, and panic attacks to the negative affect of loneliness.

10.1.6 Resilience

Over the lifespan an individual faces a variety of situations and events which may affect her/him negatively. According to Luthar and Cicchetti (2000) “resilience is a dynamic process wherein individuals display positive adaptation despite experiences of significant adversity of trauma” (p. 2). Connor and Davidson (2003) claimed that resilience is a combination of “personal qualities that enable one to thrive in the face of adversity” (p. 76).

Concerning children’s upbringing, authoritarian and permissive parenting styles were negatively correlated with resilience (Ritter, 2005) and positively with post-traumatic symptoms in adolescents (Zhai et al., 2015). More specifically, parental rejection and punishment were negatively associated with adults’ resilience (Petrowski et al., 2014), while maternal overprotection was negatively correlated with adolescents’ resilience (Shi et al., 2021). Authoritative parenting type and emotional warmth instead brought up the best results, being positively related to resilience during adolescence (Firoze & Sathar, 2018; Ratih, 2015; Ritter, 2005; Zhai et al., 2015). Finally, friendship bonds and social support enhanced emerging adults’ resilience, while loneliness had a negative effect (Yakıcı & Traş, 2018).

10.1.7 Subjective Well-Being

In accordance with Diener et al. (1997) “subjective well-being refers to how people evaluate their lives and includes variables such as life satisfaction and marital satisfaction, lack of depression and anxiety, and positive moods and emotions” (p. 1). Consequently, subjective well-being is not identified with a person’s mental health, though representing a necessary condition for it (Diener et al., 1997).

Diener et al. (1997) suggested a tripartite model for understanding subjective well-being, including satisfaction with life, high levels of positive affect, and low levels of negative affect. Satisfaction could be understood in a general framework, such as satisfaction with life as a whole, or contextualized in specific domains, such as love, marriage, friendship, work. Positive affect is related to regular experience of happy feelings, affection, and pride. Negative affect, on the contrary, is related to unpleasant feelings, such as shame, guilt, sadness, anger, and stress (Diener et al., 1997, p. 3–4). Finally, levels of subjective well-being seem to present relatively high levels of cohesion and stability over time, despite transient changes due to disruptive events (Diener et al., 2011).

An individual characteristic that has been related to personal well-being is resilience. Specifically, individuals who present high levels of resilience also report high levels of life satisfaction (Yakıcı & Traş, 2018; Zhai et al., 2015). In addition, family characteristics, such as parental support and authoritative caregiving, contribute to adolescents’ well-being (Meeus, 2003; Raboteg-Saric & Sakic, 2013). To the contrary, loneliness negatively affects a person’s health and well-being (Beutel et al., 2017). Anderson and Malikiosi-Loizos’s (1995) study among Greek students found that feelings of loneliness were negatively related to life satisfaction.

10.1.8 Study Hypotheses and Research Questions

As mentioned above, the COVID-19 pandemic has been considered “a serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources” (UN-ISDR, 2004, p.43). Taking these issues into consideration, specific hypotheses were formulated, concerning strategies young adults may adopt to cope with adversities matched with restrictions and to achieve life satisfaction. According to literature review, it was expected that during the quarantine months—in which family members had to share the same home spaces uninterruptedly—perceived parental emotional warmth would be positively correlated with emerging adults’ life satisfaction (Özdemir & Sağkal, 2019) and resilience (Ratih, 2015; Zhai et al., 2015), while it would be negatively associated with loneliness (Mousavi & Dehshiri, 2021). On the contrary, perceived parental rejection was expected to negatively correlate with participants’ life satisfaction (Özdemir & Sağkal, 2019) and resilience (Petrowski et al., 2014), while it

was hypothesized that it would positively correlate with loneliness (Ayhan & Beyazit, 2021; Mousavi & Dehshiri, 2021). Furthermore, perceived parental overprotection was expected to have a negative correlation with participants' life satisfaction (Özdemir & Sağkal, 2019) and resilience (Shi et al., 2021).

Further, based on findings obtained from other studies conducted during the pandemic (Kavčič et al., 2020; Paredes et al., 2020), it was hypothesized that resilience would be positively correlated with participants' life satisfaction, while loneliness would be negatively correlated with life satisfaction (Anderson & Malikiösi-Loizos, 1995) and resilience (Yakıcı & Traş, 2018). Finally, an exploratory question was formulated concerning whether and how emerging adults who lived with their parents differed regarding life satisfaction from those who lived by themselves during quarantine.

10.2 Method

10.2.1 Participants

The sample consisted of 292 participants, 188 females (64.4%) and 104 males (35.6%), aged between 18 and 28 years ($M = 21.50$; $SD = 2.16$). The majority of participants defined their socio-financial status as middle-class ($n = 233$, 79.8%), while 21 (7.2%) defined it as upper-class, 21 (7.2%) as lower-class, and 17 (5.8%) preferred not to answer. The sample's vast majority ($n = 272$, 93.2%) reported to reside in a city (>2000 people), while only 20 participants (6.8%) lived in a rural area.

Concerning marital status, 141 participants (48.3%) reported themselves as single, 121 (41.4%) reported being in a romantic relationship, 3 (1%) were married, 7 (2.4%) were in a civil partnership or cohabitation, and 4 (1.4%) were divorced or in a legal separation. Only 1 participant (0.3%) reported being widowed, 1 (0.3%) did not identify his/her status with any of the available options, while 12 participants (4.1%) preferred not to answer. Lastly, 2 participants (0.7%) gave irrelevant answers to the question. The vast majority of participants ($n = 287$, 98.3%) stated being childless, while 5 (1.7%) had children.

As concerns living conditions and cohabitation during the pandemic quarantine and restricted movement, the majority of participants ($n = 216$, 74%) reported living with their parents and 6 (2.1%) with their siblings; seven (2.4%) lived with their marital family and 27 (9.2%) with their partner; eight (2.7%) lived with their flat mates and 27 (9.2%) reported living alone. Only one participant (0.3%) did not answer the specific question.

10.2.2 Measures

10.2.2.1 The Revised UCLA Loneliness Scale

The scale (Russell et al., 1980) measures the individual's psychological loneliness. It was adapted in Greek by Anderson and Malikiosi-Loizos (1992). The revised edition, used in this study, consists of 19 items (e.g., "I lack companionship") rated on a Likert scale ranging from 1 (never) to 4 (often). The total score is represented by the mean of 19 items. The scale includes two subscales, one measuring *social loneliness* (items 1, 5, and 6, e.g., "I am no longer close to anyone") and the other one *emotional loneliness* (items 3, 7, and 13, e.g., "I feel isolated from others"), according to Weiss (as cited in Russell et al., 1984). Alpha Cronbach in the present study was calculated .883, while alphas of the *social loneliness* and *emotional loneliness* subscales were .52 and .64, respectively. Therefore, subscales were not used in further analyses.

10.2.2.2 Connor-Davidson Resilience Scale [CD-RISC]

The scale (Connor & Davidson, 2003) was developed to measure individuals' resilience and adapted in Greek language by Dimitriadou and Stalikas (as cited in Stalikas et al., 2012). The scale comprises 25 items (e.g., "I am able to adapt to change") rated on a Likert scale ranging from 0 (not at all true) to 4 (true nearly all of the time). The total score ranges from 0 to 100, with higher scores reflecting higher levels of resilience. Alpha Cronbach score in the current study was .908.

10.2.2.3 Satisfaction with Life Scale [SWLS]

The instrument (Diener et al., 1985) was designed to measure the individual's life satisfaction, it was adapted in Greek by Stalikas and Lakioti (as cited in Stalikas et al., 2012) and standardized by Galanakis et al. (2017). The scale consists of five items (e.g., "I am satisfied with my life") rated on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The total score ranges from 5 (low satisfaction) to 35 (high satisfaction). Alpha Cronbach score in the current study was .818.

10.2.2.4 Egna Minnen Beträffande Uppfostran: Short Form [s-EMBU]

The scale (Arrindel et al., 1999) measures perceived parental rearing behaviors; it was adapted into Greek language by Papadopoulou (as cited in Stalikas et al., 2012). The scale comprises 23 items rated on a Likert scale ranging from 1 (no, never) to 4 (yes, most of the time). It consists of three subscales *Rejection*, *Emotional Warmth*,

Table 10.1 Communication with family and friends during COVID-19 pandemic

	Never		Rarely		Occasionally		Often		Very often	
	n	%	n	%	n	%	n	%	n	%
Exercise/walk	32	11	38	13	72	24.7	68	23.3	82	28.1
Phone	19	6.5	29	9.9	79	27.1	68	23.3	97	33.2
Messages	1	0.3	5	1.7	21	7.2	41	14	224	76.7
Calls/video calls	12	4.1	30	10.3	53	18.2	66	22.6	131	44.9

Table 10.2 How quarantine restrictions have affected the relationship with family members and friends

	Very negatively		Negatively		Neither positively/nor negatively		Positively		Very positively	
	n	%	n	%	n	%	n	%	n	%
Family	14	4.8	39	13.4	174	59.6	54	18.5	11	3.8
Friends	17	5.8	93	31.8	157	53.8	20	6.8	5	1.7

and *Overprotection*. The *Rejection* subscale includes seven items regarding father (for this study $\alpha = .755$) and seven regarding mother ($\alpha = .788$) (e.g., “It happened that my parents were sour or angry with me without letting me know the cause”). *Emotional Warmth* subscale includes six items for father ($\alpha = .895$) and six for mother ($\alpha = .875$) (e.g., “My parents praised me”). *Overprotection* subscale comprises nine items for father ($\alpha = .829$) and nine for mother ($\alpha = .799$) (e.g., “It happened that I wished my parents would worry less about what I was doing”). The final score for each subscale is calculated as the sum of the corresponding item ratings.

Participants provided the demographic information described in the previous section, as well as information about their contacts with family and friends during the quarantine. More specifically, participants were asked to report the frequency and the media they used in order to communicate with their family and friends (Table 10.1) and how they felt that quarantine restrictions affected their relationship with them (Table 10.2) on 5-point scales.

10.2.3 Procedure

Questionnaires were completed online between December 2020 and January 2021. Participants signed a consent form informing them about the purpose of the current study and their voluntary and anonymous participation. Only after signing the form they were allowed to fill the questionnaire.

The current study adheres to the principles of academic research ethics and was approved by the Research Ethics Committee of the Department of Psychology, National and Kapodistrian University of Athens.

10.2.3.1 Data Analysis

Data obtained from the online questionnaire were exported to SPSS 28.0. Descriptive statistics were computed to show distribution through means and standard deviations for the study variables. Further, correlation analyses were carried out in order to examine relations among all study variables. Finally, a hierarchical regression analysis was conducted to evaluate the predictive role of perceived parental rearing behaviors, resilience, and loneliness on emerging adults' life satisfaction, using the block-entry method.

10.3 Results

10.3.1 Descriptive Statistics

Concerning social contacts with friends during quarantine, 96 participants (32.9%) reported to interact "often" and 120 participants (41.1%) "very often" with them. Contacts with friends were "rare" according to 20 participants (6.8%) and "occasional" for 51 participants (17.5%), while only 5 participants (1.7%) reported having no contact with their friends during quarantine.

Regarding interactions with family members, 198 participants (67.8%) reported to contact them very often, 52 (17.8%) often, 23 (7.9%) occasionally, and 11 (3.8%) rarely, while only 8 participants (2.7%) never contacted family. Furthermore, participants reported how often they used different media to communicate with their family and friends (Table 10.1) and how they felt that quarantine restrictions affected their relationship with them (Table 10.2).

Findings showed that young adults were communicating with family and friends primarily via messages and video calls. As concerns the role of quarantine restrictions, over half of the participants did not identify relevant influences on their relationships with family and friends, by selecting the scale point "neither positive nor negative effect." Second in rank was the percentage of participants perceiving a positive impact of the restrictions on family relations and a negative impact on the relationship with friends, respectively.

The means and standard deviations of all variables are presented in Table 10.3. Remarkably, participants' average loneliness level was moderate ($M = 1.90$, on a scale from 1 to 4).

With regard to life satisfaction, 197 participants (67.5%) stated that they were satisfied with their life (5–7), 81 participants (27.8%) were dissatisfied (1–3), and 14 participants (4.8%) reported neither satisfied nor dissatisfied with life (4).

Table 10.3 Variables' means and standard deviations

Variable	<i>M</i>	SD
Loneliness ^a	1.90	.47
Resilience ^b	65.86	14.68
Life satisfaction ^c	22.86	6.00
Paternal rejection ^a	9.79	3.25
Maternal rejection ^a	9.91	3.38
Paternal emotional warmth ^a	17.93	4.81
Maternal emotional warmth ^a	19.63	4.10
Paternal overprotection ^a	18.14	5.31
Maternal overprotection ^a	19.96	5.13

Note:

^a4-point scale

^b5-point scale, range 0–100

^c7-point scale, range 5–35

10.3.2 Correlation Analyses

Correlation analyses (Table 10.4) showed that life satisfaction was negatively correlated with loneliness and positively with resilience. As expected, perceived parental emotional warmth and rejection were significantly correlated with life satisfaction, whereas maternal overprotection presented a low negative correlation and no correlation was detected for paternal overprotection.

The association between gender and all the study variables was examined using *t*-tests; no differences emerged.

10.3.3 Predictors of Life Satisfaction

A hierarchical regression analysis (Table 10.5) was conducted to evaluate the predictive role of perceived parental rearing behaviors, resilience, and loneliness on life satisfaction. The first block included paternal and maternal rejection, emotional warmth, and overprotection. The results revealed a statistically significant model, $F = 12.10$, $p < .001$, with paternal and maternal rearing behaviors emerging as significant predictors, accounting for 19% of the variance in life satisfaction.

In the second block, resilience and loneliness were added as predicting variables. The results also revealed a statistically significant model, $F = 19.16$, $p < .001$, and accounted for 33% of the variance in life satisfaction.

When all eight variables were included in the second model, only resilience and loneliness significantly contributed to the prediction of life satisfaction, making paternal and maternal emotional warmth not statistically significant.

Table 10.4 Correlations among variables

Variable	1	2	3	4	5	6	7	8	9
1. Loneliness	–								
2. Resilience	–.435**	–							
3. Life satisfaction	–.420**	.493**	–						
4. Paternal rejection	.346**	–.185**	–.268**	–					
5. Maternal rejection	.264**	–.231**	–.240**	.428**	–				
6. Paternal emotional warmth	–.397**	.277**	.402**	–.526**	–.296**	–			
7. Maternal emotional warmth	–.363**	.324**	.367**	–.215**	–.616**	.558**	–		
8. Paternal overprotection	.129*	–.133*	–.041	.471**	.271**	.039	–.050	–	
9. Maternal overprotection	.171**	–.199**	–.123*	.361**	.467**	–.091	–.142*	.655**	–

Note: * $p < .05$, ** $p < .01$

Table 10.5 Hierarchical regression analysis for the prediction of life satisfaction

	Variable	<i>B</i>	SE <i>B</i>	<i>B</i>	<i>R</i> ² Adj	Δ <i>R</i> ²
<i>Step 1</i>						
Father	Rejection	-.26	.16	-.14	.19***	.20***
	Emotional warmth	.24	.11	.19*		
	Overprotection	.09	.10	.08		
Mother	Rejection	.10	.15	.06		
	Emotional warmth	.37	.13	.26**		
	Overprotection	-.11	.09	-.10		
<i>Step 2</i>						
Father	Rejection	-.18	.15	-.10	.33***	.15***
	Emotional warmth	.16	.10	.13		
	Overprotection	.10	.09	.09		
Mother	Rejection	.05	.14	.03		
	Emotional warmth	.18	.12	.13		
	Overprotection	-.04	.09	-.03		
	Resilience	.14	.02	.34***		
	Loneliness	-1.98	.74	-.15**		

Note: **p* < .05, ***p* < .01, ****p* < .001

10.4 Discussion

The present study investigated the association between perceived parental rearing behaviors and emerging adults’ life satisfaction during COVID-19 pandemic. Furthermore, it examined the role of loneliness and resilience in predicting their life satisfaction. Overall, the majority of the participants reported to be satisfied with life. This finding is in accordance with a recent study conducted during the pandemic (Zacher & Rudolph, 2020).

Although one third of the participants identified negative consequences of the quarantine restrictions for their relationship with friends, over half reported that relationships with both their family and friends were not affected by the pandemic, while around 23% reported that family relationships were positively affected. In the same line, Ye et al. (2022) found that during COVID-19 pandemic parental support was negatively associated with depressive symptoms; similarly, Zhen et al. (2021) reported that parental support contributed to young adults’ lower stress perception from the disruptive events caused by the pandemic. It seems that relationship with family members in the Greek sample “compensates” any possible negative impact caused by deterioration of the relationships with friends, also considering that the majority of participants reported being satisfied with life and perceiving moderate levels of loneliness.

As concerns the quality of family relationships, the vast majority of the participants lived with their parents and communicated with family members very often during quarantine, reflecting the close relationships and the strong emotional bonding of the Greek family (Georgas, 1999; Mylonas et al., 2006). Gaining

independence during emerging adulthood among Greek population is an important attribute (Ismyrilis, 2019), and yet strong emotional ties with parents are not affected by this transition (Petrogiannis, 2011). However, this finding might be also attributed to the fact that young adults continue living with their parents due to the previous economic crisis in the country (2010–2020), which prevented them from living autonomously, as it might be expected in their age. Furthermore, the vast majority of participants frequently used social media as means of communication with their family and friends, in accordance with a study conducted in Greece during COVID-19 pandemic (Golemis et al., 2021). Similarly, McMillan (2020) found that phone calls and video calls were frequently used among college students considering their communication with their parents during the same time.

Regarding perceived parental rearing behaviors, emotional warmth was positively correlated with life satisfaction, confirming the research hypothesis, while rejection was negatively correlated, confirming other studies (Smout et al., 2019). This might suggest that endorsed emotional warmth preserved subjective well-being despite isolation and restrictions. Perceived paternal overprotection was not significantly correlated with life satisfaction, while maternal overprotection showed a low negative correlation. However, both perceived paternal and maternal overprotection were associated with psychological distress among emerging adults in other studies (Özdemir & Sağkal, 2019).

On average, participants reported moderate levels of loneliness, in accordance with another study conducted in Greece during the pandemic (Golemis et al., 2021), but differently from other studies showing higher levels of loneliness among youth during quarantine restrictions (Groarke et al., 2020; Rees & Large, 2020; Shah et al., 2020). Confirming research hypotheses, participants' loneliness was negatively associated with life satisfaction and resilience and positively correlated with both parental rejection and overprotection, while it revealed a negative correlation with parental emotional warmth, a finding consistent with a recent study (Mousavi & Dehshiri, 2021).

The positive association between resilience and emerging adults' life satisfaction during the COVID-19 pandemic confirmed the hypotheses. Additionally, in the present study perceived parental emotional warmth was positively correlated with resilience (Ratih, 2015; Ritter, 2005; Zhai et al., 2015), while both parental rejection (Petrowski et al., 2014) and overprotection (Shi et al., 2021) revealed a negative correlation with the same variable. It seems that perceived parental rearing behaviors were associated with participants' resilience during COVID-19 pandemic as expected, according to studies conducted before the pandemic.

Results from hierarchical regression analysis highlighted that the predicting role of perceived parental emotional warmth failed to be significant after the inclusion of resilience and loneliness in the model. The contribution of resilience to participants' life satisfaction during COVID-19 pandemic is evident, and it is in line with other studies (Yakıcı & Traş, 2018; Zhai et al., 2015). In the present study we assume that parental emotional warmth's contribution might be considered as a "hidden" component in resilience, since numerous studies have reported their strong positive association, which is also consistent with present study's findings. As for loneliness,

its negative association with emerging adults' life satisfaction is consistent with findings obtained in pre-pandemic times (Anderson & Malikiosi-Loizos, 1995; Beutel et al., 2017).

Studies conducted during the COVID-19 pandemic reported that resilience is positively correlated with life satisfaction (Kavčič et al., 2020; Paredes et al., 2020), as well as negatively associated with suicidal ideation (Papadopoulou et al., 2021) and post-traumatic stress symptoms (Kalaitzaki et al., 2022). Furthermore, social support was positively associated with adolescents' well-being (Kurudirek et al., 2022) and young adults' life satisfaction during the pandemic (Huang & Zhang, 2021), whereas loneliness in other studies was also associated with anxiety and depression (Liu et al., 2020; Palgi et al., 2020). From a developmental point of view these findings might indicate that young adults turned parental warmth to competence or even strategies in coping with crisis conditions to their benefit.

10.4.1 Study Limitations and Future Research Directions

Although these findings may contribute to the understanding of emerging adults' experience during the pandemic, further research is necessary in light of the unprecedented conditions brought about by this crisis worldwide.

The major limitation of the present study is the sample size and the rather homogeneous living conditions (with family in urban contexts) of the majority of participants. Moreover, the study was conducted during the first year of quarantine, while restrictive measures continued for more than a year and a half (almost till the present chapter is written); therefore, we do not know whether during this prolonged emergency any further negative emotions or distress were developed among emerging adults. Collecting data from a larger sample and on a post-pandemic time might contribute to fully examine the association between the examined variables.

Finally, in the current study it was not possible to examine the differential role of residing with family on emerging adults' life satisfaction, since the majority of the participants did reside with their families during quarantine. In recent studies, living with family emerged as a protective factor against anxiety (Cao et al., 2020) and tended to be positively related to emerging adults' life satisfaction during quarantine (Schlesselman et al., 2020). However, returning to parental home during the pandemic was associated with decrease of life satisfaction among emerging adults living autonomously (Preetz et al., 2021). Finally, other studies conducted during COVID-19 pandemic highlighted that the forced residence with other family members was associated with increased aggressive behavior and domestic violence (Brooks et al., as cited in Campbell, 2020; Van Bravel et al., 2020). Future research may investigate the potential impact that residing with family may have on emerging adults' life satisfaction during and post the pandemic.

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Chapter 11

A Struggle for Love: Emerging Adults' Romantic Relationships During the COVID-19 Pandemic



Nitzan Scharf, Yael Enav, and Miri Scharf

Abstract The value given to romantic relationships and the process of romantic exploration differ among societies, cultures, and individuals. Using questionnaires and semi-structured interviews, we examined the associations between personal characteristics, interparental relationships, and romantic relationships of young Arabs in Israel during the COVID-19 pandemic. One hundred and six Arab emerging adults (EAs) participated in the study. Being a woman, being of older age, having greater levels of meaning and a growth mindset regarding relationships, and having lower levels of other-perfectionism were associated with higher levels of importance given to romantic relationships. Additionally, having a model for relational intimacy may facilitate competence in bringing one's authentic self into the equation and perceiving transgressions as opportunities for greater closeness, while observing interparental conflicts or conforming to social pressures regarding relationship choices might lead to less fulfilling relationships and a tendency to avoid or delay them altogether. While pandemic-related restrictions created difficulties for becoming acquainted and dating in public places, it also propelled creativity and using other forms of communication to attain closeness and intimacy.

Keywords Emerging adulthood · Romantic relationships · Growth mindset · Stress · COVID-19

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11.1 Introduction

As emerging adults (EAs) transition into adulthood, they experiment and explore the compatibility of different types of relationships and romantic partners (Shulman & Connolly, 2013). The weight given to romantic relationships and the process of romantic exploration differs among societies, cultures, and individuals. In the current study we investigated personal characteristics and interparental relationships, and how the pandemic crisis might have impacted the romantic relationships of Arabs EAs in Israel.

11.1.1 Romantic Relationships in the Arab Society in Israel

Arabs constitute 20% of the population in Israel and belong to three main religious groups: Muslims (84%), Druze (8%), and Christians (8%). Arab society emphasizes adherence to social norms and hierarchical relations inside and outside the family. As a collectivist society, loyalty to familial demands often takes precedence over pursuing individualist goals. The family provides support and protection for the individual through a network of kinship relations, while breaking commitments might aggravate concerns over ostracism. Nevertheless, there is great diversity among Arab families and individuals in their social norms and expectations (Seginer & Mahajna, 2004). Arabs living in mixed cities, with higher levels of education and income, report greater assimilation to western/individualistic cultural norms (Kulczycki & Lobo, 2002).

Arab communities have undergone significant sociodemographic changes in recent years (Israel Central Bureau of Statistics, 2021), including an increase in urbanization, access to higher education, participation of women in the workforce and political life, and a change in birth rates and gender roles (e.g., greater independence for women). These changes have been associated with the increased use of communication technologies and co-existence alongside the individualistic Jewish majority (Haj-Yahia & Lavee, 2018). However, societal changes leading toward gender equality have been slow to follow changes in other domains (Abu-Baker, 2016).

Research on young Arabs' romantic relationships is lacking, perhaps due to their reluctance to disclose intimate details of their dating conduct, especially when personal behavior might not conform to cultural norms and expectations. Choosing a romantic partner is affected by family members of the prospective couple. Prearranged marriages and a dowry system are common traditions (Na'amnih et al., 2015). Today, many couples meet out of sight of their parents, in the context of higher education or the workplace. Although there is a growing tendency to turn a blind eye on these encounters, if the couple wishes to marry, they need the family's consent (Abu-Rabia-Queder, 2008). Furthermore, both families are expected to support the couple financially. Considering that the majority of Arab families

struggle with low income, the ability to cover future expenses might influence the couple's decision to progress toward engagement.

11.1.1.1 Gender and Romantic Relations

Arab society is patriarchal—women are expected to look to a male figure, whether a guardian, father, or husband and are seen as responsible for the household and childcare. However, the past three decades have seen change toward a more egalitarian society. Young Arabs today report a more balanced power distribution; consulting with one another, and supporting women's desire for self-fulfillment (Meler, 2020). Yet, little is known about the implications of these transitions on romantic practices.

Pursuing personal goals, such as education or a career, is viewed as means to increase the family status in harmony with the family goals and values (Meler, 2020). When choosing a romantic partner, young Arabs need to consider the implications of their choice for the family. Men receive more support and less disdain when they pursue autonomic choices (Abu-Baker, 2016). From an early age, males are less supervised, and their romantic behavior is less scrutinized by other family members, while females' behavior is far more controlled and monitored (Abu-Baker & Azaiza, 2010). Young Arabs face conflicting needs—adherence to inter-group societal norms, where families place demands and have control over marital choices (Haj-Yahia & Zaatut, 2018) or to intra-group individualistic norms, such as freedom of choice (Nauck & Steinbach, 2012). EAs' romantic relationships are embedded within these cultural norms and societal expectations. Nevertheless, their personal attributions, cognitions, and attitudes play a significant role in their mating behavior (Scharf & Mayselless, 2008).

11.1.1.2 Romantic Relationships During the Pandemic

Due to the spread of COVID-19, the Israeli government mandated closures of universities and businesses and imposed social distancing and lockdowns. The pandemic affected relationships' quality and stability intermittently (Luetke et al., 2020). For some, the increased worries regarding health and finances and the shared confinements resulted in increased stress, domestic violence, and relationships' dissolutions, while others reported thriving even under these conditions (Estlein et al., 2022). COVID-19-related restrictions might have affected the ability of dating singles to meet in person or in various social settings, whether with current partners or in the search for new partners. They needed to evaluate the importance of their current, past, or future relationships and adjust their involvement levels in forming and maintaining relationships. These differences might be explained by the interplay between individual characteristics (e.g., relationship mindset) and the external context (e.g., pandemic-related stress, the interparental bond).

11.1.2 Importance of and Attitudes Toward Romantic Relationships

EAs often invest efforts in romantic exploration rather than committing to a single romantic relationship (Luyckx et al., 2014). This period is characterized by engaging in short-term relationships, having several romantic partners, and exploring compatibility (Shulman et al., 2018). However, considering Arab social scrutiny, this process of exploration may manifest differently among young Arabs. Young Arabs that hold conservative views may decide to avoid the exploration and adhere to prearranged marriages to maintain social status, whereas their peers who hold egalitarian views may feel conflicted or coerced by these cultural guidelines. Additionally, young Arab women may be torn between the need to pursue a relationship with feelings of mutual love and gender equality, and the need to conform to the cultural structure of patriarchy.

From a self-determination theory (Deci & Ryan, 2002) perspective, Arab EAs face conflicting needs between their need for autonomy in searching for, choosing, and holding on to romantic partners and their need to conform to family and social demands (e.g., early or arranged marriages) that may support their need for relatedness at the price of diminishing their sense of autonomy. EAs who view a romantic relationship as a personal goal may invest more efforts in its pursuit, whereas others who feel coerced, or feel that it interferes with fulfilling other priorities in their lives, might report placing less emphasis on establishing romantic relationships. Another contributing factor to the importance given to romantic relationships is individual beliefs regarding the nature of romantic relationships.

During times of acute stress, people tend to turn to others for support and comfort. However, chronic stressors and uncertainties can increase tensions and reduce individuals' communication skills and their ability to attune to others' needs (Jones et al., 2021). Individuals who view difficulties as transient events or as opportunities to grow may be more inclined to actively seek romantic partners or find comfort in their romantic relationships during this stressful time. However, others who view stress and conflict as detrimental to relationships may find the uncertainties of the pandemic as mentally taxing, and it may leave them with a diminished capacity for intimacy.

Implicit theories of relationships are cognitions that guide the way in which people perceive interpersonal events, and their emotional and behavioral reactions to these (Knee et al., 2004). Destiny belief involves the assumption that relationships and compatibility of partners are stable in nature and can be determined from an early stage. People high on destiny beliefs remain in relationships longer if their initial impression was positive (Knee, 1998). Growth belief involves viewing relationships as dynamic and malleable (Knee et al., 2004). When faced with relationship obstacles, people who hold strong destiny beliefs may choose to abandon the relationship, having little hope for change in the foreseeable future, whereas growth believers may feel that they can overcome the obstacles and, therefore, choose to retain and cultivate the romantic bond.

Destiny and growth beliefs are two independent constructs—one can score high or low on both or can hold one belief and not the other (Knee et al., 2004). Considering the predetermined nature of romantic relationships in the Arab culture, it is expected that EAs would have limited opportunities to explore or experience different relationships. They would, therefore, be inclined to deduce the chances of the success of a romantic relationship more rapidly. However, once relationships are formed, EAs are expected to embrace a more cultivating mindset toward romantic relationships due to the negative attitudes toward divorce or dissolution of relationships in the Arab community. Considering the value placed on a long-lasting commitment (Abu-Baker & Azaiza, 2010), Arab EAs may hold high standards regarding themselves and others.

11.1.2.1 Romantic Perfectionism

The wish to find a romantic partner could motivate individuals to find their soul mate and to invest their efforts in fostering ideal/perfect relationships. Though perfectionism encompasses positive and negative qualities, high levels of perfectionism might negatively impact romantic relationships by setting unrealistic expectations regarding oneself and/or one's partner. These high standards and expectations create disappointment and dissatisfaction when not met. Previous studies showed that romantic perfectionism is associated with poor dyadic adjustment, reduced commitment, and criticism, sarcasm, and revenge in the relationships (Stoeber, 2012). Perfectionism is associated with negative attributes that promote conflict and decrease forgiveness (Furman et al., 2017). Additionally, it is associated with increased conflict and intimate partner violence (Lafontaine et al., 2020).

Romantic perfectionism may stem from increased expectations for personal excellence and decreased tolerance for interpersonal transgressions. These attitudes are influenced by EAs' attachment.

11.1.2.2 Interparental Intimacy and Conflict

Attitudes toward romantic relationships may mirror intrinsic perceptions of the self and other in interpersonal relationships that were integrated into the self and serve as guidelines to social behavior (Scharf & Mayseless, 2008). Parents' interactions and behaviors model the ways of handling strong emotions, expressing care and love, and resolving conflicts. The interparental relationships can involve both intimacy and conflict.

Romantic intimacy pertains to the shared experiences and expectations of longevity of the couple (Schaefer & Olson, 1981). It is manifested in reciprocal self-disclosure, authenticity, validation, affection, and care (Scharf et al., 2004). Intimacy is associated with commitment and stability of romantic relationships and satisfaction in life. Children who observe their parents' intimacy develop the social skills

essential for forming romantic relationships, including mutual trust, a sense of connectedness, and relationship competency (Scharf & Maysseless, 2008).

Conflicts are manifestations of disagreements or disputes between partners that can be met with responses such as engagement and problem-solving, or withdrawal and avoidance (Li et al., 2020). Interparental conflicts can be distressing for children. EAs may find themselves entangled in their parents' conflicts and may assume the role of an intermediate or distance themselves to avoid negative emotions. They may lack adequate strategies to resolve interpersonal conflicts. Interparental conflicts put EAs at risk of experiencing difficulties separating from parents and developing and maintaining their own intimate relationships (Schrodt & Afifi, 2007). They are associated with detrimental outcomes, including poor social skills, emotion dysregulation, low life satisfaction, and greater conflicts in romantic relationships (Masarik et al., 2013).

Parental intimacy can set the ground for EAs to view romantic relationships more positively, to actively seek romantic relationships, to feel more comfortable with romantic partners, and to invest in conflict resolution. At the same time, interparental conflict might decrease EAs' motivation to pursue romantic relationships and increase tendencies to avoid conflicts or abandon the relationship as soon as these arise. Conflict between their parents, exacerbated due to the pandemic, could have negatively affected EAs' views of romantic relations. At the same time, if parents demonstrated empathy, affection, and shared coping, they may have modeled the ways in which a romantic relationship can serve as a source of strength during stress (Genç et al., 2021; Shulman et al., 2012).

Finally, finding meaning in romantic relationships can also impact EAs' willingness to invest in romantic relationships.

11.1.2.3 Meaning in Life

Meaning in life (MIL) represents a sense of coherence and purpose, pertaining to eudemonic well-being (Steger et al., 2009). Coherence reflects the ability to find consistency and significance in one's personal experiences; while purpose is having long-term volitional goals one is passionate about (Steger et al., 2009). Individuals with a strong sense of commitment and purpose often report feeling more satisfaction in life in general, and with their romantic partners in particular, while a lack of MIL is associated with ill-being (Steger et al., 2011). Moreover, MIL is associated with a sense of connectedness and strong social relationships (Lambert et al., 2010). According to the Self-Determination Theory, eudemonic meaning increases when one feels intrinsically motivated (Deci & Ryan, 2002). In this manner, a person who enters a romantic relationship volitionally, in pursuit of personal goals (e.g., intimacy, connection, personal growth), and feels that this integrates with other parts of the self, may experience more satisfaction in the relationship and, as a result, more MIL (Hadden et al., 2018). Having little autonomy over the choice of a romantic partner might decrease the feeling that one's romantic relationship is a source for a meaningful life (Maysseless & Keren, 2014).

Romantic relationships and feelings of love are important sources for MIL (Sørensen et al., 2019). At the same time, individuals with a strong sense of MIL may be more inclined to cultivate and find meaning in their romantic relationships and, as a result, report more satisfaction in these relationships (Hadden & Knee, 2018).

11.1.3 Aims and Hypotheses

The COVID-19 pandemic has contributed to a rise in mental health problems, including anxiety, depression, and feelings of loneliness (Brooks et al., 2020). Universities were closed, and digital learning took place. The lockdown imposed to control the pandemic has increased EAs' stress regarding health and finances and has decreased their opportunities to meet prospective romantic partners outdoors. Individuals' motivation, romantic attitudes, and dating behaviors might have been affected by the need to adjust to these stressful conditions.

In times of stress, romantic relationships can serve as sources of resilience for individuals but can also put relationships at risk for greater tensions and difficulties (Luetke et al., 2020). In this research, we examined how Arab EAs' perceptions of self and others associated with their view of romantic relationships during the pandemic.

We hypothesized that a view of interparental relationships as manifesting both intimacy and low conflict would be associated with a growth mindset regarding romantic relationships. Second, we expected a growth mindset regarding relationships to be positively associated with importance of romantic relationships and a sense of MIL. Because destiny belief has been shown to be associated with both negative and positive perceptions of romantic relationships, we explored its association with importance of romantic relationships without specific hypotheses. Finally, because of its relation to unrealistic expectations regarding oneself and/or one's partner, we expected both self- and other-perfectionism to be associated positively with destiny belief. As Arab society places great importance on having romantic relationships, holding high personal standards for oneself can involve forming romantic relationships as markers of personal development. Therefore, we hypothesized self-perfectionism would be positively associated with importance of romantic relationships. Other-perfectionism has been associated with avoidance of intimacy, and a tendency to have unrealistic expectations of romantic relationships that result in disappointments (Flett et al., 2001; Stoeber, 2014). We hypothesized it would be negatively associated with importance of romantic relationship.

11.2 Method

11.2.1 Participants and Procedure

One hundred and six EAs participated in the study—67% females and 33% males, mean age of 23.93 ($SD = 3.49$); 70.8% were single, 29.2% in a relationship; 74.6% had higher education, and 25.5% had high-school education; 53.8% Christians, 38.7% Muslims, and 7.5% Druze, with 67.9% identified as religious and 32.1% as secular. 40% of participants reported supporting themselves independently, and 58.5% reported receiving financial aid from their parents. 35.2% reported having no prior or current romantic relationships. Participants were recruited through adverts on social media, and with the help of research assistants using the snowball technique.

11.2.2 Measures

Demographic questionnaire included items pertaining to gender, age, education, religion, religiosity, number of previous relationships, financial and relationship status.

Romantic Relationship Perfectionism Scale (Matte & Lafontaine, 2012). This 14-item questionnaire assesses perfectionism in intimate relationships and consists of two subscales: self-oriented perfectionism (e.g., “I consider myself a failure if I can’t act the way my partner wants me to”) and other-oriented perfectionism (e.g., “When my partner does not act the way I want him/her to, I don’t want to be around him/her”). Items are rated on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). In the current study $\alpha = .71$ and $.65$, respectively.

The Personal Assessment of Intimacy in Relationships (PAIR; Schaefer & Olson, 1981). Interparental intimacy was assessed using the Emotional Intimacy subscale. This 6-item scale assesses EAs’ perceptions regarding the marital intimacy of their parents (e.g., “my parents often feel distant from each other”). Items are rated on a 5-point Likert scale, ranging from 0 (strongly disagree) to 4 (strongly agree). In the current study $\alpha = .82$.

The Children’s Perception of Interparental Conflict Questionnaire (Grych et al., 1992). Interparental conflict was assessed using the Frequency subscale. This 6-item scale assesses marital conflicts of one’s parents during childhood (e.g., “I often saw my parents arguing”). Items are rated on a 3-point scale: “true,” “sort of true,” and “false.” In the current study $\alpha = .82$.

The Meaning in Life Questionnaire (MLQ; Steger, 2006) is a 10-item measure divided into two 5-item subscales: Presence of MIL (e.g., “I understand my life’s meaning”) and Search for MIL (e.g., “I am searching for meaning in my life.” Items are rated on a 7-point Likert scale ranging from 1 (Absolutely true) to 7 (Absolutely untrue). In the current study $\alpha = .72$.

The Brief Measure of Relationship Importance (Watkins & Beckmeyer, 2020) is a 7-item measure assessing relationship desire (e.g., “being in a romantic relationship is very important to me”) and relationship dismissal (e.g., “Romantic relationships have more problems than benefits”). Items are rated on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). In the current study $\alpha = .84$.

Implicit Theories of Relationships Scale (ITRS; Knee, 1998) is a 22-item scale assessing destiny belief (e.g., “potential relationship partners are either compatible or they are not”) and growth belief (“The ideal relationship develops gradually over time”). Items are rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). In the current study $\alpha = .79$ and $\alpha = .87$ for growth and destiny.

Additionally, to gain insight into what it meant to form or maintain a romantic relationship during the pandemic, we conducted four semi-structured short interviews with Israeli Arab EAs. Interviewees were students in their twenties; three females (Muslim, Druze, and Christian) and one Druze male. One lived by himself and the rest lived with their families. The interviewees were asked about dating habits before and during the pandemic: “Can you describe the positive and negative effects of the pandemic on your romantic relationship?” and “What are the long-term consequences of the pandemic on your romantic relationship?”. Interviews were transcribed verbatim and analyzed using a phenomenological approach (Moustakas, 1994). We focused on changes and accommodations made due to the pandemic.

11.3 Results

As can be seen from Table 11.1, other-perfectionism associated negatively with importance of relationships. Parental conflict, self and other-perfectionism associated positively with destiny mindset regarding relationships, while parental intimacy, self-perfectionism, and importance of relationships associated with growth mindset regarding relationships. Finally, parental intimacy, importance of relationships, and growth mindset were associated with meaning, demonstrating the role of meaning in interpersonal and intrapersonal outlook on relationships.

In addition, we examined gender differences and single versus couple differences in the various study variables. Only a few differences were found. Women revealed higher levels of self-perfectionism ($M = 4.90$; $SD = .74$) than men ($M = 4.31$; $SD = 1.09$), $t(102) = 3.27$, $p < .01$, and higher levels of importance of romantic relationships than men ($M = 3.11$; $SD = .54$) versus $M = 2.75$ $SD = .65$, $t(103) = 2.82$, $p < .01$. Also, parental conflict negatively associated with number of previous relationships ($r = .21$, $p < .05$). Finally, age was positively associated with importance of romantic relationships ($r = .27$, $p < .01$).

Only a few associations between demographic variables and our dependent variables were significant. Highly-educated participants reported lower levels of self-perfectionism compared to less-educated participants: $t(102) = 2.63$, $p < .01$, $M = 4.36$, $SD = 1.05$ versus $M = 4.94$, $SD = .81$. Religious participants reported

Table 11.1 Intercorrelations between the study variables

Variable	1	2	3	4	5	6	7	8
1. Parental intimacy	–							
2. Parental conflict	–.44***	–						
3. Self-perfectionism	.08	–.08	–					
4. Other-perfectionism	–.10	.15	.12	–				
5. Importance of relationships	.08	.07	.19	–.23*	–			
6. Destiny mindset	–.10	.19*	.20*	.24*	–.20	–		
7. Growth mindset	.20*	.05	.26**	–.01	.25**	.10	–	
8. Meaning	.22*	–.09	–.00	–.17	.23*	–.17	.28**	–
<i>Mean</i>	3.56	2.74	4.51	3.57	2.87	3.68	4.91	5.13
<i>SD</i>	0.62	0.95	1.02	0.95	0.64	1.09	0.90	0.74
<i>Range</i>	1–5	1–5	1–7	1–7	1–4	1–7	1–7	1–6

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

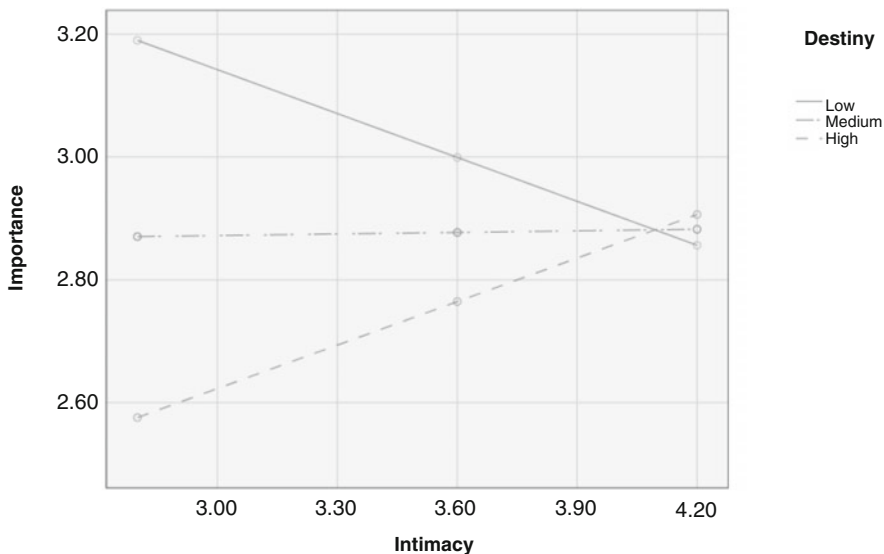


Fig. 11.1 Association between interparental intimacy and importance of romantic relationships moderated by destiny belief

higher levels of parental intimacy compared to secular participants: $t(104) = 3.51, p < .001, M = 3.69, SD = .59$ versus $M = 3.26, SD = .59$. Religious affiliation was not associated with dependent variables.

To test whether the relationship between the independent variable (i.e., interparental intimacy, interparental conflict) and the dependent variable (importance of romantic relationships) is contingent on the level of the moderator (i.e., destiny or growth belief), we followed Preacher et al. (2007) procedures for moderation using the PROCESS macro (Hayes, 2012). The regression analyses revealed two significant interactions. As can be seen in Fig. 11.1 interparental intimacy positively predicted importance among people with high destiny belief ($\beta = .209, SE = .086, p = .017, 95\% CI .039, .379$) and negatively predicted importance among people with low destiny belief.

As can be seen in Fig. 11.2 interparental conflict positively predicted importance among people with high growth belief ($\beta = .168, SE = .070, p = .018, 95\% CI .029, .306$) and negatively predicted importance among people with low growth belief. It should be noted that moderation is evidence of interaction between two variables and does not reflect causality.

11.3.1 Narrative Analysis

When asked about the effects of the pandemic, some emphasized how pandemic-related lockdowns strengthened their relationship: they spent more time together,

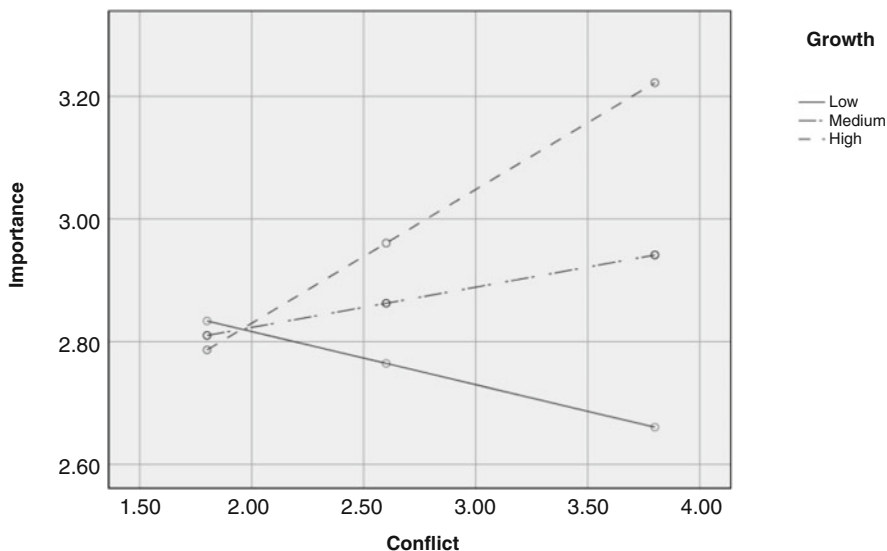


Fig. 11.2 Association between interparental conflict and importance of romantic relationships moderated by growth belief

and even if this meant more struggles, they felt it brought them closer together: A., a Druze male, 22 years old, shared with us “*We had a lot of time during COVID-19 so we talked more. We had more time with each other, we were less occupied with our own daily hassles,*” L., a Christian female, 26 years old, added “*During COVID-19 I felt I got to know myself better and it led to my partner getting to know me better*”.

Other participants felt it created difficulties in the relationship, especially due to the intensity of spending more time together and the lack of opportunities to continue with previous shared activities: R., a Druze female, 26 years old, described: “*We had to stay indoors, we felt suffocated.*” A. described “*We only communicated via video calls. Because of lockdowns, induced isolations and the closing of restaurants, we ended up breaking up, it brought up a lot of arguments and negative emotions.*”

The ability to adapt to the new reality, and develop new ways to spend time together, led some couples to create changes that strengthened their connectedness and enabled them to build a stronger bond: M., a Muslim female, 22 years old, commented: “*At first it was hard, but then it strengthened our relationship.*” L. added: “*We couldn’t go to restaurants and bars, and therefore we ended up doing other things like spending time outdoors, with a campfire or a walk in nature.*” L. said: “*We needed to think outside the box and come-up with ways to adjust our activities: instead of sitting in a restaurant, we ordered take-out and sat in front of the sea, instead of going to the movies we connected on WhatsApp and watched movies online.*”

The virtual dating sphere flourished, since many people were surfing the net while not being able to leave their homes. R. elaborated: “*It was easier to meet someone on an app or via social networks, because during COVID-19 that was the only option to*

meet." On the other hand, the inability to meet face to face hindered the relationship from progressing as A. explained: "*We couldn't meet,*" "*We couldn't spend private time with each other*" and L. added "*We couldn't go to places where we wanted to meet, because everything was closed.*"

It appears that COVID-19 related regulations were experienced as another stressor taking its toll on the romantic relationship, as happens with other life stressors. Relationships that were strong and stable before COVID-19 were able to withstand the additional stress, and those less strong dissolved. As L. concluded: "*Relationships that underwent COVID-19 can cope with even much worse conditions.*"

11.4 Discussion

The current study attempted to deepen our understanding regarding the romantic relationships of Arab EAs during the COVID-19 crisis using questionnaires and short interviews. Being a woman, older age, greater levels of meaning and growth mindset regarding relationships, and lower levels of other-perfectionism were associated with higher levels of importance of romantic relationships. Because Arab society highlights romantic relationships as means to preserve family honor and social status (Sabbah-Karkabi & Stier, 2017), women's tendency to report greater importance of romantic relationships may reflect their internalization of societal norms, and their desire to form a family. Also, religious participants reported higher levels of interparental intimacy. These results are in line with previous studies demonstrating higher religiosity to be associated with higher value placed on family relations and greater expectations for oneself to be in a romantic relationship (Hurt, 2012). These perceptions are accompanied by an emphasis on relationships as involving commitment and efforts to avoid conflicts (Curtis & Ellison, 2002) and might also reflect a tendency toward positive evaluation of relationships reflecting one's ideals and values. No differences were found between Christian and Muslim participants. This could be explained by our sample composition, which included mostly educated, medium-high SES women. Studies examining the association between religious affiliations and formation of intimate relationships are scarce and often group non-Christians or Arabs together. Nauck and Steinbach (2012) revealed it is not simply the individual's religion but rather the combined effect of religiosity, romantic expectations, parental supervision, and mothers' education that affected Muslim and Christian adolescents' mating behaviors. Future studies using larger, more heterogeneous samples could further explore the contribution of religious affiliation to romantic relationships.

The association between age and importance may also be related to societal changes taking place in the Arab society. As personal self-fulfillment becomes increasingly significant to EAs (Shulman & Connolly, 2013), they might invest first in achieving higher education or a career and delay their pursuit of romantic relationships.

Higher-educated participants reported lower levels of self-perfectionism compared to lower-educated participants. This was a surprising result, because previous studies did not find an association between romantic self-perfectionism and sociodemographic variables (Matte & Lafontaine, 2012). Perhaps in a society that sets high standards for individuals, higher education facilitates less rigid and more realistic self-expectations.

Individuals with more flexible attitudes toward romantic relationships are willing to invest even when difficulties emerge. Their proactive approach is driven by their belief that romantic relationships are important and solving problems might strengthen these (Knee et al., 2003). Growth belief has been associated with holding an intrinsic motivation toward romantic relationships (Knee et al., 2004) and intrinsic motivation has been associated with MIL (Hadden & Knee, 2018). These individuals demonstrate greater authenticity with their partners, are less defensive when faced with conflicts, and report feeling greater satisfaction in their romantic relationships. Therefore, it is not surprising that growth belief was associated with individuals' sense of the importance of romantic relationships. Growth belief and importance may indicate that these individuals are actively searching for what makes their lives meaningful and are more attentive to the possibility that having a significant relationship is rewarding and promotes MIL. At the same time, this positive view of romantic relationships may induce feelings of romantic competency and, therefore, complement the sense of having a meaningful life. MIL is especially important during chaotic situations such as the pandemic and might bestow a sense of control over the events as EAs cultivate their romantic relationships.

The negative association between other-perfectionism and importance of romantic relationships might reflect the way that values and goals regarding the importance of a "perfect" match tap into attitudes toward romantic relationships. Individuals high on other-perfectionism may be more extrinsically motivated to search for romantic relationships. They may feel that choosing a romantic partner should be in harmony with social standards of what is perceived as ideal. When the perception of one's partner is weighted against an ideal, it leaves limited room for change and little motivation to invest in a relationship. A less than ideal partner is more likely to disappoint and increase the feeling of a mismatch. As the goal of achieving a positive romantic relationship rests heavily on others being close to ideal, this can lead to a devaluation of romantic relationships.

We also found an association between destiny belief and both types of perfectionism. Destiny belief may indicate a more conditional regard of the self and others. A person with high destiny belief is invested in an ongoing evaluation of attributes deemed indicative of greater compatibility, in the hopes that this will increase the chances that a match was destined. This may result in idealizing certain personal characteristics and negatively judging those who lack these. These individuals may also feel their romantic relationships reflect on their personal success and are, therefore, motivated to constantly scrutinize themselves in the hopes of achieving better social status. The association between self-perfectionism and growth belief could be explained by individuals' tendency to self-develop. These individuals may feel that in order to develop a strong romantic relationship they must first invest in

themselves (Luyckx et al., 2014). Finding and cultivating an authentic self is an important life goal for EAs in Israel. Growing in collectivist cultures, they need to discover their authentic selves separate from the expectations, goals, and values of society and significant others, before committing themselves to romantic and other developmental goals (Scharf & Maysless, 2010).

11.4.1 The Interparental Relationship

Interparental intimacy was associated with EAs' growth belief, and a greater sense of MIL, while interparental conflict was associated with destiny belief and an increased number of previous relationships. Consistent with previous studies (Shulman et al., 2018), it appears the parental relationship serves as a model for EAs' beliefs regarding romantic relationships. Greater intimacy between one's parents may foster a view of love and affection as qualities that can develop over time, and that cultivating the romantic relationship has its benefits as a source of support and MIL. Conversely, interparental conflicts might impede the ability to view relationship struggles as malleable. This might put individuals at greater risk of searching for even the smallest signs of incompatibility and disengaging from relationships early on. Furthermore, possibly intensified by pandemic-related stress, conflicts can escalate a view that relationships hamper the attaining of personal goals and disrupt routines.

However, when we examined whether the parental romantic relationship affected all EAs in the same manner, we found that implicit theories of relationships moderated the association between the parental romantic relationship and viewing romantic relationships as important. The association between intimacy and the importance of romantic relationships was only evident for those with high destiny belief, while the opposite association emerged for individuals with low destiny belief: lower intimacy was associated with more importance given to romantic relationships. It appears that for some people, destiny beliefs can promote a more positive view of romantic relationships. Relying on their parents' experience, these individuals may develop an expectation for a romantic relationship to be positive and special and, therefore, place greater importance on these. On the contrary, people with low destiny belief may consider lower levels of intimacy less negatively and perceive this as an indication of the need to improve the relationship.

Growth belief moderated the association between exposure to parental conflicts and viewing romantic relationships as important. It buffered the effect of interparental conflicts, enabling individuals to view conflicts as passing events, or as opportunities for dyadic development. Previous studies suggested growth beliefs enable individuals to view conflicts in their romantic relationships less negatively and to feel committed to the relationship even during disagreements (Knee et al., 2004).

The interviews demonstrated that EAs faced inevitable setbacks because of social distancing and the rapidly changing regulations. The pandemic brought on increased

awareness of external threats to one's health and a prolonged sense of uncertainty regarding the future. Mortality salience can increase the desire to search for and commit to romantic relationships (Florian et al., 2002). However, when stress becomes chronic, with no end in sight (as in the current pandemic crisis), or when individuals distrust others, intimate relationships may instead be viewed as a threat to one's independence and self-reliance and result in an inclination to stay single or dissolve existing relationships (Pietromonaco & Overall, 2020).

Consistent with previous findings, individuals who were able to support each other and remain invested in pursuing shared and personal goals strengthened their romantic bonds. They reported changing dating routines or coming up with creative ideas for shared activities. However, when relationships were still in the making, or when the romantic bond was not as tight, they did not survive the pandemic challenges (Jones et al., 2021).

11.4.2 Differences Between Men and Women

Women in our sample reported higher levels of self-perfectionism, in line with global tendencies of women being preoccupied with self-improvement, and with Arab society's emphasis on a woman's demeanor reflecting on her family status (Seginer & Mahajna, 2004). Conforming to these high standards and external expectations might put women at greater risk of developing an ideal sense of self to which they constantly aspire. In turn, this tendency might prevent these women from forming meaningful and satisfying relationships.

11.5 Limitations and Implications

Romantic relationships can be a great source for MIL, and MIL might promote investing in finding romantic relationships, as well as bolstering them. However, multiple factors might hinder the ability of EAs to be present fully, and experience satisfaction in their relationships. Having a model for relational intimacy may facilitate competence in bringing one's authentic self into the equations and perceiving transgressions as opportunities for greater closeness, while viewing interparental conflicts or conforming to social pressures regarding relationship choices might lead to less fulfilling relationships and a tendency to avoid or delay these altogether (Scharf & Mayseless, 2010). Individuals' prior and current vulnerabilities and strengths, the dyadic relations, and the social context are likely to intensify or mitigate the pandemic's impact on romantic views and behaviors. For a society in a state of constant change, it seems important to explore if and how these cultural advances tap into changes in mating behavior, family structure, and gender roles. Having to balance personal aspirations with cultural norms, Arab EAs might struggle to attain a romantic relationship that integrates their need for autonomy with

their need for relatedness. Although not directly deduced from our results, it is important to note that Arab women might be at greater risk to try and satisfy social demands at the expense of pursuing authentic, volitional romantic goals. Conducting in-depth interviews with a larger, more heterogeneous sample could provide a clearer picture of intrinsic processes and their associations with mating behaviors.

Most of the information gathered in this study relied on self-report questionnaires that might be biased toward a positive self-representation (Lalwani et al., 2006). Being a cross-sectional study, it is difficult to conclude on the directionality between the study variables. While it is possible that perceptions of romantic relationships shed light on EAs' romantic behaviors, it is also possible that attitudes are affected by previous experiences and current romantic status.

Although beliefs can affect expectations and experiences in romantic relationships, further investigation is needed on the role these personal beliefs play in relationship competence and adjustment. Our participants were predominantly well-educated, middle-high SES, Christian women, which is not representative of the overall Arab population in Israel, so generalization of the findings to other contexts is limited. Individuals from low-income backgrounds, those with preexisting psychological difficulties, or those who suffered greater losses due to the pandemic may hold a different outlook on romantic relationships.

Despite its limitations, the present study provided a closer look at the romantic attitudes and behaviors of Arab EAs during a worldwide health crisis. Living in a society influenced by individualist and collectivist values simultaneously, it seems especially important to support these EAs as they strive to attain romantic relationships and maintain a balance between their conflicting needs. Being able to maintain a positive view of romantic relationships, even under difficult circumstances, can help foster healthier, more profound relationships that provide greater MIL.

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Chapter 12

Hope in the Face of the Greek Crisis: Intergenerational Echoes of Income and Parental Involvement in Emerging Adulthood



Sophie Leontopoulou and Michael Chletsos

Abstract This survey studies hope in emerging adulthood during the Greek socio-economic crisis. It highlights intergenerational echoes at the level of the economic antecedents of the crisis, recollected parental school involvement, and perceived parental hope. Participants were 468 young females and males, mostly university students, but also graduates. The questionnaire battery included demographics, participant and family income, perceived impact of the crisis, parental involvement, and hope. Positive associations were found between (a) available personal income, socio-economic background, and high parental school involvement, and participant and parental hope; (b) available personal and family income, and emerging adults' experience of the severity of the crisis; (c) perception of the crisis and youths' hope, along with their perceptions of parental hope; and (d) recollected parental school involvement, and emerging adults' hope. Overall, recollected parental school involvement was the strongest predictor of youths' hope, even though the perceived effects of the crisis predicted both hope and parental involvement. Available family and personal income was clearly associated with the way young people experienced the crisis, while paternal socio-economic status was involved in the way emerging adults recollected their parents' school involvement and experienced hope. In light of these findings, positive psychological hope interventions may prove instrumental

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in the promotion of positive youth development under crisis, facilitating well-being and flourishing in emerging adulthood.

Keywords Crisis · Income · Hope · Parental involvement · Emerging adulthood

12.1 Introduction

Hope is traditionally associated with youth, to whom older generations entrust their desires and expectations for a brighter future. Its components, mechanisms, *modi operandi*, and impact on mental health and well-being have been studied in psychology from different perspectives, including cognitive, developmental, educational, counselling and, recently, positive psychology. Nevertheless, much is yet to be unearthed in terms of the various pathways through which hope can influence positive youth development, especially in times of crisis. Economists have long asserted that financial considerations influence well-being throughout the life cycle (Bjørnskov et al., 2013; Eiji et al., 2010). The 10-year severe socio-economic crisis that faced Greece, the economic and health impact of the COVID-19 pandemic, lockdowns, changes in learning, missed milestones, and the refugee and migration crisis affected emerging adults in unprecedented ways. This interdisciplinary survey examines intergenerational aspects of the way the recent crisis was related to hope in emerging adulthood in Greece. In particular, it explores the role of parental school involvement in the relationship between the crisis, financial characteristics of young people and their family, and youths' hopeful outlook in life.

12.1.1 Hope Theory, Research and Interventions: Interpersonal and Contextual Influences for Well-Being in Emerging Adulthood

Throughout the twentieth and twenty-first centuries hope has been differentially conceptualized and studied as an emotion, as a positive motivational state that can cause emotions, and as a character strength (for a review, see Leontopoulou, 2020; Weis & Speridakos, 2011). Hope was initially considered an emotion central to shaping and maintaining well-being throughout the life span (Desmet, 2012; Farran et al., 1995; Leontopoulou, 2020). Snyder's (2002) subsequent development of cognitive hope theory proved by far the most influential in the field. It defined hope as the ability to set goals, to develop pathways to achieve those goals, and to motivate oneself using agency thinking to use those pathways. The pursuit of goals is enabled by cognitions that can cause emotions. The value of emotions for the physical and mental health of humans is immense, as it can help them build lasting resources to better equip them to handle adversity (Fredrickson, 2001). The definition of hope as a character strength combines Snyder's (2002) cognitive approach,

describing it as an adaptive thinking process that aids goal orientation and a developmental view positing that people with high levels of hope are those who have already met their developmental tasks (Seligman et al., 1999). Within a strengths-based approach in counselling, hope is enlisted as a powerful means to enhance resilience, well-being, and positive adaptation throughout the lifecycle that can be nurtured through positive psychology interventions (PPIs. Smith, 2006). PPIs, along with other interventions that included an element of hope, burgeoned in the last two decades. Even so, hope's potential in enhancing well-being and reducing psychopathology still remains to be proven with various populations, in different settings and cultural frames.

Studies of hope in emerging adulthood are few and far between. Overall, hope seems to predict diverse outcomes in emerging adulthood, from mental and physical health, life satisfaction, to academic performance, social competence and athletic achievement, to name but a few (Curry et al., 1997; Dwivedi & Rastogi, 2016; Snyder et al., 1999). Snyder's (2000) definition of hope as consisting of agentic and pathways thinking was influential in the field. For example, in a study carried out to explore how hope and purpose in life can indicate and contribute to thriving during adolescence, emerging adulthood and young adulthood, the authors reported that the agency component of hope mediated the relationship between purpose and life satisfaction in all age groups; the pathways component of hope only mediated the relationship for young adults (Bronk et al., 2009). Identity formation processes that are more eminent during adolescence and emerging adulthood seemed to explain this finding, possibly because for younger people it is enough to have the will to achieve their ultimate aim and purpose in life, and not necessarily to possess the way to reach it.

Hope was repeatedly found to relate to mental health, resilience, and well-being across the life span (Pezirkianidis et al., 2020; Snyder, 2002). For instance, in an exploration of character strengths of Greek adults, including emerging adults aged 18–19 years hope, alongside love, curiosity, and zest was found to correlate the most to overall well-being, as well as the positive psychological constructs of positive emotions, engagement, positive relationships, meaning in life and accomplishments (Pezirkianidis et al., 2020). In a similar vein, a study of university students explored the relationships between character strengths and well-being (Leontopoulou & Triliva, 2012). Emerging adults who demonstrated the virtue of transcendence, under which the character strength of hope falls, were older, performed better academically, were pleased with their living arrangements, talked to their parents more often and, most importantly, enjoyed better mental health than younger students. In another study of female university students, hope was significantly related to resilience and well-being (Kirmani et al., 2015).

The significance of interventions—hope-based or multi-targeted ones that include an element of hope in cultivating and maintaining positive youth development—was demonstrated in a number of reviews. Waters (2011) indicated that school-based hope PPIs improved student well-being and academic performance. Idan and Margalit (2013) in their review compared hope enhancement cognitive strategies on normal development and on development with learning disabilities among

children, adolescents, and young adults. They identified hope as a mediator in adaptive developmental processes and showed how significant family and school, as well as significant others are in the lives of youths. Hope impacted on positive youth development by affecting the quality of attachment relations and social support. A different single-session plus follow-up multi-targeted PPI was aimed at increasing emerging adults' emotional, cognitive, and behavioral aspects of well-being, including hope (Leontopoulou, 2015). Significant benefits were found in terms of hope, perception of available social support, ability to handle social stress successfully, and in character strengths. University students' hope and pain-coping skills also increased after a brief hope-based intervention using guided imagery and skills instruction (Berg et al., 2008). More specific explorations of pathways linking risk factors, mental health, and well-being of youths are required that relate to earlier socio-economic inter- and intra-individual experiences, dynamics, and processes (Leontopoulou, 2020). For instance, while the effects of parenting behaviors were proven essential for the positive psychosocial development of children and adolescents, their impact on emerging adults' well-being remains under-researched. In one of the few studies available on this topic, Shorey et al. (2003) investigated the developmental trajectories of hope in the context of secure relationships with a supportive adult in childhood. They found that adult attachment mediated the relationship between recollected parenting and hope and that hope mediated the relationship between attachment and mental health. Hope among a range of other "covitality" factors such as academic self-efficacy, optimism, and resilience was positively associated with the positive affect element of subjective well-being and negatively associated with its negative one in young university students; however, these relationships did not persist over time (Denovan & Macaskill, 2017).

12.1.2 Hope in the Face of Crisis for Emerging Adults

Economic, sociological, and psychological perspectives seek to assess the impact of crises on physical and mental health and well-being throughout the lifecycle—not an easy task, even though there is now broad agreement as to crises' deleterious nature for humans. A review of the relationship between economic crises, including the recent Greek one, and a possible rise in mental health problems resulting in suicides concluded that such a relationship regrettably exists (Van Hal, 2015). In the case of Greece, a massive 40% rise in suicides in the first half of 2011 compared to the same period in 2010 was reported (Katsadoros et al., 2011, as cited in Van Hal, 2015). The main reasons of suicidal thoughts reported to the national suicide helpline included financial difficulties and inability to repay high personal debts.

The repercussions of the prolonged and severe socio-economic crisis that hit Greece in 2008 are still being felt today by all, regardless of age, gender, socio-economic status, location, and occupation (Chalari & Serifi, 2018). The Crisis Generation, or Generation Z, as it has been termed, consists of emerging adults born between 1995 and 2000. Not only are these youths faced with the challenges

associated with more normative transitions, including identity formation, assumption of adult roles, and handling negativity and instability (ibid; Arnett, 2000; Galanaki & Sideridis, 2019); in addition, they have to negotiate their paths to adulthood through a precarious, uncertain socio-economic and political milieu that renders employment seeking and retaining, as well as work advancement difficult and tentative (Kretsos, 2013; Leontopoulou, 2018a). The above inevitably hold back development in other areas in their lives, such as financial independence, family making, and relations building (Eiji et al., 2010). Coupled with extremely high youth unemployment rates, which climaxed in 2016 to an unprecedented 50%, by far the highest in Europe (Papanastasiou et al., 2016), these also contributed to a massive “brain drain” of qualified and over-qualified young Greeks abroad to seek occupation and better quality of life (Theodoropoulos et al., 2014). The crisis also increased youth stress, insecurity, and interpersonal tension, especially in the family, exacerbated by the enforced protracted staying at their parental homes (Žukauskienė et al., 2020). Last but not least, it augmented personal and collective youth feelings of disappointment and pessimism about the future. Even so, young Greek University students tend to reflect on their ability to engage in personal and social action in order to construct a future identity after the crisis (Chalari & Serifi, 2018). On the other hand, emerging adults that are not in education, employment, or training (NEETs) experience increased feelings of hopelessness, especially in terms of job seeking and overall prospects (Papadakis et al., 2017).

Individual and family assets seem to be pivotal in one’s perception and experience of the crisis. Personal and family income appears to be a reliable indicator of the above. During the Greek crisis not only was job loss unusually high, loss of earnings among those still in employment was significant: on the whole, earning losses for primary earners between 2009 and 2013 were over 26% on average (Matsaganis, 2013). This resulted in the relative povertization of a large proportion of the population and also in more pronounced income inequality. There is a robust evidence base linking income inequality and poverty to lower levels of mental and physical health and well-being, especially in the more vulnerable segments of society, i.e. children and youths (Brooks-Gunn & Duncan, 1997; Leontopoulou, 2018b). Emerging adults were arguably more strongly hit by the crisis, as they barely got the chance to enter the workplace, due to their age and status, i.e. studying in tertiary education when the crisis hit. A recent study explored the effects of intergenerational mobility on quality of life and flourishing of Greek emerging adults, as mediated by the crisis and parental involvement (Leontopoulou & Chletsos, unpublished manuscript). Intergenerational mobility, as indexed by personal and family income and educational achievement significantly affected youths’ experience of the crisis, recollected parental school involvement and well-being. One of the main tenets of the present study was to examine whether and how available income was related to the perception of the crisis in emerging adulthood.

Taken together, the above findings lend support to the notion that Greek emerging adults were faced with numerous normative and non-normative challenges that they may have been able to negotiate more or less successfully, depending on a) their personal characteristics, such as hopefulness, b) interpersonal assets, such as

recollected parental school involvement, and c) the level of perceived pressure the crisis exerted on their capabilities and resources. This study, informed by economics and psychological considerations set out to empirically explore this supposition.

12.1.3 Aims and Hypotheses

The principal aim of this interdisciplinary study combining economic and psychological perspectives was to explore intergenerational aspects of emerging adults' well-being. It brought together and examined in tandem for the first time the economic antecedents of the Greek crisis and their relationships with emerging adults' hopeful outlook in life. A hopeful sense for the future can facilitate the transition into adulthood and aid positive youth development (Nurmi, 1989). Conceptualization of hope in this study was largely based on Snyder's (2002) theory of hope, combined with a developmental perspective, insofar as it involves youths' cognitive evaluations, motivations, hopes, and feelings about the future. Emerging adults' perceptions of crisis and hope were expected to be associated with the level of recollected parental school involvement, as an indicator of parenting behaviors that can influence positive youth development. In addition, the study was aimed to map the socio-demographic characteristics of youths who perceived themselves as more or less affected by the crisis. Based on these premises, some hypotheses were formulated: a) socio-demographic differences are related to participants' perception of the crisis, recollected parental involvement and hope for the future, namely youth and recollected parental hope, b) personal and family income are associated with the way crisis is experienced by youths, c) young people's perception of crisis is related to the way they perceived their parent's school involvement, d) crisis perception is linked with youths' hopefulness, and e) parental school involvement is associated with dimensions of emerging adults' hopeful outlook in life.

12.2 Method

12.2.1 Sample

Table 12.1 summarizes relevant sample information.

12.2.2 Measures

A questionnaire battery was administered to the participants to assess the relationships between the study variables.

Table 12.1 Sample details

Participants	Total sample	$N = 486$
	Females	$N = 390$ (80.2%)
	Males	$N = 96$ (19.8%)
	Mean age	20.77 years (SD = 2.36 years)
Degree	University students	95.3%
	Undergraduates	89.3%
	Postgraduates	6%
	Graduates	4.7%
Employment	Yes	20.6%
	No	79.4%
SES ^a	Lower	18.5%
	Average	27%
	Higher	34%
Mean monthly income	Participant	425.83 € (SD = 80.13 €)
	Family	2097.3 € (SD = 237.3 €)
Living arrangements	Alone	36.6%
	With parent/s	34.4%
	With partner	7.6%
	With relatives	6.4%
	With a friend	6.2%
	Hall of residence	5.1%
	Other	3.7%
Satisfaction with living Arrangements	Moderately/very satisfied	73%
	Neither satisfied nor dissatisfied	20.3%
	Unsatisfied	6.7%
Marital status	Single	96.3%
	Married	2.3%
	Other	1.4%
Romantic relationship ^b	Yes	58.8%
	No	39.7%

Note:

^a20.6% missing values

^b1.4% missing values

Demographics measured in the study included gender, age, type of studies (undergraduate, postgraduate, graduate, or not a student), degree, work status, educational status for participant, mother, father, grandmother and grandfather, participant and parental income, living arrangements and satisfaction with it, marital status, and romantic involvement.

Parental involvement was indexed using a 6-item scale, which featured the six types of parental involvement suggested by Epstein and Salinas (1993) and Carey et al. (1998), as adapted by Bonia (2011). The scale consists of a 4-point Likert-type scale (1 = Never to 4 = Often). Sample items include (How often do your parents) “Check if you have done your homework” and “Participate in parent-teacher

meetings". A high score indicates higher parental involvement. Cronbach's alpha in this study was $\alpha = .73$.

Perceived impact of the economic crisis was measured with two custom questions developed for the purposes of this study. The first question asked participants to characterize their family's ability to meet its basic needs, while the second to characterize their family's overall financial situation. The questions were answered on a 5-point Likert-type scale ranging from 1 = very poor to 5 = very good. A higher score indicated fewer negative consequences as a result of the crisis. Cronbach's alpha was $\alpha = .69$.

Hope for the future was measured with four questions developed by Arnett (2000), which specifically refer to some of the core issues that concern emerging adults, namely economic issues, prospects of career achievements, personal relationships, and overall quality of life. As an example, one of the questions reads: "Overall, do you think the quality of your life is likely to be better or worse than your parents' has been?". Participants were also invited to answer a version of the four questions adapted to reflect their parents' views. To illustrate, the above question became: "Overall, at the beginning of their lives, did your parents think that the quality of their life was likely to be better or worse than their own parents' has been?". For each question participants could answer "1 = Worse," "2 = About the same," or "3 = Better." Higher scores indicated higher hopes for the future. Cronbach's alpha in this study was $\alpha = .66$ for emerging adults, and $\alpha = .55$ for their parents.

12.2.3 Procedure

In late 2016 emerging adults in Greece were recruited to participate in a survey following ethics committee approval. A pen-and-pencil version of the questionnaire battery was administered during course time, after permission was granted from course tutors at Institutes of Higher Education in Northern and Western Greece, such as the University of Ioannina, the Aristotle University of Thessaloniki, and the Technological Educational Institute of Epirus. Students who had signed informed consent forms took about 20' to complete the survey. An online version of the questionnaire battery was available as well, which also took about 20' to complete. Calls for online participation were posted in the e-courses of instructors who permitted their students to participate during lectures, and also from other academics in Greece. In addition, students who had already participated in the pen-and-pencil version of the study notified their peers of the online version. Participation in the online version of the study was restricted to emerging adults aged 18–29 years who were currently studying toward or had recently obtained a higher education degree.

12.2.4 Data Analysis

The statistical procedures adopted in this quantitative study included descriptive analyses to identify any demographic differences among the study participants. ANOVAs, as well as means, SDs, and Pearson correlations among the main study variables, i.e. income, crisis effects, parental involvement, and participant and parental hope were calculated. Hope-related questions were treated as total scores. Stepwise linear regressions were performed to explore the relationships between the study variables. The statistical package SPSS v. 22 was used to analyze the results.

12.3 Results

12.3.1 Demographics

Descriptive analyses were carried out to identify any demographic differences among the study participants with respect to the perceived effects of the crisis and parental involvement, as well as hope variables. These are portrayed in Table 12.2. Means, SDs, and Pearson correlations among income, crisis effects, parental involvement, and hope are reported in Table 12.3.

12.3.2 The Relationships Between the Perceived Effects of the Crisis, Parental Involvement, and Emerging Adults' Hopefulness

A number of stepwise linear regressions were used to explore the relationships between the variables under investigation. In particular, links among the economic antecedents of the crisis, perceived impact of the crisis on the lives of emerging adults, recollected parental school involvement, and personal and perceived parental levels of hope were assessed. The rationale for the regression analyses that were estimated pertained to the examination of the hypotheses that guided the study.

Four regression analyses were run to estimate the different hypotheses that guided this study. Specifically, the first regression examined whether demographic characteristics of participants, proven to be significant in prior analyses, predicted youths' perceived effects of the economic crisis. Gender and paternal socio-economic status (SES) were entered in the regression equation first. Family income, indexed by income of the main wage earner in the family, as indicated by participants, was entered into the equation next. Personal available income was entered in the final step. In the second regression potential predictors of recollected parental involvement were explored. Gender and paternal SES were entered first, followed by the perceived effects of the crisis. The third regression equation examined whether

Table 12.2 Demographic differences for income, crisis effects, parental involvement, and hope variables

	Gender	SES	Degree	Field of study	Work	Living arrangements	Satisfaction with living arrangements	Romantic relationship
Personal income	Males > Females $F(1, 484) = 11.06^{**}$	Middle > Lower $F(3, 482) = 2.65^*$	Postgraduates > Undergraduates $F(2, 483) = 7.71^{***}$	Health studies > other $F(20, 465) = 14.67^{***}$	In employment > Students $F(1, 484) = 4.85^*$			
Family income			Postgraduates > Undergraduates $F(2, 483) = 4.82^{**}$	Health studies > other $F(20, 465) = 6.4^{***}$				
Crisis effects		Higher > Lower $F(3, 482) = 6.44^{***}$		Health studies, Social sciences > other $F(20, 465) = 2.33^{***}$			Satisfied > Dissatisfied $F(12, 473) = 4.92^{***}$	Yes > No $F(8, 47) = 1.96^*$
Parental involvement		Middle > Lower $F(3, 482) = 4.02^{**}$					$F(12, 473) = 15.65^{***}$	
Participant hope		Middle > Lower $F(3, 482) = 3.99^{**}$				Living with sibling > other arrangements $F(16, 469) = 4.93^{***}$		
Parental hope		Lower > Higher $F(3, 482) = 4.73^{**}$					Dissatisfied > Satisfied $F(12, 473) = 15.44^{***}$	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Table 12.3 Means, SDs, and Pearson correlations among income, crisis effects, parental involvement, and hope measures

	Mean	SD	Crisis effects	Parental involvement	Participant hope	Parental hope
Personal income	438.81	1886.35				
Family income	1365.34	5330.5				
Crisis effects	4.37	.672				
Parental involvement	4.42	11.460	.10*			
Participant hope	3.83	12.33	.15**	.52**		
Parental hope	4.93	14.33	.18**	.44**	.74**	

Note: * $p < .05$, ** $p < .001$

Table 12.4 Four stepwise linear regressions with perceived crisis effects, parental involvement, participant and recollected parental hope: Significant predictors

Dependent variables	Independent variables	Beta	<i>T</i>	Sig <i>T</i>	<i>R</i> ²	ΔR^2	ΔF
1. Crisis	Family income	.19	3.57	.000	.03	.03	12.78
	Personal income	.16	2.47	.014	.05	.01	6.12
2. Parental involvement	SES	.15	3.34	.001	.02	.02	11.18
	Crisis	.08	1.94	.05	.03	.008	3.78
3. Hope—participants	SES	.13	2.97	.003	.01	.01	8.85
	Crisis	.14	3.31	.001	.04	.02	10.98
	Parental involvement	.5	13.08	.000	.29	.25	171.21
4. Hope—parents	SES	.15	3.5	.000	.02	.02	12.54
	Crisis	.17	3.88	.000	.05	.03	15.09
	Parental involvement	.41	10.25	.000	.22	.06	105.06

participant hope was predicted by gender and paternal SES; moreover, by perceived effects of the crisis; and, lastly, by recollected parental involvement. These latter predictors were used to examine perceived parental hope as a dependent variable in the fourth regression analysis. Significant predictors for each of the above dependent variables are shown in detail in Table 12.4.

The results indicated that family income and available personal income strongly predicted the way emerging adults experienced the severe socio-economic crisis. In turn, youths’ perceptions of the crisis, alongside with socio-economic status were reflected in the way they recollected their parents’ school involvement in earlier years. Socio-economic status, participants’ perception of the effects of the crisis, as well as recollected parental school involvement, all proved strong predictors of emerging adults’ levels of hope, as indicated by their own hopefulness, and their perceptions of their parents’ hopefulness at the beginning of their lives.

Overall, recollected parental school involvement was the strongest predictor of youths’ hope, even though the perceived effects of the crisis predicted both hope and parental involvement. Socio-demographic resonances echoed at both an

intergenerational and a concurrent level were evident in the way emerging adults experienced hope in their lives. Available family and personal income was clearly associated with the way young people experienced the crisis, while paternal socio-economic status was involved in the way emerging adults recollected their parents' school involvement and experienced hope.

12.4 Discussion

This interdisciplinary exploratory survey sought to describe and decipher the relationships between socio-demographic and psychological factors, and the perception of the severe and prolonged Greek crisis by emerging adults; their associations with recollected parental involvement; and the culmination of these processes in young people's hopefulness. Intergenerational associations were evident linking the economic antecedents of the crisis, the psychosocial characteristics of emerging adults and their parents, and recollected parental school involvement with youth and parental hopefulness. The approaches employed to study the complex relationships among the above variables included economic, developmental, and positive psychological perspectives. The study findings are hoped to facilitate the development of targeted psychoeducational and clinical interventions to enhance hope and promote positive youth development.

12.4.1 *Describing the Emerging Adults' Experience*

What was the profile of the emerging adults who responded to the survey questions? They were mostly female university students, aged about 21 years, not married, mainly studying toward a degree; most were not in employment, either lived in their family home or on their own, and were largely satisfied with their living arrangements. This finding confirms that emerging adults tend to remain under the parental shield at least for the duration of their studies; the Greek crisis seems to have sharpened and prolonged their reliance on their parents' help (Galanaki & Sideridis, 2019; Leontopoulou, 2018b). Evermore, a difference in available personal income favoring males identified here suggests that gender inequality may still linger in the Greek society; besides, recent studies have found that income inequality still persists in the employment sector (Papanastasiou et al., 2016). Living arrangements and satisfaction with them also seemed to exert a role on many study variables. A novel finding in itself, the former were found to relate to emerging adults' level of hope, so that living with a sibling boosted hopefulness more than any other living arrangements. Perhaps youths' hopeful outlook in life rubs off to those closer to them. Nevertheless, those who were more satisfied with their living arrangements reported being more hardly hit by the crisis; they also thought that their parents had lower hope at the beginning of their lives than those who were more dissatisfied with their

living arrangements. Perhaps these young people, as they experienced a worsening of their personal and family finances, were, on the one hand, grateful that they were able to continue with their lives, even if their actual conditions worsened, but, on the other hand, aired their disillusionment with this situation, both compared to their parents and in their own right. Lastly, those involved in a romantic relationship reported feeling the impact of the crisis more acutely than those who were not. It is conceivable that when in a relationship, young people may expect that they will be able to do more with their partners; the harsh realities of the crisis in practice dispelled these expectations, as their available income prevented them from going out or doing as much as they thought they would be able to.

The role of socio-economic dimensions on the main study variables was evident in this study. Interestingly, the crisis was reported to impact more strongly youths from higher, rather than lower SES backgrounds. This is not altogether surprising, since the upper middle class in Greece suffered more, and it had the lion's share in lifting the burden of the economic crisis. As a result, the middle class lost income and jobs, with many falling into the poverty range (Kretsos, 2013). Moreover, middle SES youths reported higher levels of recollected parental involvement, and also of personal hope than lower SES youths; however, lower SES emerging adults perceived their parents' as filled with more hope at the beginning of their lives than their higher class counterparts. This finding may well reflect youths' loss of heart at the prolonged crisis and their perception of limited opportunities for a fulfilling adult life in the future, especially when comparing themselves to their parents' generation. This is not altogether untenable, since the overall worsened condition of the middle class and the subsequent povertization of the lower middle class have been shown in various studies and still form a part of the ongoing political discussion in the country (Kretsos, 2013; Matsaganis, 2013; Mavridis, 2018). Socio-economic status, then, seems to continue to permeate many aspects of emerging adults' lives, especially in the midst of a deep socio-economic crisis (Chalari & Serifi, 2018; Leontopoulou, 2018b). It seems more pertinent than ever that intra- and interpersonal skills and competencies are identified, nurtured, and enhanced in young people, especially for those coming from the lower SES backgrounds, to even out inequalities and offer them a fair chance to succeed and thrive.

12.4.2 Perceptions of the Crisis, Parental Involvement, and Hopefulness in Emerging Adulthood: Intergenerational Echoes

Intergenerational overtones were evident in all levels of the variable configuration of the survey. Personal and family income were found to predict youths' perception of the crisis, as hypothesized. There were intergenerational traces in recollected parental school involvement by definition, as this indicator of parenting behaviors is what remains in the minds and hearts of emerging adults of their childhood experiences

regarding their parents (Shanks et al., 2010). Participants' perceptions of their parents' levels of hope at the beginning of their own life also reflected the culture in their family, as carried down through the years while they were growing up (Shorey et al., 2003). Connections among all study variables were established by regression analyses in this survey, revealing strong, statistically significant, and meaningful relationships that confirmed initial hypotheses. Next we shall examine them more closely.

Available income, as indexed by personal and family income was significantly related to the experience of the crisis in emerging adulthood. It is worth mentioning that family, rather than personal available income seemed to weigh more heavily on youths' perception of the crisis. This is to be expected to some degree, as in the majority of the cases Greek parents provide the bulk, if not all of income to their offspring, making sure that the latter are well supported financially throughout their studies (Ioakimidis & Papakonstantinou, 2017); therefore, the higher the family income, the more of it ends with young people. This kind of financial protection that parents afford their offspring may sometimes obscure their own financial needs or troubles, effectively shielding their children from the realities and worries of their family financial situation. It is worth mentioning that student loans for their studies are extremely uncommon in Greece, as parents largely see support of their children's education as one of their major contributions to and investments in their offspring's future financial and psychosocial well-being (Saiti & Prokopiadou, 2008).

The protracted Greek crisis was related to participants' hope significantly, but not highly. It seems that while the crisis hit young people hard, it was not enough to quench their youthful hope. This finding is supported by similar results in Greece and abroad, which suggest that the mental health and well-being of young people were taxed, but not (necessarily) overwhelmed by crises, depending on a number of factors including socio-demographic, intra- and interpersonal assets of individuals, wider societal, economic, public policy and cultural ones to name but a few (Bronk et al., 2009; Chalari & Serifi, 2018; Galanaki & Leontopoulou, 2017; Leontopoulou & Chletsos, unpublished manuscript; Motti-Stefanidi & Asendorpf, 2017).

An important interpersonal asset, key to the well-being and hopefulness of emerging adults proved to be recollected parental school involvement. Parental investment in the future of their children is manifested in parenting behaviors, including school involvement. Although the impact of the crisis was not found to have a particularly high relation with recollected parental school involvement per se, this proved significant nonetheless. This finding resonates the severity and pervasiveness of the protracted Greek crisis in major aspects in the lives of the young. During the crisis parents strove to make ends meet and to support their families. Many worked longer hours, some lost their jobs, yet others experienced huge pay cuts, or were forced to seek alternative sources of income. These changes posed extra limitations on their time, possibly preventing them being actively involved in their children's schooling. Even so, recollected parental involvement was found to relate both to the perception of the crisis and to hope. It appears that parenting behaviors, including their involved interest in their children's schooling is beneficial to their psychological well-being later in life and at least throughout their emerging

adulthood years, and in maintaining hope under adversity. This particular finding is a new one, however it resonates with other similar research results, such as the mediational role of parental involvement between intergenerational mobility, the crisis and quality of life, and flourishing in emerging adulthood (Leontopoulou & Chletsos, unpublished manuscript); the mediational effects of attributional style, self-regulation, and emotional involvement in positive adolescent development (Lee et al., 2012; Wenk et al., 1994); and the influence of parental school involvement, alongside other parenting processes and behaviors on positive youth outcomes (Shanks et al., 2010).

12.4.3 Limitations and Suggestions for Future Research

This survey contributes meaningfully to the growing literature of well-being in emerging adulthood, especially under a crisis. Nevertheless, it is not without limitations. The sampling was largely a non-probability one, and mostly consisted of university students from Northern Greece, thus impeding the generalizability of results. The online mode of completing the questionnaire, though, improved this situation, attracting some participants from other parts of the country. It also enriched the sample with youths in part-time employment; however, future research should include more emerging adults that are not in education, employment, or training (NEETs) for a more comprehensive picture of this age group, their needs, wants, and resources. The emerging picture for the total sample was similar to that of most social sciences research in this country, with more female students participating; this necessarily limits the generalizability of the results.

Regarding measurement, the two indicators of income that were used to gain insight into the overall influence of income on the individual experience of the crisis proved robust, highlighting the importance of available family and personal income. In addition, the perception of the crisis was assessed through only two questions, concerning the family's ability to meet its basic needs, and its overall economic situation. Yet, these two questions were so relevant to the realities of emerging adults' needs and overall life conditions that they proved strong indicators of the situation young people found themselves in during the crisis, thus allowing for significant understanding of the crisis' influence on both recollected parental involvement and hope. More objective measures of the multifaceted effects of the crisis, as well as qualitative explorations of related variables can only enrich our understanding of the complex relationships among crises and well-being. In a related vein, the two sets of four questions used to index hope for the future were not without problems (Arnett, 2000). They were preferred over other, more widely validated measures of hope, such as the Adult Hope Scale (AHS, Snyder et al., 1991), and the LOT-R (Scheier et al., 1994), as they were specifically created to capture some of the most important issues facing emerging adults. These included prospects for financial and employment well-being, which are directly relevant in times of crisis. Cronbach's α s in this study were low, with implications for the validity of the

measures. More research is needed to clarify the issues arising from the use of these questions to capture youths' hope for the future under conditions of crisis.

A keener understanding of developmental and other social, economic, political, and cultural processes on emerging adults is still needed, if their realities, aspirations, and needs are to be better understood. Longitudinal research designs can help identify cause and effect during this dynamic period in life. Targeted interventions at the family, educational, clinical, and counselling levels that include elements of hope can enhance well-being and mental health in young people.

12.4.4 Conclusions

The Greek crisis took its toll on emerging adults, with various intergenerational influences relating to their well-being. The higher the economic disadvantage they suffered, the more severely were they affected, both financially and also in terms of their well-being. Nevertheless, recollected parental school involvement may have alleviated some of the adverse effects of the crisis and afforded youths the opportunity to maintain their hope for the future. Hope proved a resilient force in the lives of young people, helping them sidestep adversity and pushing them toward positive adaptation. Used as an effective and powerful tool within appropriate psychosocial hope interventions can promote positive youth development, encourage flourishing, and facilitate thriving in emerging adulthood.

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Part III
Well-being, Resources and Interventions
in the Academic Context

Chapter 13

Academic Well-Being Among Emerging Adults During the COVID-19 Pandemic: An International Overview



Faramarz Asanjarani

Abstract This chapter explores academic well-being and engagement among emerging adults during the COVID-19 pandemic. The pandemic forced educational institutions to move all teaching activities to online platforms. College educators and students were not prepared to make this transition. Moving from a traditional model of education to completely online education, from a teacher-centered system to a mode of self-driven learning, lack of resources, absence of supportive learning environment, lack of social connection with peers and teachers, prolonged screen time, technology, and non-engaging instructional designs were some of the significant challenges and concerns for educational institutions and adult learners. While young children received supervision and guidance from parents and teachers, the needs of emerging adults were largely neglected. Emerging adults were expected to take up self-learning and be self-motivated to continue learning. Absence of academic belongingness could negatively affect students' mental health and well-being, putting them at risk of feeling disengaged, depressed, lonely, and stressed. Working on the strengths of emerging adults and their relevant protective factors could be an excellent opportunity to make them connected and engaged in the academic context. The chapter calls the attention of psychologists and educationists to design interventions for well-being, healthy academic engagement, joy, passion, motivation, and purpose in the learning process.

Keywords Emerging adults · Academic well-being · COVID-19 pandemic

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13.1 Introduction

Lifelong learning has become an essential area in modern society, and adequate teaching methods, as postulated in adult education theories, are needed to support it. However, most educational theories ignore when adulthood begins, so the emphasis is rarely placed on a clear line between emerging adulthood and adulthood. Biologically, humans reach adulthood before the age of 20. While a 23-year-old student still displays the learning patterns of adolescence, teachers cannot rely solely on adult education theory. Thus, when exploring adult learning models, it is vital to study the correlation between age and the principles of adult education (Meier, 2020).

Recent studies show that the school-university transition process has a marked impact on the overall psychological well-being of emerging adults throughout their school careers. Its effects are mainly observed on components of well-being such as personal growth, with another weaker link with personal autonomy (Barrantes-Brais & Ureña-Bonilla, 2015). Research has shown that the transition to university is characterized by changes in autonomy, control over the environment, positive relationships with others, and life purpose (Salmela-Aro & Upadaya, 2014). In conclusion, emerging adulthood, seen through the lens of lifelong development, can be a very positive developmental stage or cause other challenges and difficulties.

Post-industrial societies give adolescents and emerging adults significant opportunities for choice and exploration. This is a stage during which young adults have the opportunity to focus on themselves and explore their life and goals, relatively free from the obligations and constraints of the adult role (Arnett, 2007). Classical development theorists such as Erikson (1959, 1968) have argued that exploration is a healthy concomitant of human growth.

Emerging adults have to rely more on their resources in a less structured environment, due to the loss of support from schools, families, and child and family-centered social and health services. They are spending more and more time suspended in an “intermediate” status, lacking the anchoring of adolescence or adulthood’s relatively specific social roles. This prolonged delay can be the source of stress and anxiety.

The COVID-19 pandemic may have further interfered with the lives of developing adults in two main ways. First, its economic consequences may harm educational and vocational opportunities, especially for developing adults, leading to unemployment and low incomes, which can interrupt the process of independence when young people have to go back to their parents. Second, the COVID-19 crisis has changed the interpersonal relationships of emerging adults. Specifically, social distancing rules, closure of public and educational facilities, and restricted mobility limited time spent with family members, peers, and partners. Social integration, especially in relationships with peers and in new educational or professional contexts, plays a crucial role in the stage of independence from parents and the parental home. Limited opportunities for face-to-face communication and lack of personal support can increase loneliness, depression, and anxiety (Elmer et al., 2020).

Research on previous crises and evidence from the early phase of the COVID-19 pandemic revealed both protective and risk factors for adult life satisfaction and mental health. Based on these findings, we expect social networks, career opportunities, financial burden, and living conditions of emerging adults to change significantly due to the pandemic conditions, lowering their life satisfaction and mental health. Under these circumstances, being in a close relationship, social integration in peer contexts, and high self-efficacy may counterbalance negative changes in well-being.

13.2 Emerging Adults: Difficulties and Strengths

Emerging adulthood is the period between 18 and 25 years of age, although some researchers have included up to 29 years in the definition (Swanson, 2016). According to Arnett, the conceptualization of a distinct new stage of development between adolescence and adulthood is the result of four societal changes that took place in the 1960s and 1970s, including (1) The Technology Revolution, (2) The Sexual Revolution, (3) The Women's Movement, and (4) The Youth Movement. As a result of these drastic changes, full-fledged adulthood has been delayed. Emerging adults now pursue longer and more extensive studies, marry and become parents later, and experience a more extended transition to stable work. Due to technological advances, people of university age are more easily in contact with their parents; for this reason, parents are increasingly able to engage in parenting practices long after their offspring have already left home. After college, youth more often return home and live with their parents. With the extension of parenting practices, emerging adults do not individualize. Arnett (2000) discovered five characteristics common to people between the ages of 18–29: (1) *Identity exploration*: This is perhaps the most distinctive feature of this stage: people explore various possibilities in love and work as they move towards sustainable choices. By trying out these different possibilities, they develop a more defined identity, comprising an understanding of who they are, their abilities and limitations, their beliefs and values, and how they fit into the society around them. (2) *Instability*, i.e., emerging adults change jobs, relationships, and residences more frequently than other age groups—Arnett (2000) has also described this period as the age of instability. (3) A decrease in *Self-Focus*, compared with adolescents. Arnett (2000) found that emerging adults pay close attention to the feelings of others, especially their parents. They are now starting to see their parents as people, not just parents, which most adolescents fail to do. (4) *Feeling of being In-Between*. Most emerging adults have gone through the fundamental changes of puberty, are typically out of high school, and many have moved out of their parent's homes. Finally, (5) *Possibilities/Optimism*. More and more young people between the ages of 18 and 25 think they will 1 day get to where they want to be in life.

It can be concluded that the emergence of adulthood is more likely to take place in highly industrialized or post-industrial countries, where youth are requested to attain a high level of education and training to access the information-based professions,

which are the most prestigious and lucrative. As a consequence, young people stay in school until their early twenties or mid-twenties. Marriage and parenthood are typically postponed long after education is completed, allowing for exploring various relationships before marriage and various jobs before taking on the responsibility of financially supporting a family and children.

13.3 Development, Career, and Uncertainty

Humans' path from childhood to adulthood is now longer and more complicated than at any time in history (Arnett, 2014). From the mid to late twentieth century and into the twenty-first century, industrial societies saw a rise in individualism and in the importance attributed to self-actualization and self-expression (Arnett, 1998). Additionally, an increasing number of young people seek post-secondary education, which is necessary for success as the economy shifts from an industrial economy to an information-based economy (Rifkin, 2011).

Emerging adults are often faced with insecurity and worry about the future (Côté, 2014). On the other hand, Schulenberg et al. indicate that the transition to adulthood is marked by significant psychological changes such as increased emotional regulation as well as changes in roles (e.g., employment, marriage). While their overall psychological status may improve (Galambos et al., 2006), many emerging adults are more vulnerable to symptoms of anxiety, which can have a negative impact on personal and interpersonal functioning (Arnett, 2007; Kessler et al., 1995; Schwartz, 2016). In addition, emerging adults engage in riskier behaviors than adults (Nelson & Barry, 2005). This developmental phase of life is associated with decreases in general health status, self-perceived worth, feelings of personal competence, security, or insecurity in relationships (Cozzarelli et al., 2003; Galambos et al., 2006). Therefore, studying emerging adults during a crisis like the COVID-19 pandemic is necessary.

Initially, emerging adults are typically dependent, living with their parents or guardians, beginning to engage in romantic relationships, and attending high school. By the end of this stage, most emerging adults live independently, in long-term relationships, and have clear career paths. Only a minority however holds full-time jobs, which limits their economic opportunities (He & Larsen, 2014). Young people today face an increasingly uncertain economic situation (Blossfeld et al., 2006). Globalization has made labor markets increasingly unstable, with less tenure and security, and with the abandonment of career jobs (Sullivan, 1999). Media reports are replete with stories of unemployed college graduates returning to their parents, although empirical research on this topic has provided mixed results. As young people try to navigate these uncertain and poor economic realities and establish themselves financially, they also try to start a family (Sandberg-Thoma et al., 2015). Transitions to emerging adulthood include other issues such as health care, finances, living conditions, and the acquisition of independence. Significant conflicts often accompany these transitions; for example, although emerging adults are increasingly

expected to manage their finances independently, they are generally unable to do so, as they do not have enough skills and experiences (Ranta et al., 2020).

The ambiguity of outcomes and possibilities becomes problematic when it leads to inability to make a decision or the error of making an unwanted decision concerning career (Gati et al., 1996). Grenier et al. (2005) have proposed that individuals who are intolerant of uncertainty or ambiguity experience a similar set of cognitive, emotional, and behavioral responses in response to threatening situations. Ambiguity exists in the natural world as an inevitable result of the interactions between various environmental factors. While some predictions can be made about the world of work and the labor market, some degree of instability and inconsistency is inevitable as multiple social, political, and economic forces intersect. The situation is difficult, especially for undergraduates, as the graduate labor market is highly competitive. Furthermore, employers tend to perceive a lack of employability skills among college graduates (Tymon, 2013). The lack of job security and the resulting uncertainty inherent in these experiences need to be factored into the career planning of emerging adults as they prepare to enter the workforce after graduation.

Emerging adults face increasing responsibilities and may access more opportunities compare to adolescents, a combination that can lead to increased stress, lower well-being, and increased risk of psychopathology and psychiatric disorders (Keyes, 2002; Schwartz & Petrova, 2019). For example, emerging adults have increased rates of suicidal ideation, depression, anxiety, non-suicidal self-harm, and suicide attempts (Polanco-Roman et al., 2014). It is of particular concern that many of those who need mental health services, supports, or treatment is not receiving them, further worsening mental health. Racial and ethnic discrimination further exacerbates emerging adults' mental health problems, being detrimental to their sense of belonging and academic achievement (Corrigan et al., 2014).

Stressors commonly reported by emerging adults attending college include interpersonal issues, financial constraints, meeting their own or others' expectations, and academic concerns (Asanjarani et al., 2021; Hurst et al., 2013; Newcomb-Anjo, Villemaire-Krajden, et al., 2017; Ranta et al., 2020). Stress has negative consequences, such as lower academic performance and a perceived need to delay or withdraw from professional opportunities (Johnson et al., 2010; Terriquez & Gurantz, 2015). As noted earlier, experiencing high-stress levels can lead some emerging adults to develop psychopathology. An anxiety disorder in early adulthood increases the risk of continuing anxiety and depression later in adulthood (LeBlanc et al., 2020). The incidence of depression in early adulthood is significantly higher than in older adulthood; those who first experienced a depressive episode before the age of 18 with a recurrence before the age of 20 have been reported to have the worst psychosocial outcomes (Rohde et al., 2013). Suicide is a significant contributor to premature mortality, as it has increased by 2% each year since 2006 and is the second leading cause of death among 10–24 year olds (Hedegaard et al., 2020). Effective and developmentally appropriate interventions for emerging adult psychopathology are needed during this time of heightened stress and beyond.

13.4 Academic Engagement in Emerging Adults

Most researchers have proposed that student engagement is the key to academic success (Caruth, 2018). It refers to the time, effort, and energy they devote to educational learning tasks, such as school-related activities and courses (Korobova, 2012). Previous studies have indicated that the quality of education can be improved through student engagement that should include cues to assess student learning success and failure. Student engagement in active learning is at the heart of adequate education, and it has been the subject of increasing academic research (Korobova, 2012).

Student engagement is strongly associated with high levels of learning and personal development, and it includes three fundamental components: behavioral engagement, emotional engagement, and cognitive engagement (Fredricks et al., 2004, 2016). Behavioral engagement relates to how students actively perform academic tasks (Skinner et al., 2009). Cognitive engagement relates to how students engage in complex cognitive and metacognitive strategies while studying a subject. Finally, emotional engagement refers to how students experience positive emotional states during classroom activities or other academic tasks (Wolters, 2004). Students without academic engagement do not show interest in participating in in-class activities and group work; furthermore, they perceive the classroom environment as not enjoyable, they may experience academic failure and are at risk of school dropout. Students with low academic engagement do not feel belonging to the educational environment (Arslan et al., 2020).

13.5 Fostering Students' Engagement

Some of the most important variables that affect academic achievement are individual features. For example, students' orientation goals and the developmental goals that they choose play a decisive role in predicting academic engagement. Development goals are situation-specific directions reflecting a desire to progress, grow, acquire knowledge, or demonstrate a skill in a particular context. Success goals are considered behavioral goals perceived or pursued by a person in a situation related to a sense of competence. The objectives of success can be considered a cognitive-social framework that guides a person in interpreting situations, processing information, and managing tasks and challenges (Asanjarani & Zarebaramabadi, 2021). The competency objectives may affect intrinsic knowledge motivation in students, and increase their willingness to solve problems. Therefore, people with a masterful goal orientation are expected to have a higher academic engagement. For example, researchers reported that students with effective goals use deep learning strategies (Rosa & Bernardo, 2013), generally have intrinsic goals and motivations (Çınar et al., 2011), show less anxiety in difficult learning situations, are more resistant to

difficult homework, and are quicker (Daumiller et al., 2021). They do not give up, and they have more self-confidence.

Studies also indicate that there is a relationship between ambiguity tolerance and academic engagement, and teachers should pay attention to this personality structure in education (Shaterian Mohammadi et al., 2014). Tolerance of ambiguity is the acceptance of uncertainty as a part of life, the ability to continue living with imperfect knowledge, and the desire to start a direct activity without knowing whether one will be successful. When an individual or group is confronted with a set of unknown, complex, and incomprehensible phenomena, they become confused; In this scenario, the individual's personality trait determines how successfully Ota can handle a situation whose end is uncertain (Saeedi Mobarakeh & Ahmadvpour, 2013).

Self-fulfillment is another factor related to academic engagement. Engagement is positively linked to concentration, attention, and commitment to homework. Engagement and resilience are also linked (Martínez et al., 2016). Given the inherent difficulties and challenges that characterize university life, resilience—i.e., the ability to recover and cope with adversity with a more positive perception of problems and difficulties—can be valued as an essential personal strength. Additionally, resilient students exhibit higher levels of intrinsic motivation (Martínez et al., 2016), well-being (Grant & Kinman, 2012), and academic performance (Martin & Marsh, 2006). In addition, engaged students seem to use more proactive coping strategies (Sánchez-Elvira-Paniagua et al., 2006).

In addition to individual factors, the university atmosphere directly impacts on academic engagement. Students who have a positive attitude towards university have well-defined goals and report positive experiences. Academic engagement is the communication mechanism between the student and academic results. Communication with others also helps students attain higher academic motivation and engagement and better academic performance (Gibson Nitza, 2005). Furthermore, studies have indicated that engaged students are more likely to obtain higher grades (Lowe & Dotterer, 2013) and show higher adjustment levels in the educational context (Fredricks et al., 2016).

13.6 COVID-19 Pandemic and Educational Engagement

COVID-19 has significantly disrupted students' lives worldwide; the main health risks, including declined mental health and increased stress, are now even more severe for emerging adults (Kujawa et al., 2020). Regardless of physical location, almost all typical college events and experiences, including study abroad trips, internships, and graduation ceremonies, have been canceled or postponed, leading many students to feel that their personal and professional milestones have not been met. The regular activities at the heart of the college experience, such as class travel and service-learning, participating in extracurricular organizations, and attending social events, all of which create bonding between students and a connection to the

institution, have been canceled or must take place remotely. Students' college experience inside and outside the classroom, including their engagement in academic life and their relationships with their peers and faculty, is critical to their well-being and success (Peltier et al., 2000). For students attending institutions that have not reopened, the lack of housing has likely become a lingering dilemma. Food insecurity is also a major problem, usually reported by 45% of the students (Bruening et al., 2017), and further exacerbated by the pandemic (Owens et al., 2020). Students who relied on meal plans or institutional resources lost access to these services (Lederer et al., 2021)

COVID-19 pandemic also had a significant financial impact on emerging adults. In a study involving a very large sample of university students, Dhar et al. (2020) reported that worry about economic influences during and after COVID-19 was one of the most prominent concerns for them. The substantial loss of jobs on campus and in the community for students and their families has undoubtedly increased financial hardship, making it even more difficult for students to meet their basic needs, let alone pay their tuition fees.

In many countries, the shift to distance learning implied the need for students to have reliable internet access and technology, which is not the reality for all students. Before the pandemic, students with limited access could visit computer labs. With schools closing and many spaces on campus restricted due to concerns about the risk of contagion, this option was no longer possible. Studies show that e-learning can be effective in digitally advanced countries (Basilaia & Kvavadze, 2020). However, in developing countries, a significant part of learning, teaching, and academic institutions' administrative activities are managed manually (Salam et al., 2017). Lack of access to fast, affordable, and reliable internet connections reduces the e-learning process, especially for those living in rural areas (Wains & Mahmood, 2008). Students who access the internet through smartphones may not benefit from online learning because a significant amount of content is not accessible through smartphones (Zhong, 2020).

Another primary concern associated with online learning is the lack of proper interaction with instructors; online course contents are usually discussed via email with the instructor, requiring response time (Zhong, 2020). Virtual classrooms cannot be of interest to students who are tactile learners. Another major gap in online learning is conventional classroom socialization. Students could only communicate with their peers, and never see them in person; therefore, real-time sharing of ideas, knowledge, and information is partially absent in the digital learning world (Britt, 2006).

High-performing students struggled to cope with the loss of their academic identity and reported feeling guilty for not meeting their usual standards, reflecting the significant influence of school stress on this population (Hasan & Bao, 2020). These findings are consistent with other documented concerns about distance learning transition, including dissatisfaction with how courses have been moved online, technological barriers, and the perceived lack of academic support (Shim et al., 2020).

A study conducted with university students in the USA (Halliburton et al., 2021) showed that students who have lost face-to-face professional development opportunities (e.g., internships) may have an increased sense of instability regarding their career plans. As the pandemic continues to impact their lives, some students may need to change career paths or delay their next steps, such as what happened after the 2007–2009 recession (Berg-Cross & Green, 2009). Another frequently reported concern is work and finances. As an example, a study in the USA showed that most people employed in February 2020 were no longer employed in April 2020, and of those who were still working, almost half earned less. Some students have seen their working hours increase due to their classification as essential personnel, and others have faced leave, layoffs, or the inability to continue working on campus (Cohen et al., 2020). Some students had to work more to contribute financially to their household or support the family business. These problems seemed to interfere significantly with their academic progress, either because they did not have time to work on their homework or because they were too worried about money to focus on school.

Students could no longer be as self-focused as typical emerging adults during the pandemic. Campus closures that forced many students to return home to their families likely compounded this problem, as students no longer had the benefit of being physically removed from family struggles and able to focus exclusively on their goals and individual activities (Arnett, 2016). For students who were no longer able to work, their sense of feeling in between may have increased if they became more dependent on their families for financial support. Additionally, emerging adults often delay or avoid accessing routine and emergency health care services (Czeisler et al., 2020).

A study by Hagedorn et al. (2022) showed that students faced an abrupt change in environment, as many of them had to return home. This potentially affected their quality of life and well-being (Shek, 2020), as they could return to a functional or dysfunctional family unit, with or without social support. Additionally, students had the potential to have more free time with the shift to online learning, and their well-being is affected by how they choose to spend their time (Shek, 2020). There is also the question of the financial situation of emerging adults. An individual's ability to access high-quality internet and personal hygiene facilities depends on their financial situation; therefore students of lower socio-economic status may be more negatively affected by the transition to online learning and maintaining personal well-being.

In a recent survey by Active Minds (2020), it was found that 91% of US students reported increased stress or anxiety. Increased rates of stress and anxiety among college students during the pandemic have been consistently found in studies on this topic (Conrad et al., 2021; Hoyt et al., 2021). Additionally, students reported an increase in sedentary time and screen time during the pandemic (Huckins et al., 2020).

13.7 Improving Well-Being Among Emerging Adults During COVID-19 Pandemic

Positive psychologists have argued that studies of well-being and development are important for understanding adaptive behavior and growth potential under difficult conditions (Joseph & Linley, 2008; Seligman, 2011). Well-being is defined as “the optimal dynamic state of psychosocial functioning resulting from good functioning in multiple psychosocial domains” (Butler & Kern, 2016, p. 2). Consistent with the view of well-being as not the mere absence of mental illness (Keyes, 2002), Seligman (2011) proposed a theory of well-being based on five pillars (Seligman, 2002, 2011) with the acronym PERMA. The first pillar, positive emotion (P), is the emotional component that includes feelings of joy, hope, pleasure, pleasure, happiness, and contentment. Next is engagement (E), which is an act of deep interest, assimilation, or focus in activities of daily living, and relationships (R), which is a feeling of being loved and connected by others, genuine and safe for others. The final two pillars are Meaning (M), a sense of life purpose that stems from something greater than oneself, and Achievement (A), a persistent motivation that helps achieve personal goals and provides a sense of purpose of accomplishment in life.

Seligman’s multidimensional model includes both hedonic and eudemonic views of well-being, and each of the components of well-being is considered to have the following three characteristics: (a) contributes to well-being, (b) is pursued for its purpose. (c) it is defined and measured independently of the other components (Seligman, 2011). Research shows that the five pillars of well-being of the PERMA model are associated with better academic outcomes in students, such as better adjustment to university life, achievement, and overall satisfaction with school and life (Butler & Kern, 2016; Tansey et al., 2018). Additionally, each pillar of PERMA has been shown to be positively associated with physical health, optimal well-being, and life satisfaction, and negatively associated with depression, fatigue, anxiety, perceived stress, loneliness, and negative emotions (Butler & Kern, 2016).

To improve the well-being of emerging adults, counselors may want to focus on developing PsyCap—i.e., positive states such as hope, resilience, optimism, and self-efficacy—to help students thrive both during the pandemic and in the post-pandemic world. Two major challenges for counseling professionals on college campuses are the lack of resources to adequately respond to student mental health issues and the stigma associated with accessing services (Gallagher, 2014). Therefore, effective interventions that are unlikely to trigger stigma responses are useful in this context. Several researchers have found that relatively short training in PsyCap interventions, including web-based platforms (Dello Russo & Stoykova, 2015) was effective.

Recently, the use of positive psychology smartphone apps like Happify and resilience-building video games like SuperBetter has been recommended and tested as motivational tools, especially among young adults, to encourage sustained engagement (McGonigal, 2015). Overall, interventions that define themselves as wellness approaches rather than those that highlight pathologies are less stigmatizing

than traditional deficit-based therapeutic approaches (Hunt & Eisenberg, 2010; Umucu et al., 2020). There are a number of research-based approaches proposed in the field of positive psychology to guide mental health professionals in facilitating the development of PsyCap and other important correlates of well-being. These include approaches to creating positive emotions (Fredrickson, 2009); coping strategies found in this study to increase well-being (Jardin et al., 2018).

Therefore, counselors have the potential to develop wellness enhancement initiatives for students on college campuses that target PsyCap and the HERO positive psychological resources within it, the ultimate goal of which is to improve wellness (Avey et al., 2011; Luthans et al., 2015; Luthans & Youssef-Morgan, 2017).

13.8 Summary

From the start of the COVID-19 pandemic, educational institutions and schools were heavily affected. As concerns college students, economic and social factors were consistently associated with distress (Emery et al., 2021). Furthermore, prior distress and economic and lifestyle disruptions related to COVID-19 and despair were the strongest correlations of young adult distress during the lockdown (Shanahan et al., 2022).

Emerging adults were also affected in other domains of their education as well as personal life (Hawes et al., 2021). Greater worry about contracting COVID-19 and school-related problems was associated with increased depression and all three types of anxiety symptoms while living longer life changes. Greater worry about being housebound and meeting basic needs was associated with increased depression, panic/somatic symptoms, and generalized anxiety. Furthermore, school preoccupations, including concerns about class achievement, juggling schoolwork and other responsibilities, and poor quality of online classes, were uniquely associated with increased depressive symptoms. In conclusion, the transition to online learning may have been a particularly significant stressor for young people.

This chapter looked at some of the pandemic effects on educational institutions, especially university. Special attention was paid to academic engagement and the psychological aspects of school and educational belongingness.

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Chapter 14

Flow, Deep Learning, and Preparing Emerging Adults for Times of Crisis: An Empirically-Based Example of Game-Based Learning



David J. Shernoff

Abstract This chapter is focused on the connection between flow and deep learning, and the potential for learning environments fostering flow and deep learning to prepare emerging adults for times of crises. Topics addressed include how crisis affects learning, as well as the importance of deep learning in times of crisis, and how it is enabled by motivation, engagement, and flow. In this context, I present a 3 year, quasi-experimental study comparing students' motivation, engagement, and deep learning of course materials between emerging adults who took an undergraduate engineering course that compared a video game approach to a control group. The video game, *EduTorcs*, provided challenges in which the student participants created control algorithms to drive virtual cars through a simulated game environment. Students taking the game-based course reported greater intrinsic motivation, work-play integration, and engagement in deep learning characteristic of flow than students taking the course in the traditional way; and they performed significantly better on tests of complex course concepts designed to measure deep learning. Results showed positive effects for concentration and engagement, which can be specific barriers to learning in times of crisis. Findings also suggest the potential role of the video game approach in facilitating intrinsic motivation, flow, and deep learning. Implications for educational and learning strategies in future crises are discussed.

Keywords Flow · Deep learning · Crisis · Game-based learning · Emerging adulthood

In memory of Mihaly Csikszentmihaly

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14.1 Introduction

Emerging adulthood is a distinctive period of development from approximately 18–25 years of age characterized by prolonged identity exploration before committing to adult roles, and is marked by instability due to many changing relationships and roles (Arnett, 2000). Individuals in this age group experience higher levels of distress compared to the general population (Bayram & Bilgel, 2008), and therefore are at increased risk for mental health problems. According to one review of epidemiological studies in the USA, the prevalence of psychiatric disorders from 18–29 is 40% higher than at any other age range (Kessler et al., 2005).

Recent conditions including global economic recessions, the COVID-19 pandemic, and the climate crises have created additional and unique challenges for the psychological well-being of youth (UNESCO, 2020). It is estimated that, during the COVID-19 outbreak, between 9% and 53% of university students and young adults have suffered from depression, anxiety, and stress disorders (Wang et al., 2020). According to one program of research (Keyes et al., 2010), the pandemic witnessed a pervasiveness of what has been described as a state of “languishing”—not necessarily mental illness, but a distinctive lack or decrease in thriving or flourishing at the cornerstone of positive psychology. Keyes et al. (2010) described languishing as a sense of stagnation or emptiness falling short of full-scale depression or emptiness. People who were languishing during the pandemic found it hard to concentrate under conditions in which their expectations or purpose were not as clear (Grant, 2021).

From the perspective of positive psychology, one might ask: what are possible sources of hope or strength in such circumstances? Csikszentmihalyi’s (1990) theory of flow grew out of different but in many ways similar conditions of death and despair in the aftermath of World War II (Seligman & Csikszentmihalyi, 2000). Csikszentmihalyi observed prominent members of society whose sense of self became shattered after losing everything in the war. This led him to ask what it is that provides a more enduring sense of happiness or fulfillment that is not rooted in material success and social status, seemingly vulnerable to the whims of fortune. He interviewed individuals from many different cultures and walks of life—artists, surgeons, rock climbers, farmers, dancers, scientists, and tradespeople—and asked how they would describe the happiest and most fulfilling times of their life. Csikszentmihalyi (1990) observed several common patterns in these descriptions, and described them as characteristics of an overarching human experience he dubbed, “flow.” When in flow, one experienced intense concentration and complete absorption in an engaging activity, with no psychic room left for distractions. One’s consciousness of the self vanished. Instead, awareness merged with one’s actions. Time seemed to fly. Rather than being aware of clock time, one jived to the rhythms of the activity. Consciousness became ordered, steadied, and focused.

Across individuals from diverse backgrounds, flow was universally experienced as a psychological state of heightened, emerging activation and motivation. According to the theory, this represented a sharp divergence from one's ordinary state of consciousness, which was typically described in starkly contrasting terms—disordered and dominated by distraction, including a preoccupation with the self. Emotionally, disorder in consciousness was frequently accompanied by a loss of energy and motivation, and along with it, depressed mood, listlessness, and lack of vitality. Coming full circle, a primary contributor to languishing during the pandemic was the lack of opportunity for action and daily exercise of talents—tantamount to the absence of flow from daily life compared to previously.

Although flow can be seen as one antidote to the crisis of overall well-being brought on by the pandemic, the present chapter is focused on the potential role of flow in addressing a specific aspect of it: the crisis in learning and education observed among the school-aged and emerging adults. In this context, I first consider how crisis affects learning. Next, I consider how deep learning, as an important educational outcome, is related to and enabled by student motivation and engagement. I then review linkages between deep learning and motivation according to several theories, and highlight the theory of flow as one that captures the phenomena of deep learning particularly well. In this context, I present data on an educational intervention of emerging adults in undergraduate education that had positive effects on concentration and engagement, which are particularly vulnerable in times of crisis. Finally, I discuss implications for practice and further research.

14.2 A Crisis in Learning

The World Bank (2021) labeled the COVID-19 pandemic, “the worst crisis in education and learning in a century.” They note that even before the pandemic, the world was experiencing a learning crisis as evidenced by 258 million children out of school globally. However, the COVID-19 pandemic exacerbated the learning crisis to the tune of 1.6 *billion* children out of school worldwide, while 700 million “attended” school from home. This included a deep crisis of the tertiary education system, impacting 220 million students who were impeded in their ability to reach their full educational and earnings potential, especially economically disadvantaged students, as university and college campuses closed globally.

Due to no fault of their own, teachers were entirely unprepared for the necessary transition to emergency remote teaching (ERT) in the first wave of the pandemic (Whalen, 2020). Lacking adequate education and professional development in teaching exclusively online, ERT was somewhat akin to building an airplane while in flight. Duckworth et al. (2021) found that high school students who attended school remotely reported lower levels of social, emotional, and academic well-being than classmates who attended school in person. Of particular concern was the gap in learning and achievement caused by the pandemic. According to one study (Kuhfeld et al., 2020), during the period of prolonged quarantining to stave off the initial

spread of COVID-19 in 2020, students achieved only 63% to 68% of the learning gains in reading and 37% to 50% of the learning gains in mathematics relative to a typical school year. By the end of 2020–2021, students were on average 4 months behind in reading and 5 months behind in mathematics (Dorn et al., 2021).

An important related and explanatory factor behind the mass learning loss was the poorer quality of student engagement in online instruction. Studies showed that factors contributing to a sharp reduction in student engagement during the pandemic included teacher, cultural, infrastructure, and technological factors (Khlaif et al., 2021).

The proposition that the decline in student engagement contributed to learning loss during the COVID-19 pandemic is reinforced by considering how crisis affects learning in general.

14.2.1 *How Crisis Affects Learning*

Research suggests that crisis can have both positive and negative effects on learning (Larsson, 2010; Stern, 1997). For example, common crises such as Chernobyl and the Cuban Missile Crisis have been associated with both positive and negative lessons. On the positive side, a situation may provide a context for important learning to occur, and even to speed up learning. One reason is that vital communications about the crisis are brought to the fore as the causal mechanisms can no longer be neglected (Larsson, 2010). Also, closer, more cohesive, and empathetic relationships may develop (Stern, 1997). For example, elaborately visualizing the scenarios of nuclear holocaust during the Cuban Missile Crisis produced the learning required to escape disaster. Some argue that crisis can lead to a posture of cognitive openness facilitating explanation-based learning as interpretations of past events can generate new understandings of causal processes (Stern, 1997). Following Chernobyl, for example, Western Europe was less likely to dismiss nuclear contamination from other countries as freak accidents (Stern, 1997).

Crisis, however, can also provoke serious obstacles to learning, creating conditions whereby important lessons and insights are not learned. For example, social actors tend to react to threats in an inflexible and rigid manner. This can lead to a *restriction of information processing* which can take the form of narrowing the field of attention, oversimplifying information, or reducing strategies used to solve a problem (Staw et al., 1981). A related consequence is *rigidity in response*, such as the reliance upon a dominant mode of thinking or well-learned pattern of action or the tendency to become overcommitted to one's position (Sabatier, 1987). A related limitation is one of *defensiveness*, or the tendency to avoid or suppress information or actions suggesting poor performance or failure (Stern, 1997).

Because crises are frequently macro-level, international or even global events, more research attention has been directed to the effects of trauma (e.g., violence, abuse, loss, or illness) on the learning of the individual than the effects of crisis per se. Unquestionably, trauma is not always experienced in a crisis; but in the case of

the COVID-19 pandemic, for example, the sharp increase in mental health problems suggests that there were traumatic effects of the crisis for sizable percentages. The effects of trauma on the brain and learning are associated with profound educational and social consequences. In school learning activities especially, the focus on basic and emotional needs for safety and security makes it more difficult for those experiencing trauma to concentrate (Duplechain et al., 2008).

The type of learning or thinking that can be particularly valuable under conditions or crises can be characterized as cognitive differentiation and integration (Etheredge, 1981). That is, do individuals exhibit a greater degree of conceptual differentiation leading to more sophisticated analysis and explanation than previous ones? Can they coherently integrate and systematize the complexity of a problem, relating its parts to each other and to wholes? This type of thinking is important to forging progressively more sophisticated understandings of a problem towards more sustainable solutions. Traditional approaches to problem solving can also neglect environmental considerations, often an important aspect of more sophisticated understandings. Relatedly, crisis calls on actors to learn new ways to flexibly deal with problems considering multiple changeable factors.

14.3 The Role of Flow in Engagement and Deep Learning

The effects of crisis and trauma on attention and concentration can have profound implications for learning; and much research has demonstrated that the quality of learning is strongly influenced by the quality of engagement (e.g., Kelly, 2008; Marks, 2000). The emphasis of flow theory on total engagement—that is, *complete* concentration or *full* immersion—can have particularly profound implications for a deeper quality of learning. Flow has been found to be related to learning processes that enable accomplishment and creative achievement characteristic of deep learning (Csikszentmihalyi, 1996). The learner’s conceptual understanding and cognitive processing occur at a deep level, enabled by motivational factors including increased interest and intrinsic motivation as well as greater self-efficacy and valuing of the topic, a combination that frequently drives concerted and sustained effort (Makransky et al., 2019).

14.3.1 What Is Deep Learning and Why Is It Important?

Deep learning stands in contrast to superficial learning. It has been observed that most of what was “learned” when cramming for a test the night before is soon forgotten. It is difficult to imagine superficial learning that leads to producing a great work of art, solving an important scientific problem, or competing at a high level of performance. Thus, deep learning can be characterized as learning that leads to

valued achievements, to be counted as among the most important outcomes of a good education.

We also know what deep learning “looks like.” Compared to superficial learning, deep learning involves greater attention, more sustained effort, more complete understanding, greater skill development or growth towards mastery, deeper encoding, and better retention. In recent studies, researchers have conceptualized deep learning as that which goes beyond the acquisition of declarative knowledge and facts, operationalizing it as the ability to transfer learning, skills, and behavior to multiple contexts (Makransky et al., 2019).

14.3.2 Theoretical Perspectives Relating Motivation and Deep Learning

Motivation is certainly a, if not *the*, key ingredient for deep learning to occur. The connection between deep learning and motivation has several aspects as illuminated by a variety of contemporary motivational theories. I briefly unpack some of these various theoretical perspectives before returning to some of the key concepts derived from the theories as tested an empirical study presented herein.

14.3.2.1 Intrinsic Motivation Theory

Intrinsic motivation theory suggests that engaging in alluring learning activities for its own sake rather than for external incentives results in several markers of deep learning, including greater effort and persistence, conceptual understanding, and continuing motivation or sustained interest (Sansone & Harackiewicz, 2000). A recent update to interest theory includes a four-phase model in which situational interest is first triggered by the environment, and as interest continues in subsequent stages, it becomes increasingly integrated and personalized (Hidi & Renninger, 2006). Einstein (1954) believed that intrinsic motivation undergirds creative discovery and inventions at the cradle of valued artistic and scientific achievements, a belief that amplifies the importance of deep learning.

14.3.2.2 Self-Efficacy and Expectancy-Value Theories

Related to the self-perception of having adequate skills to successfully meet a challenge, *self-efficacy theory* holds that individuals are more likely to try harder on tasks in which they believe they are capable of succeeding (Schunk & DiBenedetto, 2020). Students who feel efficacious are also more likely to use self-regulatory strategies, and persist longer than students who doubt their abilities, and such behaviors promote learning (Bandura, 2001). Expectancy-value theory also

suggests that the greater effort fueling deep learning is more likely when individuals expect to succeed, as well as when the task or activity is highly valued (Eccles & Wigfield, 2020).

14.3.2.3 Flow Theory

The phenomenon of deep learning and its connection to emergent motivation is captured particularly well by flow theory. As discussed earlier, flow can be defined as state of intense concentration and complete absorption in a challenging activity with no psychic energy left for distractions. Flow has been found to be integral to the deep learning and creative process of scientists, artists, and leading to discovery or invention (Csikszentmihalyi, 1996). Flow has also been empirically related to the development of talent (Csikszentmihalyi et al., 1993) and autonomous regulation (Bassi & Delle Fave, 2012) in adolescent youth. Findings like these suggest that the ability to harness concentration for complex mental tasks in deep learning may be one of the hallmarks of intellectual achievement. The primary conditions creating flow experiences are (a) a high level of challenge paired with a high level of skill to meet the challenge, (b) a sense of control, (c) the pursuit of clear, important, and meaningful goals, and (d) immediate feedback regarding effectiveness or success in meeting those goals. The integration of perceptions of work and play is another distinctive characteristic of flow experiences.

14.4 Study of Engagement and Deep Learning in Emerging Adults

14.4.1 While Playing Educational Video Games

Ever since the early 1980s, when “Pac-Man fever” became a nation-wide epidemic, scholars have urged educators to consider some unique advantages of video games for engaging students in deep, meaningful learning experiences (Shaffer, 2006). When playing a video game, for example, individuals are said to “plunge into it,” and to be “immersed” or “enveloped” by it. Psychologists and educational scholars have also recognized that when people “play” video games, they engage themselves in complex problem-solving exercises which requires them to acquire and apply new knowledge.

In 2002, associate professor at Northern Illinois University, Brianno Coller, began developing video games as an ideal instructional aid to teach undergraduate courses in mechanical engineering (Coller, 2010). With support from NSF, he started by creating a game called *NIU-Torcs* with similarities to commercial car racing games like *Gran Turismo*. In developing *NIU-Torcs*, Coller strove to create an accessible video game that would guide students through engaging and authentic engineering

problems. The game had a key difference from commercial car racing games, however. Rather than physical controls for accelerating or braking, steering, or shifting, students needed to write computer programs to give the car its commands. He then revamped his numerical methods course to be anchored by the video game.

When playing the game, students became eager to learn key course concepts that were formerly perceived as the drudgery of homework. Suddenly, root finding was a valuable tool for on-the-fly calculations needed for determining intersection points optimal to shift gears. Efficient shifting could shave seconds off of their lap times. If they did so before their classmates did, they had a clear advantage in head-to-head racing. Learning appeared to become fun and infectious.

Coller also began to notice some signs of student engagement that he had never previously observed. Some students were bringing their parents and siblings into the lab. Others were bringing their video game to job interviews. Coller graphed students time spent on the game-based numerical methods course compared to other courses, and found that they were spending more than twice the time in numerical methods than the average of their other courses. He knew something was indeed unusual when some students began asking for additional homework—more video game challenges.

This was not all he noticed, however. There were budding signs of deep learning as well. Coller asked his students to outline every concept they learned in their courses in separate concept maps, one for each course. Students put primary topics in the center of the concept map, placed secondary concepts around them, and drew a line between concepts to illustrate relationships between them. Students were instructed to produce as many concepts as they could remember, as well as to indicate all of the *meaningful* connections among them. Students produced about as many concepts in the game-based course as students in the same course taught in the traditional way despite spending half the class time on them. Moreover, they drew many more meaningful connections among course concepts, suggestive of a deeper quality of learning.

Since 2006, Coller and I teamed up to study the connections between engagement and deep learning from the theoretical perspective of flow. We obtained further NSF support to pursue a formal, quasi-experimental study of student engagement, flow, and learning with a video game approach in another undergraduate mechanical engineering course at Northern Illinois University, *Dynamic Systems and Control* (DS&C) (Coller et al., 2011).

In the DS&C course, students learn how to make machines run autonomously, as with cruise control, anti-lock brakes, and automatic parallel parking. The course is conceptually challenging, drawing on principles of upper-level mathematics and physics. The 3-year, quasi-experimental study compared engagement and deep learning of course materials between students who took an undergraduate engineering course that used the video game approach to a separate cohort of students who took the same course utilizing a more traditional approach—one relying on textbooks and labs.

14.4.2 Theoretical Connections Between Motivation/Flow and Deep Learning in the Study

The video game study was rooted in seminal contributions by Richard E. Mayer to theory and research in cognition, problem solving, and multimedia (e.g., Clark & Mayer, 2016; Mayer, 2005). A primary tenet of Mayer and colleagues' *cognitive theory of multimedia learning* is highly overlapping with flow theory: the learner's amount of processing capacity is limited, such that deep and productive learning occurs when engaging in active cognitive processing and attending to relevant stimuli. In deep learning, this is followed by an organizing function in which the information is arranged into a coherent structure (as demonstrated, for example, in Collier's concept mapping exercise), and an integrating function in which information is connected with existing knowledge from long-term memory. Furthermore, this process of meaningful learning is activated when visual and verbal materials are presented together simultaneously. Building on this work, Makransky et al., (2019) recently found that a group of individuals receiving safety trainings with virtual reality (VR) outperformed a group receiving them with text on a transfer task involving problem solving, as well as on measures of enjoyment, intrinsic motivation, and self-efficacy. Similarly, Collier and I (Collier et al., 2011; Shernoff & Collier, 2013) hypothesized that undergraduate engineering students taking a game-based course would demonstrate greater motivation/engagement (motivation hypothesis) and deeper learning (deep learning hypothesis) than those taking the traditional course.

Motivation can be a struggle for students taking *Dynamic Systems and Control* as traditionally taught, due to the difficult and abstract mathematics involved. According to Shaffer (2006), video games have the educational advantage of placing students in simulated environments where they face authentic, open-ended challenges similar in nature to those faced by real-world professionals. Intrinsic motivation theory suggests that engaging in alluring learning activities like this for its own sake results in several markers of deep learning, including greater effort and persistence, conceptual understanding, and continuing motivation (Sansone & Harackiewicz, 2000). It was therefore hypothesized that students would be more intrinsically interested in the game-based DS&C course than the traditional one.

The motivational advantages of a video game approach are also undergirded by self-efficacy, expectancy-value, and flow theories. It was hypothesized that the video game would inspire greater confidence in students' skills to succeed in the game as well as self-efficacy to apply course principles to solve (simulated) real-life problems, thereby increasing their level of effort (Schunk & DiBenedetto, 2020). In line with expectancy-value theory, we further hypothesized that greater effort would come not only from their greater expectation to succeed, but also from greater value in learning activities while playing the game (Eccles & Wigfield, 2020). With respect to flow theory, it was expected that students would perceive both challenge and skill levels to be high, and the goals to be clear and important when playing the game – key theoretical conditions for flow to occur (Csikszentmihalyi, 1990).

Table 14.1 Overview of study goals and hypotheses

Study Aim:	To test the primary research question: Would students who learned Dynamic Systems & Control with a video game demonstrate higher motivation and deep learning with course materials than students who learned the material in a more traditional way before the game was incorporated into the class?	
Hypotheses	Outcome measure	Prediction
Motivation hypothesis	Intrinsic motivation Motivational enablers Engagement	Video game > traditional Video game > traditional Video game > traditional
Deep learning hypothesis	Performance on course exams of conceptual understanding	Video game > traditional

Synthesizing these expectations based on motivational theory, the perceptions of skill, challenge, and importance were conceptualized as *motivational enablers* of deep learning. When these motivational enablers are present, flow theory predicts a state of immersion or heightened concentration, interest, and enjoyment. The integration of perceptions of work and play that are often reported when playing serious games is another distinctive property of flow experiences (Michael & Chen, 2005). Thus, we predicted that students would report a greater sense of work-integration during game play. Thus, motivational hypotheses were that students in the game-based course would perceive these enablers to a greater extent than those taking the traditional course, and would report greater intrinsic motivation and engagement in learning as characterized by flow theory. See Table 14.1 for a summary of study goals and hypotheses.

14.5 Method

14.5.1 Participants

Participants were undergraduate mechanical engineering students taking the *Dynamic Systems & Control* course at Northern Illinois University ($N = 155$) in the spring semester during the 3 year study from 2007 to 2009. Eighty-eight percent of the sample was male. Seventy-nine percent were Caucasian, 9% were Hispanic, 6% were East-Asian, 3% were African American, and 3% were Middle Eastern. The sample ($N = 98$) consisted of the students who took the course in Year 1 (control, $n = 51$), and those who took the course in Year 3 (experimental $n = 47$). Year 2 was also designed to be an experimental year, but a horrific and traumatic campus shooting occurred that year. Given what we know about the effects of trauma on engagement and learning, the data were not used that year. Due to the traumatic event, however, year 3 represents not only a ‘treatment condition’ in the usual sense;

it also represented an intervention targeting engagement and deep learning in the aftermath of a crisis that could only have made attention and concentration all the more challenging.

14.5.2 Procedure

14.5.2.1 Dynamics Systems and Control Course Before and After the Video Game

To serve as the control condition, the *Dynamics Systems and Control* (DS&C) course was taught in the traditional way in Year 1 of the study: from a textbook, supplemented with laboratory exercises. It is important to note that students worked in small groups and were asked to reflect, design, and create in the DS&C course. Thus, the experimental condition did not represent primarily a more “active” vs. a more passive style of learning; it did, however, feature more opportunities for modeling and practice.

In Years 2 and 3, the video game (with the name changed from *NIU-Torcs* to *EduTorcs*) was utilized to anchor course instruction to create the experimental condition. The video game facilitated conditions for flow in a variety of ways. When driving a car in everyday life, one unconsciously devises algorithms, or rules, which require information about the vehicle’s dynamic state (position, velocity). We use these algorithms to calculate how much to step on the gas, apply the brakes, and turn the steering wheel. In the video game, the clear goal was for students to code their algorithms in C++. Depending on whether the player’s Porsche nimbly glided through an S-turn at 85 mph, or it spun out of control and smashed into the guard rail in a burst of flames, students received immediate feedback on how well their algorithms worked.

In line with flow theory, the game-based course started with a simple task, and the challenge of the tasks increased as students built their skills. In the first assignment, the car sat motionless on a serpentine track. Students were to write a small and simple algorithm to make the car steer itself around the track at modest speed. Throughout this first exercise, students learned how to navigate the game, and at the same time were hypothesizing, probing, and reflecting on how to optimize automated and mechanical systems governed by the laws of physics. New challenges within the game structure then promoted productive learning and application at increasingly higher levels of skill. For example, students wrote programs to change lanes, pass, or follow other cars, and optimize speed without crashing.

14.5.2.2 Data Collection Procedure

The Experience Sampling Method (ESM; see Hektner et al., 2007) was used to follow student perceptions and emotions during homework and lab exercises

throughout the course. The ESM measures perceptions and experiences “in the moment” of specific task completion, reducing reliance on memory. Previous research has demonstrated the ESM to be both a reliable and valid instrument (Hektner et al., 2007).

All student participants agreed to wear digital wristwatches that were pre-programmed to sound an alarm 30 randomly selected times per week over three separate weeks: one in the beginning (Wave 1), one in the middle (Wave 2), and one towards the end (Wave 3) of the semester, for a total of 90 prompts per student during the semester. When signaled, each student completed an Experience Sampling Form (ESF) to record their perceptions and subjective experiences. They then rated their experiences and emotions in approximately 20 multiple-choice and scaled items. Beep schedules were designed to maximize experiences sampled during homework and labs (when students were working in *EduTorcs*), but were otherwise randomized.

14.5.3 Measures

14.5.3.1 Experiential Measures and Motivational Enablers

Experiential measures were derived from the ESM based on motivational and flow theory. For example, a measure of perceived competence (based on self-efficacy theory) asked respondents to rate the level of skills they were using for the task performed at the time of the beep on a five-point Likert-type scale. Perceived work-play integration (based on flow theory) came from an ESF item asking if the activity felt more like work, play, both work and play, or neither work nor play. The selection of “both work and play” represented work-play integration.

14.5.3.2 Course Performance

Course performance was measured by students’ group-normed score on two exams created by the instructor, designed to measure deep learning and application of course principles to solve complex problems, given once at the midpoint and once at the end of the course. Items were modeled on exam questions that had been posed in previous years, and were designed to serve as a general measure of learning and deep conceptual thinking with DC&S principles independent of the game or non-game environment in which it was learned.

14.5.3.3 Baseline Measures

At the beginning of the semester in both years, participants completed an exam in basic mechanics concepts to assess prior levels of knowledge, as well as surveys

assessing learning styles and engineering interests. They also provided demographic and background information.

14.5.4 Data Structure and Analyses

We focused our analyses on the 657 self-reports in which students indicated that they were completing homework or working on a lab assignment for DS&C. The 657 surveys were nested within the 98 students in the sample.

Factor analyses of participants' reports of engagement and emotions were used to create the following composites: Intrinsic Motivation (e.g., choice, control, wishing to do the activity), Motivational Enablers (e.g., importance, challenge, and skills), Engagement (i.e., concentration, interest, and enjoyment), Positive Affect (e.g., feeling happy, creative, active), and Negative Affect (e.g., stressed, irritated, worried). Reliabilities of the composite variables ranged from .73 to .80. To analyze the data, we used a series of two-level Hierarchical Linear Models (HLM; Bryk & Raudenbush, 2002) to test both the motivation and deep learning hypotheses.

14.6 Results

With respect to the motivation hypothesis, Year 3 students (i.e., those in the game-based course) reported significantly higher Intrinsic Motivation, Engagement, Positive Affect and significantly lower Negative Affect during homework and lab than Year 1 students (i.e., control year; see Figs. 14.1 and 14.2). The difference in Motivational Enablers between the experimental and control year was not

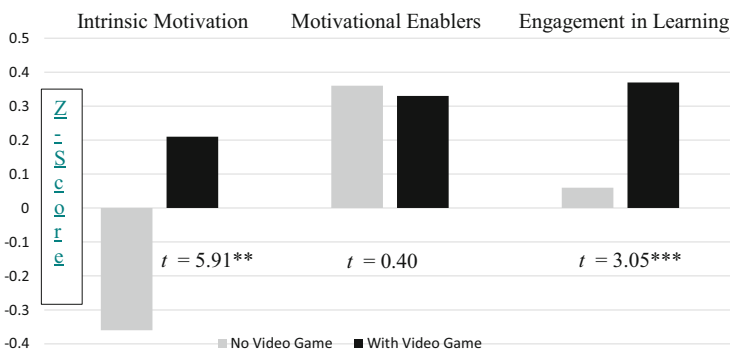


Fig. 14.1 Group differences in intrinsic motivation, motivational enablers, and engagement in Year 1 (no video game) vs. Year 3 (video game). *Note.* Asterisks denote level of significance: ** $p < 0.01$ *** $p < 0.001$

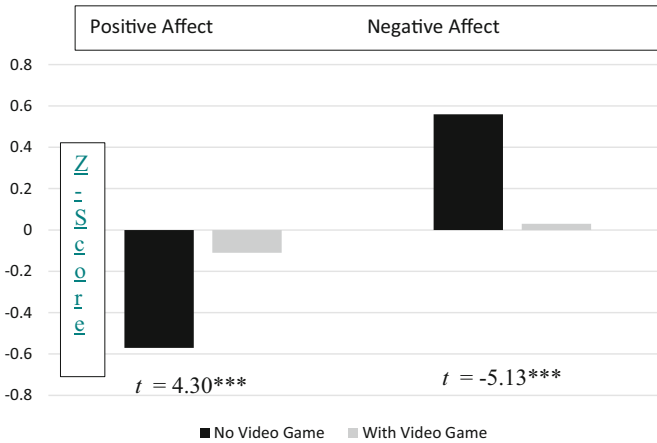


Fig. 14.2 Group differences in positive affect and negative affect in Year 1 (no video game) vs. Year 3 (video game). *Note.* Asterisks denote level of significance: *** $p < 0.001$

significant. In addition, Year 3 students also reported that their homework and lab activity was “like work” less frequently than Year 1 students (41% compared to 76% of the time), but felt that it was “like work and play” more frequently (50% compared to 15% of the time; See Fig. 14.3).

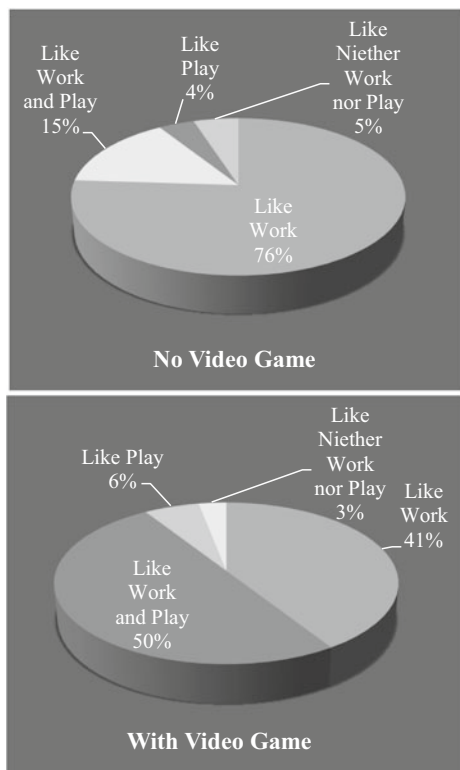
With respect to the deep learning hypothesis, results as displayed in Table 14.2 showed that students scored almost a full standard deviation better ($\beta = 0.94$) in practice tests measuring deep learning in the game-based semester after accounting for control variables, an effect that was statistically significant. The reduction of level-2 variance from a fully unconditional model (i.e., no predictors) to a simple model in which treatment is the only predictor revealed that the treatment condition accounted for 43% of the variation in exam scores among students (results not tabled; See Shernoff & Coller, 2013). No interaction effects between the treatment condition and student characteristics were statistically significant.

In support of self-efficacy theory, students reported significantly higher perceived skill use when playing the game than when they were not playing the game during homework and labs, and this perceived competence was a significant predictor of deep learning in the course ($\beta = 0.24$, $p < 0.05$; results not tabled). There was also a significant effect of perceived work-play integration on course performance ($\beta = 0.20$, $p < 0.05$; results not tabled; See Shernoff & Coller, 2013).

14.7 Discussion

In these studies of engagement and deep learning of emerging adults in undergraduate engineering courses, we explored the possibility that students receiving an instructional intervention rooted in flow theory would demonstrate greater

Fig. 14.3 Participants' Indications of whether their homework/lab felt more like work, play, both, or neither affect in Year 1 (no video game) vs. Year 3 (video game)



motivation (motivation hypothesis) and deep learning (deep learning hypothesis) than those who did not receive the intervention. Overall, we found ample evidence for both motivational and the deep learning hypotheses. Emerging adults taking a game-based, undergraduate engineering DS&C course reported greater intrinsic motivation and greater engagement in deep learning than students taking the course in the traditional way; and they performed significantly better on tests of course concepts and application designed to measure deep learning of complex material by a content expert. These findings are consistent with studies finding that high challenge and skills in other educational video games are also associated with flow, engagement, and greater learning (Hamari et al., 2016). Lack of significant difference in motivational enablers was surprising and difficult to interpret. It appears that due to the academic intensity of the DS&C course, perceptions of challenge and importance were high in both in the traditional and game-based course. However, the game-based course added the element of intrinsic motivation and enjoyment. Findings concerning the motivational and deep learning hypotheses suggested that the activation of intrinsic interest and enjoyment in game-based instruction can be important for the deep learning of content.

Consistent with self-efficacy theory, findings suggested students perceived themselves to be utilizing higher levels of skill in the game-based course, and that this

Table 14.2 Two-level HLM analysis: Predictors of course performance

Fixed effects	Level	Performance
Intercept		-0.46
Treatment	2	0.94 *** (0.15)
Female	2	0.56 * (0.25)
Afr. American	2	0.24 (0.21)
East Asian	2	-0.02 (0.24)
Mid-eastern	2	-0.15 (0.25)
Hispanic	2	-0.20 (0.27)
Baseline Mech.	2	0.22 * (0.08)
LS: Actv/Refl	2	-0.20 * (0.08)
LS: Sens/Intv	2	0.00 (0.07)
LS: Vis/verb	2	-0.08 (0.07)
LS: Seq/Glo	2	-0.05 (0.07)
Interest in vehicles	2	-0.14 * (0.06)
Interest in electronics	2	-0.02 (0.07)

Note. N (participants) = 98; N (repeated measures on practice exams) = 196. Coefficients for continuous variables are standardized betas. Coefficients for categorical variables indicate the deviation from a baseline variable. Numbers in parentheses are standard errors. *LS* Learning Styles at baseline (four dimensions: Active/Reflective, Sensing/Intuitive, Visual/Verbal, Sequential/Global). Asterisks denote significance: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

perception was a predictor of deep learning as measured by exam performance. As flow theory suggests, individuals can come to enjoy an activity when they make discoveries or build new capacities while engaging in it. In the Dynamics Systems and Control course, it appeared that principles and concepts from the course became clearer to students as they played the game and their skills increased. Creating an environment for flow and the building of new competencies and self-esteem may have been particularly timely in the aftermath of the host university's mass shooting tragedy. Research suggests that one of the primary effects of crisis and trauma on learning is difficulties attending and concentrating (Duplechain et al., 2008; Sitler, 2009; Staw et al., 1981). By targeting concentration and engagement specifically, the

video game intervention may have mitigated some of the deleterious effects of the crisis.

Furthermore, the finding that students in the game-based course reported greater positive affect and lower negative affect is consistent with research and theory suggesting that a learner's emotional reaction to learning can have a strong influence on academic achievement (Pekrun, 2016). This finding may be particularly relevant in the wake of the COVID-19 pandemic, when academic achievement proved to be highly vulnerable, and a major source of educational concern.

Overall, the game-based activities could be characterized as providing spontaneity and excitement on the one hand, and intellectual rigor on the other, a combination has been described as "playful work" or "serious play" (Rathunde, 1993). The finding that work-play integration predicted exam performance is consistent with the theory of flow when learning through "serious games." Deep immersion in the authentic professional context, creating at once a playful and serious disposition towards the work, resulted in *deeper processing* and the *making of more connections among concepts* in the course. Adding the element of enjoyment and spontaneity through technology may be a particularly useful approach in crises requiring the transition to online learning like the COVID-19 pandemic. Game-based activities, which are seamlessly implemented in online learning environments, can make up for the reduction in engagement that can occur in online instruction in the absence of pedagogical strategies to address it.

Undergraduate students often pursue engineering because they enjoy building things, tinkering, inventing, and making things work. In designing the learning environment for the game-based dynamic systems and control class, Dr. Collier might not have created the game as he did if it did not capture the imagination of its users, providing a source of exhilaration and enjoyment. Rather than being responsible for learning abstract principles of physics and science without understanding its purpose, the game-based approach provided a sense of meaning by connecting the material to real-world problem solving. It is this kind of discovery-based, deep learning that is critical in coping with crises.

The game also greatly added to the complexity of students' experience and thinking. Supporting Mayer and colleagues' *cognitive theory of multimedia learning* (e.g., Clark & Mayer, 2016; Mayer, 2005), the superior test scores of students in the experimental year showed that when as they attended to relevant stimuli in the game, they mastered a greater number of challenging concepts (i.e., differentiation), and also found more connections among them (integration). More productive modes of thinking in times of crisis are characterized by precisely this complexity of thinking, leading to deeper, more insightful understandings (Etheredge, 1981). Furthermore, the video game demonstrated levels of complexity in its approach to environmental and sustainability factors—by saving the physical energy, resources, and human risks involved in physically building vehicles and racing them on a track. In fostering multiple levels of complexity, the game approach can therefore provide a rich preparation for the future—the type of preparation necessary to create vaccines

and propose pertinent social policies when the next pandemic hits, for example. Thus, by enjoying learning today, we are better prepared for crisis tomorrow.

14.7.1 Implications for Future Study

The study reported here has implications for studying deep learning and cognitive engagement in the future. In particular, a critical ingredient is a content expert or experts with a strong understanding of the cognitive processes involved in domain-specific, effective problem solving; the ability to produce a learning environment with authentic tasks in which those cognitive processes are activated; as well as the ability to create authentic, competency-based assessments that distinguish between deep and superficial conceptual understanding of the content. Such an approach maximizes the validity and authenticity of measures of deep learning and cognitive engagement compared to simple surveys and lab exercises.

14.7.2 Moving Forward

There will be much work to do in schools and universities to address issues of mental health and well-being in times of crisis. Positive educational approaches attending to learners as whole persons with physical, emotional, and cognitive needs in an interactive context are recommended for individuals who have experienced crisis or trauma (Sitler, 2009). Thus, many important efforts fall under the umbrella of Social and Emotional Learning (SEL), such as mindfulness and kindness-oriented practices, in order to promote well-being and reduce psychological distress (See Reynolds, this volume). Also important, however, is the promotion of play, creativity, gaming, athletics, and organized recreation in order to restore the psychological need for meaningful engagement and skill development in enjoyable, flow-producing activities (Shernoff, 2013; UNESCO, 2020). The goal of such activities is not only to reduce symptoms of anxiety and stress, but also to expand the limits of routines that can become narrowed during a crisis, and to carve out time for meaningful engagement undergirding important forms of learning. This chapter's focus on a game-based approach for emerging adults in an undergraduate mechanical engineering course is only one such example, but hopefully an illustrative and instructive one.

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Chapter 15

The Role of Music in Undergraduate Students' Wellbeing During the COVID-19 Lockdown: An Investigation Based on Musical Training



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Abstract Music-related activities have been proven effective in promoting wellbeing, particularly during the COVID-19 pandemic. Undergraduate students' wellbeing has worsened during this crisis. However, there is little evidence with regards to the impact of music usage on students' wellbeing during the COVID-19 lockdown. This study investigated the relationship between music usage and students' wellbeing, based on their level of musical training. Participants ($N = 142$, Greek undergraduate students) completed online questionnaires about the lockdown period assessing: (i) Musical training, (ii) Wellbeing, and (iii) Music usage for mood regulation. Furthermore, they reported the degree that music usage contributed to their wellbeing and provided qualitative answers about how music assisted them during lockdown. Results revealed that wellbeing during lockdown positively correlated with how much participants considered that music engagement contributed to their wellbeing, suggesting that participants, especially the highly musically trained, were aware of the beneficial impact of music. Wellbeing negatively correlated with music usage for discharge. Furthermore, a data-driven approach revealed three clusters of participants: high wellbeing-high musical training, high wellbeing-low musical training, and low wellbeing-high musical training, the latter being potentially indicative of a group of musicians which were negatively affected on a professional level by the pandemic. Finally, a qualitative analysis showed that participants with higher musical training and those with high wellbeing used music in more diverse ways compared to those with low musical training or wellbeing. Overall, our findings shed light onto the relationship between music usage, musical training, and wellbeing in times of crisis for young adults.

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Keywords Music · Wellbeing · Mood · Musical training · COVID-19

15.1 Introduction

15.1.1 *Emerging Adulthood and Music Student Populations*

For most young people in industrialized countries, the late teens until the twenties are years of profound change and importance. During this period, young adults acquire the level of education and training that will provide the foundation for their income and occupational achievements for the remainder of their adult work lives (Chisholm & Hurrelmann, 1995; Arnett, 2000). It usually is also a time of frequent change and exploration related to their life, work, worldviews, and relationships (Erikson, 1968; Rindfuss, 1991). By the end of the late twenties, most young people make life choices that have enduring ramifications.

Arnett coined the term “emerging adulthood” and explored this age group’s views about themselves in a series of studies (Arnett, 1994, 1997, 1998). He identified a number of criteria for the transition to adulthood that relate to the acquisition of specific skills and characteristics. These are accepting responsibility for one’s self, making independent decisions, and becoming financially independent (Arnett, 1997, 1998, 2000). Emerging adulthood is a time in a person’s life when they enjoy relative independence and explore a variety of possible life directions, when the future is still uncertain and the possibilities are many. At the same time, it is characterized by demographic diversity and unpredictability, as stated in the following quote: “*Emerging adults tend to have a wider scope of possible activities than persons in other age periods because they are less likely to be constrained by role requirements, and this makes their demographic status unpredictable*” (Arnett, 2000, p. 470).

Identity formation is also an important factor that characterizes emerging adulthood. Even though the process begins in adolescence, final and enduring decisions take place in this period (Arnett, 2000). These identity explorations are partly responsible for the great instability that is apparent in young adults’ lives. Frequent changes and different possibilities in all areas of their lives—love, education, profession—paint a picture that is blurred with no clear lines and colors. For many this may be the most unstable period of their lifespan and -not surprisingly- it is identified as a struggle and a stressful period (Arnett, 2014). Undergraduate students that typically belong to the age group of 18–24 years, are best described as emerging adults; they show specific and particular characteristics related to their beliefs, resilience, and behavior. This age group has also been the focus of research on emerging adults’ wellbeing, shedding light on undergraduate students’ university experiences (Leontopoulou & Triliva, 2012) and identity formation (Ritchie et al., 2013).

A range of international studies have contributed to raising awareness of undergraduate music students’ identity formation, career and life transitions, as well as of the challenges young graduates encounter in view of the precarious and non-linear careers that characterize music work (López-Íñiguez et al., 2022; Jääskeläinen et al.,

2020). Research with music students indicates that stress levels, workload and burnout are higher than the general student population (Demirbatir et al., 2012). Another notable characteristic that music students seem to have in common is the high level of internalization and identification with their specialization. Research on musicians' identity/ies and careers highlights the need to establish early on during undergraduate studies a strong learner identity. It seems important for tertiary education to be more supportive of students' metacognitive engagement, experiential learning and career preparation (López-Íñiguez & Bennett, 2021).

15.1.2 Music, Health, and Wellbeing

The relationship between music, health and wellbeing is complex and multifaceted (MacDonald et al., 2012), involving many academic disciplines, such as musicology, psychology, medicine, music therapy, music education, sociology, and others. Since ancient times music has been proposed as a therapeutic agent, both directly and indirectly. In recent years, however, music as a drug has received further attention due to its obvious advantages: it is free, ubiquitous, carries meaning, and affects behavior and emotions (Juslin & Sloboda, 2010), and people can self-medicate through everyday usage.

Earlier studies have helped us understand the personal and social uses of music (Small, 1998), the use of music in everyday life (DeNora, 2000), the perceived uses people make of music (North et al., 2000) and the role of music in identity formation and construction (Frith, 1996). Music-related activities represent sources of consolation when dealing with distress and sorrow, when coping with anxiety, and can function as a general marker for wellbeing (ter Bogt et al., 2017; Daykin et al., 2018). Similarly, group singing and audience participation in live music events have been associated with positive emotional experiences, feelings of connectedness, and positive social wellbeing impacts (Fancourt & Finn, 2019).

Using quantitative and qualitative measures, Vamvakaris (2020) provides evidence concerning the connection between music and self-reported health and wellbeing; the author further proposes a new model of classifying everyday usage of music in order to improve self-reported health and wellbeing (AMLAW Model). The findings propose that music listening is linked to health and wellbeing via individual and contextual factors. The author highlights that the listeners' expertise should be taken into consideration in further studies and interventions involving music, health, and wellbeing, as done in the present study.

15.1.3 Music-Related Activity During COVID-19

In response to the global pandemic, the Greek government, among others, instituted strict spatial distancing and quarantine measures leading all non-essential activities,

including university education, to a standstill. Studies from around the world explored and described the disruption that emerging adults, and particularly higher education students, experienced in their relationships and interactions with their friends and family. Missed rites of passage, disruption of social lives, loss of independence may result in stalling or regression of key developmental milestones. As this is a critical period in students' identity formation, the impact on their developmental trajectory may be long-term. Role confusion, financial constraints, and limited employment opportunities created stress, feelings of isolation and disconnection as well as tension in their relationships and posed unprecedented challenges (Vuletic et al., 2021; Dotson et al., 2022; Gruber et al., 2020).

A range of studies worldwide explored the impact of the global pandemic on wellbeing, as well as the associations between wellbeing and music-related activity in both general and musically trained populations. Music listening activity during the early stages of the pandemic was explored by Krause et al. (2021), with results indicating a positive association between life satisfaction and music listening, and the potential benefits of music listening during periods of social isolation. Similar results were observed among Australian undergraduate students in a study that investigated the effectiveness of music listening for managing stress and supporting wellbeing during COVID-19 (Vidas et al., 2021). Results also showed that students who found music listening effective reported better wellbeing. In a large-scale UK study, Bu et al. (2020) found that listening to the radio/music was associated with a decrease in depressive symptoms and an increase in life satisfaction.

Focusing on wellbeing in particular, a study by Granot et al. (2021) looked at the cross-cultural uses of music and other activities in addressing five wellbeing goals during lockdown: release and venting of negative emotions; diversion from the crisis; enjoyment and maintaining good mood; reducing loneliness and creating a sense of togetherness, and connecting with the self and detachment from the surroundings. Music was found to be the most effective activity for three out of five wellbeing goals: enjoyment, venting negative emotions, and self-connection.

Martínez-Castilla et al. (2021) investigated the impact of personal and context-related variables on the perceived efficacy of musical behaviors to fulfill adults' emotional wellbeing-related goals during lockdown. Age and musical training (half the sample was musically trained) seemed to be important. For example, participants in the 18–24 age group showed significantly higher efficacy of musical behavior as compared to the oldest one with regards one wellbeing goal “diversion from the crisis.” Of particular relevance to the study reported in this chapter is that musical training showed a significant effect on the efficacy of musical behavior for four emotional wellbeing goals. It is also interesting to note that for “diversion from the crisis,” musical efficacy was lower for the musically untrained participants compared with each of the musically trained groups (1–3, 4–9, 9+ years of music training). Finally, during the pandemic, the use of music in mood regulation has been observed to have both individual and social applications in the general population. A study by Henry et al. (2021) suggested that musicians may experience emotional responses to music differently than non-musicians. The authors conclude that exploring

differences between musicians and non-musicians in use of music for mood regulation may be important for future studies.

15.1.4 The Present Study

The use of music by undergraduate students, as a means to cope with adversities in times of crisis, such as the COVID-19 pandemic, continues to be an under researched area of study in the emerging adulthood literature. Following on from the studies presented above, it is important to investigate the ways in which music was used by this population to enhance their wellbeing. Furthermore, populations with higher musical training seem to acknowledge the benefits of musical engagement for their wellbeing in adverse circumstances. The current study aims to contribute to the growing evidence with regards to the association between music engagement, musical training, and wellbeing in young individuals. More specifically, the study aimed to investigate (1) the relationship between music usage and students' wellbeing, and whether there is a difference in music usage and wellbeing in those with higher vs. lower musical training, and (2) the ways that music was used by these two groups of students during lockdown and any differences that were evident.

Due to the greater engagement of highly musically trained individuals with music activities, first, it was hypothesized that participants with higher musical training would demonstrate increased awareness of the beneficial effect of music usage for their wellbeing, in contrary to participants with low musical training who would not consider that music usage plays a crucial role for their wellbeing. Second, we expected that music usage for mood regulation would be associated with wellbeing, either positively (individuals that use music for mood regulation have high wellbeing potentially linked to their beneficial music engagement), or negatively (individuals that use music for mood regulation have low wellbeing potentially associated with their overall low mood levels independently of music usage). Third, through a data-driven approach, we attempted to identify potential clusters of participants with similar profiles. Finally, we sought to explore the qualitative ways in which music was used by students with higher and lower musical training. This study hopes to shed light on the relationship between music usage, musical training, and wellbeing, in times of crisis for emerging adults.

15.2 Methods

15.2.1 Participants

One hundred forty-two adult volunteers aged between 18 and 24 years old took part in this experiment. All participants were undergraduate students at the National and

Kapodistrian University of Athens. Participants were separated into two groups, based on a median split of their level of musical training assessed by the Goldsmith's Musical Sophistication Index (Gold-MSI Musical Training sub-scale; Müllensiefen et al., 2014). The group with higher musical training (HM, $N = 71$) had a mean \pm s.d. musical training score of 38.56 ± 2.68 , whereas the group with lower musical training (LM, $N = 71$) had a mean \pm s.d. score of 26.77 ± 2.04 . The median split procedure was validated by an independent t -test showing significantly higher musical training for the HM group compared to LM ($t(140) = 29.46, p < 0.001$).

15.2.2 Materials

The study included the following materials.

15.2.2.1 Musical Training

To evaluate the level of musical training of our participants, the “Musical Training” factor (Gold-MSI Musical Training sub-scale; Müllensiefen et al., 2014) was used. This includes seven statements referring to formal musical training experience and musical skill (e.g., “*I would not consider myself a musician*”) and is scored on a 7-point Likert scale. The measure is scored by summing all responses and the total score ranges from 7 to 49 points. The musical training sub-scale has high reliability (Cronbach's alpha = 0.922) and validity (highly replicable, e.g., see Baker et al., 2020).

15.2.2.2 The Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)

The WEMWBS was developed as a tool to assess mental wellbeing in the UK adult population (Tennant et al., 2007). The scale has been validated in adult populations across Europe as well as adolescents. Test-retest reliability in a UK sample at 1 week was shown to be high (0.83) (Tennant et al., 2007). WEMWBS consists of 14 items scored on a Likert scale from 1 (*None of the time*) to 5 (*All of the time*). The following are examples of two WEMWBS items: “*I've been feeling optimistic about the future,*” “*I've been feeling confident.*”

15.2.2.3 Usage of Music

In order to explore music usage by the different groups of students, the questionnaire utilized the following measures:

1. The Brief Music in Mood Regulation Scale (B-MMR)

The B-MMR comprises a model of mood regulation through music consisting of 7 strategies: entertainment, revival, strong sensation, discharge, mental work, diversion, and solace (Saarikallio, 2012). It has been developed and validated by Saarikallio (2012) with a sample of adolescents, showing high reliability (Cronbach's alpha = 0.93). The sub-scales cover various ways in which music may affect mood by maintaining and enhancing positive mood and dealing with negative emotions. The scale consists of 21 self-report items (3 for each sub-scale) scored on a Likert scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*).

2. Music Usage for Wellbeing

Participants were asked the following questions: "How much has engagement with music (in any way) contributed to increase wellbeing in your life?" and "How much has engagement with music (in any way) contributed to decrease wellbeing in your life?". The questions required a response on a 5-point Likert scale from 1 (Not at all) to 5 (Very much). After reverse-coding the second question, we scored this measure by summing the two responses.

3. Open-Ended Questions (Qualitative)

Three final questions invited required participants to describe: (a) how music contributed to help them deal with challenging circumstances; (b) how they would advise a friend as to how to use music to increase their wellbeing; as well as (c) comment on the phrase "during the pandemic I appreciated more the value of music." The collection of qualitative data within the current study aimed to explore in depth how music was understood, used and valued during the period immediately preceding the distribution of the survey. Similarly, in a study by Carlson et al. (2021) on the role of music in everyday life during the pandemic, a series of free-text answers provided valuable understandings of musical behaviors they had engaged in during the pandemic.

15.2.3 Procedure

In order to explore the initial hypotheses, data on participants' musical training was collected, as well as on the ways that music was used for their wellbeing during the stressful period between March 2020 and May 2021. To this end, the above questionnaire was distributed through Google forms to various departments of the University, with an introductory letter that sought participants' consent in proceeding to complete the questionnaire. On the first page of the questionnaire, participants were informed of the aims of the study as well as the anonymity and confidentiality of their data and their ability to withdraw from the study at any time.

15.2.4 Data Analysis

15.2.4.1 Predicting Wellbeing from Musical Training and Usage of Music

To investigate whether musical training and usage of music predicts wellbeing, we constructed a stepwise linear regression model with wellbeing (as assessed by WEBWBS) as the dependent variable. The following measures were used as predictors: (1) Group (higher musical training, HM, vs. lower musical training, LM), (2) Usage of music for wellbeing (self-report), as well as the B-MMR sub-factors for the use of music for (3) Entertainment, (4) Revival, (5) Strong Sensation, (6) Diversion, (7) Discharge, (8) Mental work, (9) Solace. All predictors showed an acceptable level of multicollinearity (variance inflation factor; $VIF < 5$), confirming the suitability of our data for regression analysis.

15.2.4.2 Clustering of Participants Based on Wellbeing and Music Usage, Separately for the Higher (HM) Versus the Lower (LM) Musical Training Groups

To identify clusters of participants within the two groups (HM vs. LM) with a similar behavioral pattern, a two-step cluster analysis was performed with the following variables: (1) wellbeing, (2) music engagement for wellbeing, and (3) music usage for discharge. As implemented in IBM SPSS Statistics (version 27.0), in the first pre-clustering step, the cases are pre-clustered based on the definition of dense regions in the analyzed attribute space, while in the second clustering step, the pre-clusters are merged in a stepwise way until all clusters are in one cluster. For our analysis, we used log-likelihood as the distance measure and Schwarz's Bayesian Criterion (BIC) as the clustering criterion.

15.2.4.3 Clustering of Participants Based on Wellbeing, Music Usage, and Musical Training

To identify clusters of participants with a similar behavioral pattern with regards to wellbeing, the variables musical training, music engagement for wellbeing and usage of music for discharge were input into a two-step cluster analysis. Log-likelihood was used as the distance measure and Schwarz's Bayesian Criterion (BIC) as the clustering criterion. We included the following variables: (1) wellbeing, (2) music engagement for wellbeing, and (3) usage of music for discharge.

15.2.4.4 Differences Between HM and LM in Music Usage

To examine differences between participants with higher vs. lower musical training with regards to their use of music for mood regulation, we conducted a 2 (*group: HM vs. LM*) x 7 (*B-MMR sub-factor*) mixed ANOVA. Furthermore, an independent *t*-test was performed to compare music engagement for wellbeing between the two groups. All statistical analyses were carried out using the IBM Statistical Package for the Social Sciences (IBM Corp. Released 2020. IBM SPSS Statistics for Windows, Version 27.0. Armonk, NY: IBM Corp.).

15.2.4.5 Qualitative Analysis

As mentioned above, analyses were performed on the free text question “describe the ways in which music has assisted in dealing with challenges.” In total, 105 participants (57 HM and 46 LM) provided answers. The research questions and aim of the study, as well as features of the quantitative scales used in the survey were employed to analyze the data using thematic analysis (Nowell et al., 2017), a method for identifying, analyzing, organizing, describing, and reporting themes found within a data set (Braun & Clarke, 2006). A series of phases, as proposed by Braun and Clarke (2006), was followed in increasing the trustworthiness of the thematic analysis (Nowell et al., 2017). Initial familiarization with the data and generating initial codes included prolonged engagement and documentation of reflective thoughts, as well as co-author debriefing and triangulation and initial open coding of the data. Thereafter, searching for, reviewing and naming themes arising from the free text responses, included a series of steps such as keeping notes on the development of the themes, as well as peer debriefing and team consensus. Finally, writing the final report included providing adequate description of the analysis processes and justification of decisions made.

15.3 Results

15.3.1 Quantitative Results

The descriptive statistics of all the variables are presented in Table 15.1, separately for HM and LM. Average wellbeing values for both groups lie on the lower side (scale ranges from 14 to 70). On the other hand, overall participants seemed to consider that music engagement plays an important role for their wellbeing (music usage for wellbeing ranges from 2 to 10). Similarly, participants scored high on the usage of music for mood regulation (B-MMR scores range from 3 to 15), especially for entertainment and strong sensation, while they scored lower for discharge.

Table 15.1 Mean and standard deviation of all measures, separately for the higher musical training (HM) and the lower musical training (LM) groups

	Higher musical training (HM)		Lower musical training (LM)	
	Mean	SD	Mean	SD
Musical training (gold-MSI)	38.56	2.68	26.77	2.04
Wellbeing (WEMWBS)	25.31	4.86	25.48	4.50
Music usage for wellbeing (self-report)	8.97	1.29	8.66	1.21
Entertainment (B-MMR)	12.48	2.62	12.85	2.23
Revival (B-MMR)	11.18	2.86	11.17	3.01
Strong sensation (B-MMR)	13.42	1.93	12.52	2.18
Diversion (B-MMR)	11.48	2.85	11.24	3.02
Discharge (B-MMR)	8.77	3.73	8.97	4.07
Mental work (B-MMR)	11.63	2.97	10.20	3.16
Solace (B-MMR)	11.58	2.72	10.69	3.28

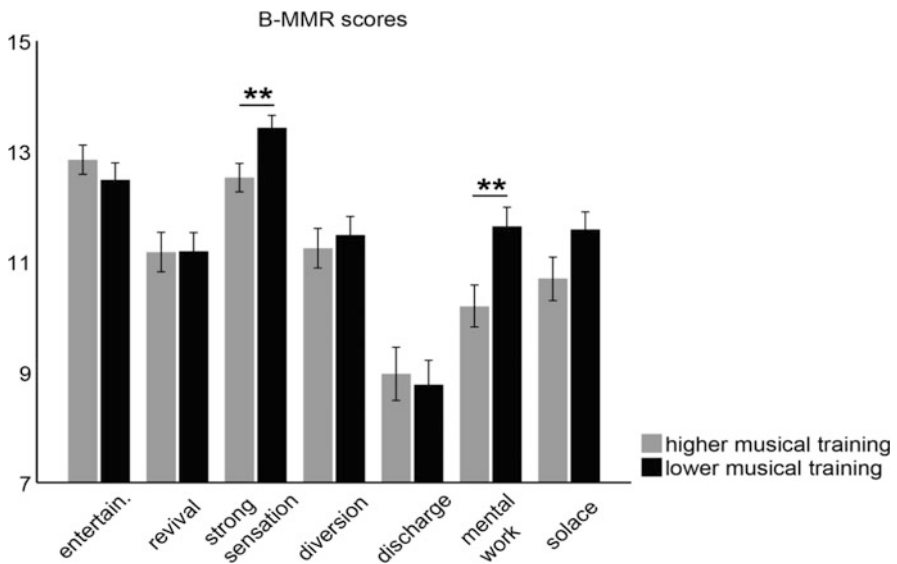


Fig. 15.1 Average scores for each B-MMR sub-factor, separately for HM (black) vs. LM (gray): entertainment, revival, strong sensation, diversion, discharge, mental work, and solace. Error bars represent ± 1 SEM. ** $p < 0.01$

15.3.1.1 Differences Between Higher (HM) and Lower (LM) Musical Training Groups in Usage of Music for Mood Regulation

To examine group differences in the use of music for mood regulation, we conducted a 2 (HM vs. LM) \times 7 (B-MMR sub-factors) mixed ANOVA (Fig. 15.1). Results revealed a significant main effect of B-MMR ($F(6,840) = 55.803, p < 0.001$,

$\eta^2 = 0.285$), as well as an interaction between B-MMR sub-factors and group ($F(6,840) = 3.483, p = 0.002, \eta^2 = 0.024$). Pairwise comparisons showed that the interaction was due to HM experiencing stronger sensation ($t(140) = 2.605, p = 0.010$) as well as mental work ($t(140) = 2.794, p = 0.006$) with music usage compared to LM.

Finally, an independent t -test was performed to compare music engagement for wellbeing (self-reported) between the two groups. There was no significant difference between the groups ($t(140) = 1.480, p = 0.141$).

15.3.1.2 Predicting Wellbeing from Musical Training and Usage of Music

We conducted a stepwise linear regression analysis with group (HM vs. LM), music usage for wellbeing (self-report), and music usage for mood regulation (7 sub-factors) as predictors, and wellbeing as the dependent variable. Results revealed that only two variables significantly predicted wellbeing: music usage for wellbeing positively and music usage for discharge negatively ($F(2,139) = 6.761, p = 0.002, R^2 = 0.089$). Both variables added significantly to the prediction ($p < 0.013$) (Fig. 15.2).

15.3.1.3 Clustering of Participants Based on Wellbeing and Music Usage, Separately for the Higher (HM) Versus the Lower (LM) Musical Training Groups

We investigated whether sub-groups with similar behavioural patterns associated with wellbeing could be identified within HM and LM. We thus included wellbeing and the significant predictors emerged from the linear regression analysis (music

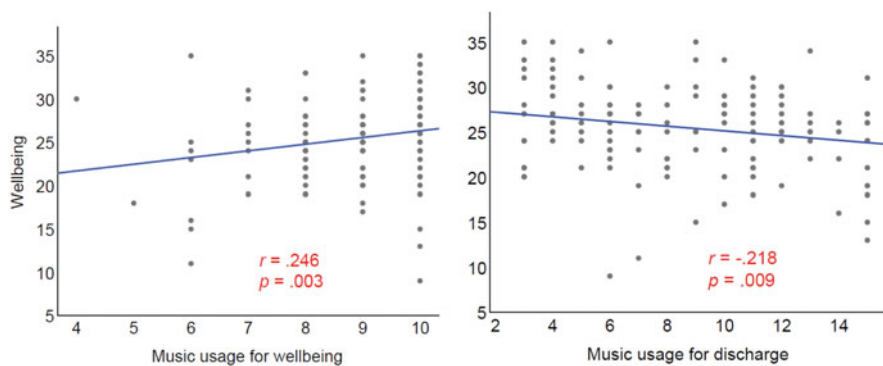


Fig. 15.2 Spearman correlations between wellbeing and (a) music usage for wellbeing and (b) music usage for discharge (B-MMR sub-factor)

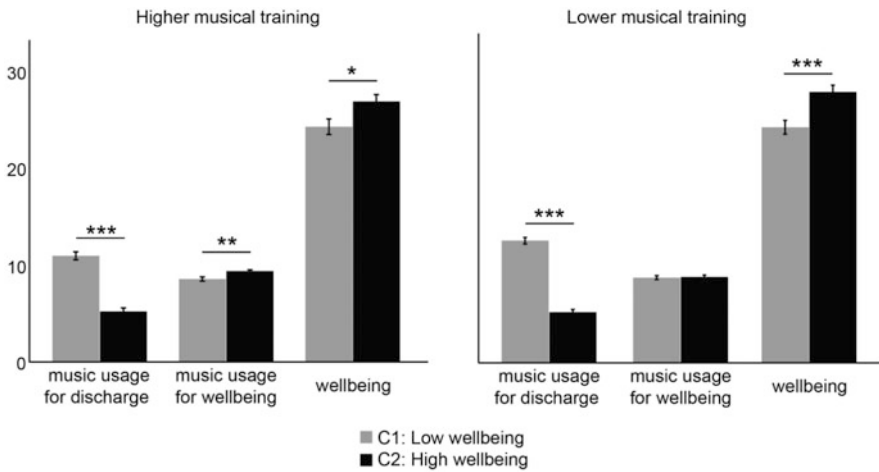


Fig. 15.3 Results of the cluster analysis, separately for HM (left panel) and LM (right panel). Average scores for each variable, separately for each of the two clusters. Error bars represent ± 1 SEM. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 15.2 Relative predictor importance to the clustering solution as revealed by the two-step clustering analysis using wellbeing, music usage for discharge and music usage for wellbeing as predictors, separately for the higher (HM) and the lower (LM) musical training groups

	HM	LM
Music usage for discharge	1.00	1.00
Music usage for wellbeing	0.15	0.00
Wellbeing	0.12	0.13

usage for discharge, music usage for wellbeing) in a two-step clustering analysis, separately for the two groups (Fig. 15.3).

With regards to HM, all variables had predictor importance > 0.1 (music use for discharge = 1; wellbeing = 0.12; music usage for wellbeing = 0.15) (Table 15.2). The analysis revealed two clusters of participants. Cluster 1 ($N = 43$, 60.6%) comprised participants who used music for discharge to a large extent but scored low in wellbeing and music usage for wellbeing. Cluster 2 ($N = 28$, 39.4%) comprised participants who used music for discharge to a lesser extent but scored high in both wellbeing and music usage for wellbeing. A one-way ANOVA showed that the two clusters differed significantly in all scores (music use for discharge: $F(1,69) = 93.881$, $p < 0.001$; wellbeing: $F(1,69) = 5.193$, $p = 0.026$; music use for wellbeing: $F(1,69) = 7.387$, $p = 0.008$).

With regards to LM, music usage for wellbeing seemed to be less associated with the other measures (see Table 15.2 for predictor importance). The analysis revealed two clusters of participants. Participants in Cluster 1 ($N = 38$, 53.5%) used music for discharge to a large extent, but scored low in wellbeing and moderate for music usage for wellbeing. Participants in Cluster 2 ($N = 33$, 46.5%) used music to

discharge to a lesser extent but scored high in wellbeing and moderate in music usage for wellbeing. A one-way ANOVA showed that the clusters differed significantly in music use for discharge ($F(1,69) = 256.713, p < 0.001$) and wellbeing ($F(1,69) = 13.094, p = 0.001$) but not in music use for wellbeing ($F(1,69) = 0.051, p = 0.822$).

15.3.1.4 Clustering of Participants Based on Wellbeing, Music Usage and Musical Training

We used wellbeing, music usage for discharge, music usage for wellbeing plus musical training in a two-step clustering analysis to identify potential groups of participants (Fig. 15.4).

Inspection of the predictor importance revealed that discharge had a value close to zero. We therefore removed this variable and re-run the clustering analysis, obtaining appropriate predictor importance values: musical training = 1; wellbeing = 0.28; music usage for wellbeing = 0.22. Cluster 1 (C1; N = 32, 22.5%) included highly musically trained participants; however, those participants showed substantially low wellbeing as well as usage of music for their wellbeing. Cluster 2 (C2; N = 65, 45.8%) comprised of participants with very low musical training, medium-high wellbeing, and medium-high usage of music for their wellbeing. Cluster 3 (C3; N = 45, 31.7%) comprised of the most highly musically trained participants, which reported the highest wellbeing as well as usage of music for their wellbeing.

Pairwise contrasts revealed that C2 had significantly lower musical training compared to C1 ($t(95) = -16.00, p < 0.001$) and C3 ($t(108) = -25.99,$

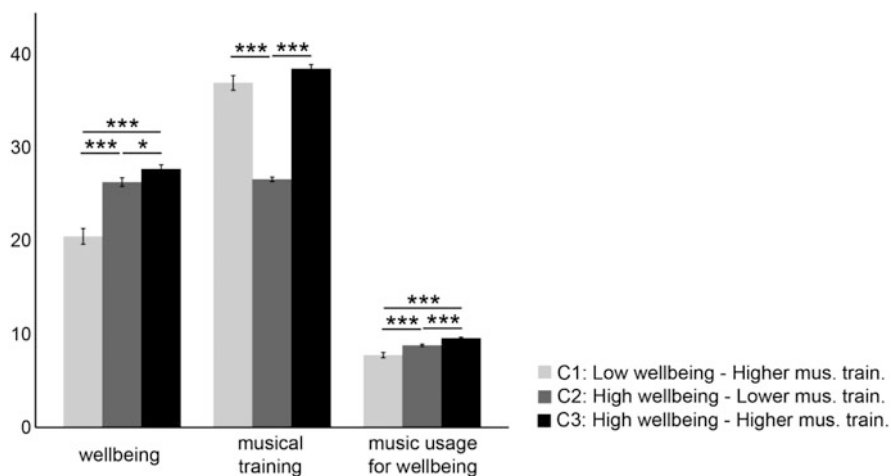


Fig. 15.4 Results of the cluster analysis. Average scores for each variable, separately for each cluster. Error bars represent ± 1 SEM. * $p < 0.05$, *** $p < 0.001$

$p < 0.001$), but C1 was not significantly different than C3 ($t(75) = -1.81$, $p = 0.075$). Interestingly, C1 reported significantly lower wellbeing compared to both C2 ($t(95) = -6.59$, $p < 0.001$) and C3 ($t(75) = -8.10$, $p < 0.001$), while also C3 showed higher wellbeing than C2 ($t(108) = 2.09$, $p = 0.039$). Finally, C3 reported the highest contribution of music usage to their wellbeing compared to C1 ($t(75) = 7.02$, $p < 0.001$) and C2 ($t(108) = 4.55$, $p < 0.001$), while also C2 scored higher than C1 ($t(95) = 4.04$, $p < 0.001$).

15.3.2 *Qualitative Findings*

Of the 105 participants' responses, 84 were used for thematic analysis, as answers that did not address the question and were off-topic were discarded. Five major themes were identified in relation to music usage in regulating mood in challenging circumstances: diversion, release, comfort/refuge, energize, and broadening (Table 15.2). Themes were drawn from the literature on music usage during the pandemic (e.g., Martínez-Castilla et al., 2021), from the B-MMR items (Saarikallio, 2010), as well as inductively arising from the open coding of the data.

The clustering of participants based on wellbeing, music usage and musical training revealed three groups: participants with low wellbeing and high musical training (C1), participants with high musical training and high wellbeing (C2), as well as participants with high wellbeing and low musical training (C3). For the qualitative analysis we drew on the free-text responses for each of these groups and looked specifically at how each of these groups of participants reported using music to deal with challenging circumstances during the 12 months preceding the distribution of the questionnaire. For this chapter, the analysis focused on the results of the first open-ended question ("how music contributed to dealing with challenging circumstances") as this provided the richest responses. Table 15.3 presents the five themes arising from the thematic analysis of the data from this first question, the numerical instances each were coded for groups C1, C2, and C3 as well as exemplars of raw data coded for each theme.

As illustrated in Table 15.3, the smaller group of undergraduate students (C1, $n = 32$) who reported high musical training and low wellbeing offered 22 responses to the question, yet only 12 were considered relevant to the question; 5 referring to using music to express and release negative emotions, 3 to using music as a source of comfort/refuge; and 2 responses referred to using music to clarify feelings/cognitive processes; no responses emerged for the theme "music as a source of energy/motivation." The second group (C2) of higher musical training students who also self-reported high wellbeing ($n = 45$) offered 35 responses overall, and 32 are coded as being relevant to the question. The theme Release (using music to express/release negative emotions) is coded for 10 cases, with the remaining themes (diversion, comfort, energize, broadening) each coded for 5–6 cases. For both the above groups with high musical training, the theme Release was coded for the most responses within the data.

Table 15.3 Summary of main findings from the qualitative analysis

Theme	Description	Instances theme coded for each cluster	Exemplars from raw data
Diversion	Using music as a source of diversion from unwanted emotions	C1: H/L = 2 C2: H/H = 6 C3: L/H = 16	<i>Just forgetting my problems. It's just a way out. I forget anything that is painful and just focus on the music. Through (music) I can express my feelings and manage somehow to forget and feel better.</i>
Release	Using music to express and release negative emotions	C1: H/L = 5 C2: H/H = 10 C3: L/H = 5	<i>It relieves my stress and anxiety in my difficult moments. ..To express my difficulties and just "get it out." It makes me express the negative emotions I suppress because of difficulty.</i>
Comfort/Refuge	Using music as a source of comfort or as a refuge	C1: H/L = 3 C2: H/H = 5 C3: L/H = 6	<i>(music) is a refuge, my "go to" place during difficult times. Music is next to me, it keeps me company. It provides comfort. It relieves me in a way I can't explain.</i>
Energise	Using music as a source of energy/ For motivation	C1: H/L = 0 C2: H/H = 6 C3: L/H = 10	<i>Music is a way of letting go, of feeling "high." It motivates me to continue moving forward. It spurs me on.</i>
Broadening	Using music to clarify feelings and cognitive processes	C1: H/L = 2 C2: H/H = 6 C3: L/H = 6	<i>Allows me to look at this in a more positive light. Clarity of thought and feelings, just really knowing where I am right now. It offers different ways of thinking and dealing with problems, new ideas and options in making decisions and dealing with everyday reality. Music opens new pathways, it creates solutions to my problems.</i>

Participants' responses were categorized based on their topic (Column 1: Theme) as revealed by the Description in Column 2. Column 3 shows the number of instances that the given theme was identified in each cluster (1–3). Column 4 provides examples from the raw data

Key: Cluster 1: H/L Higher musical training, low wellbeing; Cluster 2: H/H Higher musical training/ high wellbeing; Cluster 3: L/H Lower musical training/ High wellbeing

The third cluster (C3) of lower musical training with high wellbeing ($n = 65$) offered 48 free text responses overall, with 40 of these coded as being relevant to the question. The theme Diversion was coded for the most responses (16 in total),

followed by Energize (10) and the remaining themes (release, comfort, broadening) were each coded for 5–6 cases.

15.4 Discussion

Exploring the role of music for the wellbeing of the undergraduate Greek students during the COVID-19 lockdown, this study sought to investigate (1) the relationship between music usage and students' wellbeing, and whether there is a difference in music usage and wellbeing in those with higher vs. lower musical training, and (2) the ways that music was used by these two groups of students during lockdown and any differences that were evident.

15.4.1 *The Relationship of Music Usage and Wellbeing*

The quantitative and qualitative data analysis illustrated that music engagement is considered an important factor contributing to participants' wellbeing, whether musically trained or not. Both groups of emerging adults in their self-reports recognized the influence that music usage had on their wellbeing. This was also verified by the results in the mood regulation questionnaire (B-MMR). These findings confirm relevant research (Fancourt & Finn, 2019; Vamvakaris, 2020) that revealed the positive association between music engagement and feelings of connectedness and emotional experiences as well as self-reported health and wellbeing.

Wellbeing during lockdown was positively correlated with the perceived contribution of music engagement to wellbeing. Specifically, individuals who believed that their music engagement enhanced their wellbeing, actually scored higher on the wellbeing scale. Prior studies suggested that perceived wellbeing through music performance or music listening is positively related to individuals' ratings of music's importance in their lives (Saarikallio, 2012; Krause et al., 2021). In line with this finding, the qualitative analysis of the participants' free-text responses showed that those with higher wellbeing revealed greater variability with regards to how music was used for their wellbeing. Conversely, those with low wellbeing, who were also musically trained, provided fewer responses with less variation in the ways they used music for their wellbeing.

Why would music students with low wellbeing consider music less important for their level of wellbeing? This may be linked to the potential harmful impact that COVID-19 had for the music industry and for musicians' livelihood, but in this study no information was collected about participants' professional and fiscal status. Prior studies on the impact of the first COVID-19 lockdown on performing arts professionals however revealed the decrease in mental and social wellbeing and the instability derived from the pandemic for performing artists, including musicians

(Spiro et al., 2021). A European Union report (Culture Action Europe & Dâmaso, 2021) emphasized the exacerbation of the difficult financial situation faced by many artists and cultural creators, while laying out the characteristics of artistic and cultural work, characterized by higher intermittence, heterogeneity, and instability than other sectors.

15.4.2 Ways Music Was Used During the COVID-19 Pandemic

The quantitative analysis revealed three distinct clusters of participants: two clusters scored high on wellbeing, one of them including participants with low musical training and the other one participants with high musical training. The third cluster scored surprisingly low on wellbeing, and it comprised of highly musically trained participants. Qualitative results showed that participants in the latter group provided a lower variety of themes, in other words, they seemed to use music in limited ways; moreover, 50% of their answers were off-topic. A possible explanation for this group's answers could be that their wellbeing relied more on aspects of their daily life that were not captured by the questionnaire. It is possible that this group consisted of musicians who faced a particularly negative impact by the pandemic lockdowns on their livelihood and professional life.

A wider use of music for wellbeing was reported by students with high wellbeing and higher musical training, suggesting that these students tend to use music in *diverse* ways in order to support their wellbeing. This finding complements recent research revealing that under stressful circumstances such as COVID-19, musical training can enhance the usefulness of music for wellbeing promotion (Martínez-Castilla et al., 2021). Overall, participants with high wellbeing (independent of the level of musical training) were found to utilize music in a wider range of ways in their daily lives compared to participants with low wellbeing and high musical training, who do not seem to use music as a means to enhance their wellbeing levels.

15.4.3 Limitations and Future Research

This study has a number of limitations that should be noted here. The questionnaire was completed retrospectively; answers therefore were based on participants' memories of their behaviors and emotions/mood during the recurring lockdowns of 2020–21. Also, music usage and wellbeing measures were not collected prior to the pandemic for comparison purposes. Moreover, the sample was small, and the questionnaire was distributed through our networks and not randomly to all departments within the University of Athens. Furthermore, this study did not investigate potential effects of demographics (e.g., age, gender, socioeconomic background) on

our variables of interest. Our sample was considered as having common characteristics in terms of age (emerging adults). At the same time, we limited our research questions and chose not to extend the scope of our research to include socioeconomic status and professional association with music.

Future studies are needed to investigate music and wellbeing in times of crises after validation of the Greek-translated questionnaires that were used. Further research might also consider the variables of age and gender, type of musical training/musical instrument. It also calls for more investigation of the causes of low wellbeing and its characteristics within specific social groups, such as music students, training to be professional musicians. Research by Demirbatir, Bayram, & Bilgel (2012, in Adamopoulou, 2018) for example, found that higher education music students have elevated levels of depression and stress even compared to medical students. Studies focusing specifically on music students and their wellbeing could shed further light on the above findings. Professional musicians' wellbeing and livelihood during challenging times also calls for further attention with regards to the role and accessibility to psychosocial resources available to them.

15.5 Conclusion

This mixed-methods study investigated the relationship between musical training, music usage, and wellbeing, in Greek undergraduate students during the COVID-19 lockdown. Through the quantitative results and with the enhancement and illumination offered by the qualitative data, this study opens a window for further research on emerging adults' wellbeing and the contributing role of music. Participants with high musical training were aware of the beneficial effect of music to their wellbeing. This evidence is an important addition to the exploration of the use of music in promoting wellbeing and mental health in general populations and in groups of musically trained individuals.

A significant finding requiring further research is the identification of a group of highly musically trained participants with substantially low wellbeing, indicating the devastating effect that COVID-19 pandemic had on them at a professional level.

Finally, the wide variety of ways in which music was being used by participants with high musical training and those with high wellbeing is particularly meaningful, as it not only provides further evidence for the relationship between musical training and music usage, and wellbeing in times of crisis for emerging adults; it also foregrounds the role of music activities as a rich, yet underutilized resource for mental health and wellbeing.

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Chapter 16

Empowering Emerging Adults to Face the Post-COVID-19 Challenges



Ulisses Araujo, Viviane Pinheiro, Valeria Arantes, and Douglas Pereira

Abstract Purpose in life and well-being are essential psychological constructs that, developed by emergent adults in times of the COVID-19 pandemic, may strengthen positive aspects of their identity. In this chapter, we will explore how collaborative work with graduate and undergraduate students may support them in reflecting and building purpose and well-being in their lives and in the lives of others. The starting point is the constructivism epistemology and the adoption of active learning techniques as educational methodological tools for developing the skills and competencies necessary to live in a world of uncertainty and indeterminacy. The chapter's primary goal is to explore and detail the pedagogical process developed through active learning methodologies, hybrid learning, and technology tools during the pandemic. Students from a Brazilian university had to work collaboratively in groups for 16 weeks in the framework designed to identify and prototype solutions to social and/or psychological challenges. Participants were challenged to face and solve real problems through the project's development. Then, using Design Thinking, the maker culture, and peer-to-peer perspectives in professional and non-professional settings, the students had to create programs or tools to empower young adults, promoting their purpose and well-being. The framework's three complementary and iterative phases were based on the Design Thinking perspective:

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Listening/observing, creating/prototyping, testing/implementing. In the end, the chapter describes the challenges faced, the pedagogical process, and the solution prototypes developed by the students, aiming at empowering emergent adults in their inevitable encounters with an unpredictable and uncertain future.

Keywords Well-being · Purpose · Emerging adults · Active learning methodologies

16.1 Introduction

Millions of lives lost and unimaginable changes in our daily routine are consequences of the COVID-19 pandemic, constituting a highly adverse period in human history. Furthermore, deprivation of freedom, proximity or experience of the disease, social isolation, and the intensification of virtual media use in interpersonal relationships provoked discomfort and negative emotions and feelings, such as fear, uncertainty, and anxiety. In this scenario, it is evident that the direct and indirect psychological and social effects of the COVID-19 pandemic are pervasive and could affect mental health now and in the future (American Psychological Association, 2020; Holmes et al., 2020), claiming for transformations in society.

With the growing adversity experienced during the pandemic, concern with the population's well-being has grown, especially for emerging adulthood that theorists have considered a crucial moment for developing identity in contemporary societies (Arnett, 2000). In this critical life period emerging adults have to define who they are, consolidate their role in the world by experiencing different social roles, and reflect on professional perspectives, sexual orientation, religion, and political adherences (Erikson, 1968, 1980).

The domains of education and work have been affected by societal transformations in this century. However, the pandemic has accelerated the pace of changes and stressed the need for shifts in the personal, social, and professional domains. Furthermore, the accelerated technological development transformed communication interactions and professions via social media. These changes produced a picture of uncertainties that may leave the current generation of emerging adults in social and psychological vulnerability. After all, they must get ready for adulthood and live in a world that no one knows yet. Experiencing this stage of life in times of uncertainty and adversity can impact their development by limiting the chances of drawing up their futures. The pandemic consequences restricted emerging adults' possibilities of identity construction and purposes development (White, 2020); moreover, it further aggravated situations of social vulnerability (Luz et al., 2020). Therefore, there is a solid demand for the academic field to investigate the well-being of emerging adults in the COVID-19 pandemic situation to seek strategies to support them.

This vision is recently inspiring the work conducted at the University of São Paulo (Brazil), aimed at studying the impact of the pandemic on emerging adults. How to empower them in these complex times, aiming at their psychological strengthening? After all, nowadays it is impossible to deal with future perspectives

anchored in assumptions of certainty and determination. It remains necessary to think about psychological strengthening strategies that turn uncertainty, unpredictability, and chaos into natural anchoring elements in personality, rather than sources of stress.

The starting point to address this perspective is to strengthen purpose in life. Considered one of the fundamental aspects of well-being, having a purpose can be an invaluable psychic source for dealing with adversity and, more broadly, for the positive development of emerging adults (White, 2020). We understand purpose as proposed by Damon et al. (2003, p. 121): a “stable and generalized intention to accomplish something that is at the same time meaningful to the self and consequential to the world beyond the self.” So, the development of purposes is a psychological force that organizes actions and moves people about their future (Araújo et al., 2020). It can help emerging adults in the simultaneous search for individual and collective happiness, creating an ethical sense of making a difference in the world and doing something of their own that can contribute to others and society. In this sense, the development of this psychological construct can be an important psychological tool for the post-pandemic life.

Inspired by Paulo Freire, John Dewey, Jean Piaget, and Lev Vygotsky, we assume that the psychological construction of purpose and well-being needs to be anchored in emancipatory and active educational processes. Besides that, it should be based on complexity, uncertainty, and indeterminacy principles, allowing emerging adults to be empowered to face the challenges of contemporary societies in the twenty-first century in a post-pandemic world. To face this challenge, we defend that active learning methodologies are an essential educational paradigm to promote optimal development.

In summary, in this chapter, we will try to answer the question: can we design programs that will empower emerging adults to face the post-COVID-19 challenges? First, we will present the concept of well-being from a historical, multidimensional, and complex perspective. Next, we will discuss the characteristics and relevance of the meaning of purpose in life. Then, we will present the constructivism epistemology and justify the adoption of active learning as educational tools for developing the skills and competencies necessary to live in a world of uncertainty and indeterminacy. Lastly, we will present examples of educational interventions with undergraduate and graduate students. These interventions were used to help emerging adults in the reflection and construction of purposes that contribute to their well-being and empowerment, with the ambition that their actions positively impact and transform the post-pandemic world.

16.2 A Multidimensional Perspective of Well-Being

The field of philosophy historically focused on the search for well-being, producing studies that oriented other areas of knowledge. Briefly, two lines of thought stood out: the *eudaimonic* perspective, by Aristotle, in which the search for a good

life refers to continuous growth and commitment toward the supreme Good; and the *hedonic* perspective, by Aristippus of Cyrene, in which a moderate life and controlling our fears and desires can promote a pleasant and happy life. Both views constitute the basis of well-being studies until the present time (Bedford-Petersen et al., 2019).

In psychology, studies that thematize well-being gained strength from the late 1990s. In the wake of the scientific movement of positive psychology, an approach was proposed to investigate the strengths and qualities related to healthy and positive development (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000). Establishing well-being as its final objective (Seligman, 2011), positive psychology moves from the theories previously consolidated in the area, which already approached well-being from different philosophical assumptions, by putting them to the test empirically. According to Ryan and Deci (2001), investigations on well-being in the field of psychology were divided into two fronts: subjective well-being (Diener, 1984), based on philosophical assumptions of hedonism; and psychological well-being (Ryff, 1989) grounded in the Aristotelian thought of eudaimonia.

Diener (1984) describes subjective well-being based on three aspects: subjectivity, that is, an individual attribution of evaluation in the face of an experience; the predominance of positive affects to the detriment of negative affects; and the global assessment of life, in the sense that only the individual can judge the satisfaction he has in his life as a whole, and not just in a specific area. Subjective well-being can be measured by judging pleasurable experiences in terms of positive affect, absence of negative affect, and the cognitive assessment of overall life satisfaction (Diener et al., 1999). Thus, subjective well-being is based on the logic of pleasure and immediate gratification, a hedonistic philosophical heritage (Myers & Diener, 1995). When considering people's evaluations of their lives, subjective well-being constitutes an important phenomenon to be considered as an aspect of the good life (Diener et al., 2018).

In contrast, Ryff (1989) proposes that the evaluation of a good life needs to go beyond an immediate logic of pleasure and satisfaction. Accordingly, the enhancement of one's potential, self-fulfillment, and the development of meaningful relationships need to be considered in assessing human well-being. For Ryff, well-being would result from actions that favor self-fulfillment and full psychological functioning. Rescuing the Aristotelian sense of eudaimonia, the author proposes the multidimensional construct of psychological well-being composed of six elements: self-acceptance, positive relationships, autonomy, environmental mastery, life purpose, and personal growth (Ryff & Keyes, 1995; Ryff & Singer, 2008; Ryff, 2013).

While different perspectives in the study of well-being have evolved separately, some researchers have sought for evidence of a connection between them. For example, Baumeister and Vohs (2002) highlighted the need for an integrative look at the human being between the cognitive aspects of satisfaction and the human need for meaning in life. In addition, Keyes et al. (2002), studying well-being and personality, demonstrated reliable correlations between subjective well-being and psychological well-being.

Although theories about subjective and psychological well-being are widely referenced, the polarization in the understanding of well-being in a hedonic or eudemonic perspective does not favor the theoretical maturation of this research field (Delle Fave et al., 2011). Many researchers have come to understand it as a broad concept that encompasses both a hedonic and eudemonic perspective, as well as incorporating psychological and social aspects (Delle Fave et al., 2011; Henderson & Knight, 2012; Huta & Waterman, 2014; Ryan & Deci, 2006; Vella-Brodrick et al., 2009;). For Delle Fave et al. (2011, 2013), well-being would be a broad, multidimensional construct that flows between pleasure and existential challenge, composed of several elements, including happiness, the construction of goals in life, and what promotes meaning in life. The understanding of well-being has gradually expanded, including elements that act in an integrated way in the human psyche.

Enfolding this approach, Mahali et al. (2018) also consider contextual differences and the relationship between well-being and social inequality, injustice, gender differences, and violence. Thus, the understanding of well-being needs to be consolidated in a critical perspective, which expands the focus of well-being beyond the individual and relational, encompassing the entire sociocultural context in which people aspire to feel good (Mahali et al., 2018; White, 2010). Promoting life purposes can be a fruitful way to foster emerging adults' well-being in this perspective, and in COVID-19 times, especially because this group reports higher and increasing levels of stress and the occurrence of anxiety and depression symptoms under crisis (Czeisler et al., 2020).

16.3 Purpose and Well-Being of Emerging Adults

According to theories that seek to identify ways to support positive development, purpose in life is fundamental to well-being (Bronk, 2014). Purpose constitutes an internal force, built throughout life and through significant experiences in different contexts and relationships, which lasts long enough to organize, motivate, and mobilize plans, behaviors, and short- and long-term goals (Damon, 2009). Furthermore, purpose in life connects to what is most central to our identity and represents the desire to connect or impact the world beyond itself (Bronk, 2011).

The first theories that turned to purpose as an essential component of well-being and positive development provided glimpses about the ways of dealing with difficult circumstances. A landmark of these theories is the work of Viktor Frankl (1946/2008). Based on his experiences in concentration camps during World War II, Frankl argued that those who demonstrated beliefs about the meaning of life were better able to cope with the suffering that afflicted them than those who struggled only to survive. Thus, he founded "logotherapy," clinical approach in psychology based on the idea that having a purpose, carried out through self-transcendence in the involvement with goals beyond oneself, is the basis for promoting mental health and prevention of what he called "existential void," that can cause depression and disorders such as anxiety and drug addiction.

When analyzing how people can feel good and prosper, some positive psychology theories bring purpose as one of the most important contributors to mental health (Ryff, 1989; Ryff & Singer, 2008; Seligman, 2004, 2011). In these theories, purpose appears to be an instrument to face adversity, and a fundamental component to prosper and develop fully, with personal satisfaction and welfare. Complementarily, the studies by Peterson and Seligman (2004) were aimed at identifying character strengths and virtues that promote psychological well-being through a classification called Values in Action (VIA). Based on factor analysis using the VIA, six major character strengths were revealed: temperance (e.g., prudence and moral regulation), wisdom (e.g., curiosity and willingness to learn), mobilization to the other (e.g., kindness and collaboration), justice (e.g., fairness, meaningful leadership, and social responsibility), courage (e.g., act on convictions and face challenges despite doubts and fears), transcendence (e.g., gratitude and purpose) (Park & Peterson, 2006). In this framework the strength of transcendence, which encompasses purpose, comes up with a strong possibility of favoring the individual's sense of direction and connection with others (Gillham et al., 2011).

Purpose plays a central role in theories that focus on positive development (Bronk, 2014). Arnett (2000) points out that it continues to be developed in emerging adulthood due to the extension of this period in contemporary societies (Malin et al., 2013). Emerging adulthood represents a psychological, biological, social, and cultural condition, in which individuals are more aware of themselves, open to the world, and begin to understand themselves as social agents. It constitutes a fundamental period for the commitment to purposes, the construction of identity, and, consequently, healthy mental development throughout life (Erikson, 1968, 1980).

The construction of identity and purpose are related and highly intertwined processes, as they share the focus on the person's beliefs, values, and goals. Although they are evidenced in the same stage of life, between adolescence and emerging adulthood, and share the same focus, they are different constructs. Identity refers to whom we want to be or believe we are, as purpose refers to what we want to achieve (Bronk, 2011).

The integration between the constitution of identity and purpose supports positive development and well-being. However, not everyone accomplishes such integration; although all human beings explore and commit to an identity, not everyone builds a purpose that guides them in a significant direction (Moran, 2009). Research in several countries shows that a small proportion of young people and emerging adults have a purpose in life (Bronk, 2014).

Purpose's significant driven force may impact emerging adults well-being and of those around them, making them capable of transforming the contexts in which they live. Emerging adults must find support to understand the strength of their purpose to overcome individual and collective difficulties inherent in contexts of social vulnerability (Arantes & Pinheiro, 2021; Pizzolato et al., 2011) and develop healthily. Mahali et al. (2018) warn that contexts of social vulnerability can promote, in individuals who experience severe deprivation, a distance between dreams and real possibilities.

In this sense, we believe that education is a critical resource (although not the only one) to develop and strengthen purpose (Damon, 2009; Malin, 2018). Studies indicate that meaningful and structured educational interventions (Mariano et al., 2014; Danza, 2019) can nurture purpose development, allowing young people and emerging adults to give an ethical meaning to their lives. Besides, it may provide them with a stable pursuit of long-term goals, positively affecting their well-being and collective well-being.

16.4 Constructivism and Active Learning as Psychological and Educational Principles for Emergent Adults' Strengthening

What Jean Piaget (1967) and Ernst Von Glasersfeld (1984) called “radical constructivism” is an epistemological approach in which knowledge is constructed through the creative actions of human beings toward the objective and subjective world they live in. For the Brazilian educator Paulo Freire (2005), knowledge results from the human creative process. Adopting the conception of these authors, we consider human beings as authors of knowledge and protagonists of their own lives, rather than mere reproducers of what society decides they should learn or that their genes decree (Araújo et al., 2021). In summary, constructivism is an approach that promotes and invites an intellectual adventure. In an educational setting it gives voice to students, fosters dialogue, incites their curiosity, leads them to question everyday life and scientific knowledge (Araújo et al., 2021).

The constructivist epistemology and its educational repercussions bring coherence to an approach that seeks to empower emerging adults when facing the challenges of a complex and uncertain post-pandemic society, searching for a meaningful and purposeful life. Moreover, this approach may foster emerging adults' strengthening of positive skills and competencies, autonomy and resiliency, toward their own well-being, the well-being of the people they live with, and the well-being of society.

As researchers in the educational field, the question that we pose is, “can we design programs that will empower emerging adults to face the post-COVID-19 challenges?” The answer must be consistent with the constructivist epistemology and its connection to the learn-by-doing perspective. The construction of knowledge and meaning occurs through significant, contextualized, real-world situations, in which the emerging adults learn and develop problem-solving skills and competencies to live in undetermined life scenarios. These are the core of what is called the active learning methodologies.

According to Prince (2004), active learning is generally defined as any instructional method that involves students in the learning process. In a classic book, Bonwell and Eison (1991) say that active learning is an instructional activity involving students doing things and thinking about what they are doing. Thus, active

learning methods in education have a central theoretical assumption: the student assumes a central and active role in learning and the search for knowledge, co-constructing the world and reality that are not considered ready.

So many active learning methods have been developed worldwide through the years, coherent to these epistemological perspectives. However, to the purpose of our work, we deem as specifically useful three active methodologies: Problem and Project-Based Learning (PPBL), Design Thinking (DT), and the Maker Culture (MC). We understand that they need to be incorporated as the central axle of pedagogical practices through active, interactive, contextualized real-world collaborative teaching methods, to empower emergent adults (Araujo et al., 2014; Decker & Bouhuijs, 2009).

Briefly, Project-Based Learning is understood as a variation of the Problem-Based Learning method. In the PPBL perspective, students work in groups to collaboratively identify, understand, and solve real contextualized problems. The problems to be studied are broad and require that more than one person works in it, in a more extended period, due to the complexity of the variables involved in the phenomenon. So, it is not an individual process or activity.

According to Plattner et al. (2014), Design Thinking (DT) is a human-centric methodology based on projects. It is developed collectively, and the group work starts with a real, local challenge or problem by examining the needs, dreams, and behaviors, searching to design and prototype solutions for the problems being studied (IDEO, 2009).

The Maker perspective is a transformative active learning method in which projects are deeply connected with meaningful problems, either at a personal or community level. The maker culture encourages students to break down barriers, explore, collaborate, use materials in new ways, and ultimately learn by doing (Martin, 2015). The designed solutions to those problems, using a hands-on approach, are prototyped through drawings, mockups, physical or virtual modeling, or using any demonstrational language. It is empowering because it sets the learner at the center of the learning process. Moreover, as a co-creator of a world that is not predetermined.

In summary, constructivism or co-constructivism, in conjunction with active learning methodologies such as the three above mentioned, is aligned with a perspective in which the students who go through these experiences are demanded to deal with real-life scenarios of complexity, uncertainty, and indetermination. When developing projects in which they learn to identify problems, and to design and prototype solutions that are not given previously, they are defied to be creative and get used to the uncertainties of life as a normal pattern of nature. We strongly believe that this educational model can be a source for emergent adults' psychological strengthening and empowerment.

The following sections will present some interventions developed in Brazilian graduate and undergraduate college courses, exemplifying how this approach can be developed as a teaching perspective in higher education. We also believe that it can be transferred to any area of knowledge and level of education.

16.5 Educational Strategies to Strengthen Emerging Adults' Psyche

We have designed and developed a framework used in different undergraduate and graduate courses in the past few years, which we adapted to remote courses in the COVID-19 pandemic scenario, with social distancing and schools paralyzed in Brazil (Pinheiro & Guedes de Seixas, 2021). In this framework, students have to work collaboratively in groups for 16 weeks, to identify and prototype solutions to social and/or psychological challenges, using the Problem and Project-Based Learning (PPBL), Design Thinking (DT), and the Maker Culture (MC) approaches (Araujo & Arantes, 2014). The students are challenged to face and solve real problems in the courses through the project's development. Based on the Design Thinking perspective (IDEO, 2009), the courses' programs were developed in three complementary and iterative phases: Listening/observing, creating/prototyping, testing/implementing. The Maker culture inspires the prototyping methods when the students have to create tools, devices, or processes to face the problem being studied. In 2020 and 2021, while in the COVID-19 pandemic, these courses were held online through Google Meet and other virtual platforms. The following paragraphs will present their dynamics and the project's phases.

Phase I—Listening and observing through empathic techniques and ethnographic procedures to identify the community's problems, needs, and desires to be affected by the study.

The course teacher begins the first class with a collective discussion based on a two-page document describing a broad and complex social theme to guide the students. Purpose in life development, adolescents' pregnancy, the UN's Sustainable Development Goals, Emergent adults' unemployment, or the youth identity construction are broad themes adopted, depending on the level and degree-professional program being developed. The initial challenge proposed for the next three weeks to the students, divided in groups of six members each, is to identify a problem to be studied. In this way, different problems and approaches related to the same theme are addressed in the class, providing a perspective of the phenomenon's complexity to the students. In this critical process of identifying a problem, the design thinking refers to a kind of ethnographic method. Supported by the teacher tutoring the course, the group must investigate, approach, and listen to people facing the challenge of living in the studied conditions. Finally, students must clarify issues, map information, reflect, and refine the problem when adequately formulated to be studied in the following two phases of the project.

However, what is a good problem for a constructivist project? As we state, it is the one that neither the students, the teacher, nor Google knows the answer to. So, it is an open problem that requires studies, complex approaches, and engagement. Since for the students the problem is defined after the beginning of the course, the methods for studying and solving it cannot be anticipated in any syllabus. This is an excellent psychological exercise. By this moment of the initial three weeks of the course, the students need to control anxiety and uncertainties. It is usual for some of them to

show discomfort because they do not foresee where and what they will get by the end of the course. Others, among many reasons, stress because they do not like to work collectively or rather have teachers giving lectures to transmit information.

Phase II—Ideation and creation of prototypes to face or solve the problem

With the problem defined in the third week, it is time for ideation, to create and think about possible solutions to the problem being studied through an iterative prototyping process. In this phase, nine weeks long, under the teacher's guidance, the groups have to propose an initial prototype to cope with the problem. Sessions of brainstorming and discussions are performed, aiming to design solutions for the problem, refine it, go back-and-forth to the persons who face the challenge, listen, and get ideas to improve the prototype—a constructive and active learning process also based in the Design Thinking perspective. Prototypes can be an app for smartphones, a whole face-to-face program to foster purpose, a public policy project; an Internet platform or portal to promote sustainable development; or even an Instagram page to aggregate positive psychology experiences. So, the students are free to use different languages that communicate with their generation. This approach can support effective pathways to face the challenges, using tools and languages that make sense for them and make their peers comfortable using it. In this perspective, as a guide of the process, the professor is also a learner and not someone that will only transmit knowledge.

At this moment of the course development, students identify their role as problem-solvers, protagonists of the learning process, co-constructors of an unpredictable and undetermined world. They understand that although uncertain, life and nature have regularities, and prior knowledge is essential to explore and inspire actions that may transform their personal life, communities, society, and the future. Most important, they are immersed in studies and interactions about real-life situations that invite them to self-reflect about their identities.

Phase III—Testing and implementing the prototyped solution

In a project based on the Design Thinking method and the Maker perspective, the goal in the third phase is to test or implement the prototyped solution developed. In the next three weeks, the groups conduct tests with real people in actual contexts. The solutions are then fine-tuned and improved to meet the expectations and needs detected in the previous steps of the project development. Following the examples mentioned, if the solution designed was to create a smartphone app (e.g., to support the self-consciousness reflection about feelings) the group must set up and implement the app for specific audience use. The same procedure of testing is followed in all the projects. For example, if the solution was a sustainability development website platform, the group would make it available on the Internet for user testing and evaluation. In another example, a health adolescent's pregnancy public policy designed by the group is taken to the city council for discussion with politicians and the population.

It is important to highlight that our goal in the courses is not only to design programs that create good ideas. The group has to collectively produce an academic report, describing and reflecting on the learning process. They have to theoretically justify the solution prototyped and justify how the work developed impacted their

present personal life, self-reflection, and the future forecast. By the end of the course, students are invited to report how these hands-on experiences, in which they have to study, reflect, and learn by doing, supported them to also reflect about their purpose in life and to connect them to other peers and their needs. In the reflective essays they produce at the end of the course, we hear about how feelings of fulfillment and accomplishment surpassed their initial anxiety. They realize that working collectively, and learning to become problem-solvers, can transform reality and empower themselves to face challenges. Usually, the courses are positively assessed by 90% of the students, recognizing its role in their personal and professional development.

16.6 An Example of an Empowering Project for Emergent Adults

To better understand the educational strategy being described, let us present how a graduate course offered by this chapter's authors was developed at the University of Sao Paulo (USP) in 2020. The course "Purpose, citizenship and education" for master and Ph.D. candidates had 28 students enrolled from 7 different schools at USP. They were emerging adults, and the course was offered online due to the COVID-19 pandemic, using the Google Meet platform. The LMS—Learning Management System called Silabe was adopted to host the course's resources. Class meetings were held once a week for three hours. The first half of the class was occupied with theoretical discussions. The second half was with group meetings to develop the project and prototype a solution to a problem.

The challenge posed on the first day of classes, on phase I of the project's development, was: "Create and develop a program aiming the development of purposes in Brazil." Based on this challenge, each group was free to define the program development and the program's target audience (e.g., youth, adults, emerging adults, elderly, people living in vulnerable conditions, unemployed people, K-12 teachers, or whatever they wanted to study), using the three phases of the Design Thinking and the Maker approaches. Also, after defining the problem to be studied, they could elect any method, tool, or approach to design the program. Our proposal's goals were to foster skills and competencies like creativity, problem-solving, critical thinking, and communication. In other words, in a situation that involves the pressure of a course assessment, intentionally, we had an open and complex challenge posted, inducing the emerging adult students to live in a perspective of uncertainty and indetermination but with a clear goal to accomplish. Besides that, the focus on purpose development would direct them to study and reflect on this psychosocial construct and listen to other people about this theme, trying to understand others' needs and desires about purposeful challenges in life. At the course's end, a collective reflective report should be delivered. Beyond that, the groups should produce a 10-minute video uploaded on YouTube, describing their personal and group process since the problem identification, going through the various

prototyping attempts listening to the targeted audience, ending with a functional prototype program that would support purpose development for the targeted audience.

At the beginning of the course, students expressed intense anxiety. First of all, they were used to humanities graduate classes in which they only had to study and make reports, passing through individual assessments. Asking them to listen and observe a social phenomenon, identify a problem, ideate and create a solution for that, and test the prototype were not expected. In this way, the students expressed they were afraid of failure or not accomplishing the goals. Also, they expressed anxiety and mistrust since they would be graded in a process that they have never experienced before, working in a group with previously unknown peers. Therefore, it was great to see that all the groups accomplished an excellent and exciting purpose development program. We were confident, but the students had doubted their ability to accomplish that all the time.

In summary, the five programs designed by the groups in the course had the following themes and structure:

Change the world—A hybrid program with face-to-face and online activities in which people living in a vulnerable community of Sao Paulo would go through a three-step process aiming at creating projects that could transform the local reality. The first step focused on actions to reflect on the context where they live and its actual conditions. The second step had a personal perspective, where participants had to think about their role in that context. In the third and last designed step, working in a group, they would have to create and implement a program or an NGO to improve a specific vulnerable condition of their community.

Professional care—An online website hub designed to support the youth and emerging adults in their professional choice and development. With a repository of professional information, its historical elements, and opportunities for studies, it also had interactive spaces where professionals in different career levels could share their experiences. At the same time, young people and emerging adults could learn and interact with companies, individuals, NGOs, and governmental institutions.

Professional choices—Like the professional care project, supporting the construction of professional purposes, this group developed an app for smartphones but only as a repository of information for adolescents to get to know professions and university programs for bachelor's degrees.

Self-knowledge and self-emotions—The group created a smartphone app to support emerging adults to reflect on themselves and their feelings and emotions. It was built not as a survey but based on reflective stories. Users could identify their feelings, emotions, and mood through images and write little texts about themselves and their feelings when facing challenges. No one monitored the app, and its goal was only to create a possibility for self-reflection.

A healthy and sustainable life—The group learned that keeping a healthy life may not be accessible to people with no income, like emerging adults' students. So, they created an Instagram page and feed named @BORA.SUSTENTAR (@LET'S. SUSTAIN) to support these people with no income to reflect about a healthy and sustainable lifestyle, using peer-to-peer interactions and memes, and empathic

languages for communication. The last program mentioned, @BORA.SUSTENTAR, is an excellent example of this chapter's discussion. In the video recorded for the course assessment, designing and creating an innovative program to develop a purpose for emerging adults (15–25 years old) is described in detail. This video—subtitled in English—is available public on YouTube and can be accessed at https://youtu.be/W4_9iW9mmf0. This video describes the theoretical background of the project and the course, the process of problem identification, how the group used a conceptual map to approach the problem and design solutions and the prototype, and finally, the decision to create an Instagram page. The final part of the video shows the Instagram construction and some examples of the posts created. In the end, the students bring a reflection about the course experience to them. It is worth highlighting how the whole process described is coherent with what we discussed in the previous pages and how this approach may empower emerging adults to face the post-COVID-19 challenges and construct meaningful life purposes.

We have no empirical data to support our claims in this essay. Only the narratives and assessment of the emergent adults that experienced the educational programs we developed to implement our approach confirm our hypothesis. In the following paragraphs, we present three excerpts taken from the students' assessment:

“The proposal of group work challenged us as graduate students. And that was very interesting because it took us out of the ordinary. The process as a whole was very collaborative and relational. Even though it was a course carried out remotely, our group (Transforming the World) connected and managed to handle the proposed challenge. We shared different points of view, made agreements, divided tasks, defined deadlines, and built the final prototype. I had the pleasure of meeting people with interests in common with mine, searching to transform the lives of young people not only in an individual sphere but mainly with the potential to generate an impact in the broader social context. From a more personal perspective, it made me reflect and analyze the extent to which I can put into practice the dimension of the positive impact on the world in the professional, personal, and social spheres. In other words, I asked myself how much my actions (not just my plans) reflect this commitment to transforming the world and what impact I see around me.” (V.M.)

“The discussion about life purpose and education in values that we did in the course was a key turning point for me. It made me think about my role as an educator, look at my values, and see how the job market relates to all this. It seems essential that teachers maintain a lively discussion about how to be an active agent in society, instead of being just a piece that can be exchanged for another at any time, because it has no identity because it is replaceable.” (B.G.)

“I got to know life purpose in-depth, envisioning viable and impactful possibilities to work at school in conjunction with active methodologies. This knowledge encouraged me to develop an experience in a project in the school I work, which I even presented at a conference. I also learned the concept of a ‘good teacher,’ which inspired me to write a research project that led me into a Ph.D. program.” (R.B.)

16.7 Final Remarks

Working in the educational field, in this chapter, we aimed to reflect on the possibility of empowering emerging adults to face the post-COVID-19 challenges through educational strategies that could play a role in strengthening their well-being and purposes.

As posed in the introduction, the research has widely shown that during the COVID-19 pandemic emerging adults' reported intense experiences of negative emotions and feelings, which were also reflected in the course of their identity development. To face that, we defended that it is necessary to think about psychological strengthening strategies that turn uncertainty, unpredictability, and chaos into natural anchoring elements in life.

We also propose that purpose must be developed through active learning methodologies that immerse the emerging adults into contextualized and hands-on reflective experiences. In addition, supporting them to learn to live in an unpredictable world would be a path for constructing the psychological elements, skills, and competencies needed for a multidimensional and critical perspective of well-being. Although we assume that there are flaws in our experience, we need to go deeper into the strategies reported. Nevertheless, we believe that a pathway is open to empower emergent adults in their inexorable encounters with an unpredictable and uncertain future. Strengthening their psyche to face the challenges they must live with is a role to be played by supportive older generations and by educators that interact with them.

COVID-19 has placed an extra burden from this generation of emerging adults. However, they were already challenged by this new era. They need support to construct a robust psychological life that allows them to integrate into their identity the emotions, thoughts, values, goals, interpersonal relationships, desires, and needs that will empower them to accomplish a pleasant, pleasurable, and full life.

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Chapter 17

Combining Stress Mindset Training with Acceptance and Commitment Therapy (ACT): An Internet-Delivered Intervention for Emerging Adults During the Pandemic



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Abstract Research showed that viewing stress as a helpful rather than as harmful part of life is associated with better health, emotional wellbeing, and productivity at work, even during periods of high stress. Stress beliefs are significant because they influence how individuals respond to stress. This pilot study illustrates an Internet-delivered intervention called “ReStress Mindset” that combines the Stress Mindset Training Program with Acceptance and Commitment Therapy (ACT) to change the stress mindset and stress response among emerging adult university students during the COVID-19 pandemic. Thirty-five participants were assigned to the intervention ($N = 17$) and control ($N = 18$) groups. Participants in the intervention group attended five weekly online modules of the intervention. All participants ($N = 35$) completed self-report questionnaires online (Stress Mindset Measure, Satisfaction With Life Scale, Depression Anxiety and Stress Scale-9, Perceived Stress Scale, Brief Resilience Scale, Scale of Positive and Negative Experience) before and after the intervention. Following the intervention, participants in the intervention group reported a more “stress-is-enhancing” mindset and a less “stress-is-debilitating” mindset. Our findings suggests that the “ReStress Mindset” intervention could promote a positive stress mindset in university students, even in times of crisis. Further studies are required in this field to establish the stability of the results over longer periods of time.

Keywords Stress mindset · Acceptance and Commitment Therapy · Internet-delivered interventions · Emerging adulthood · University students

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17.1 Mental Health of Emerging Adult University Students During the COVID-19 Pandemic

Emerging adulthood is the period between adolescence and adulthood that differs demographically and is linked to one's cultural and socioeconomic environment (Leontopoulou et al., 2016). According to Arnett (2000, 2007), emerging adulthood is the period between ages 18 and 29 when individuals have moved out of adolescence, but have not entered young adulthood, and is characterized by the following five dimensions or developmental features: identity exploration, instability, self-focus, feeling "in-between," and opening of possibilities. However, it is important to note that age is only an indicator of this transition to young adulthood, as there is individual variation in the age at which a person reaches a particular stage in life (Arnett, 2000). Emerging adulthood is a distinct period toward mature adulthood marked by various changes in education, career, love, and worldview (Arnett, 2000). This developmental period is a major public health concern, especially for the emerging adult university students, as numerous studies indicate that students experience higher levels of distress compared to those of the same age in the general population (Bayram & Bilgel, 2008; Bewick et al., 2010).

World Health Organization (2020) declared the COVID-19 outbreak as a Public Health Emergency of International Concern. An increase in mental health problems was observed worldwide (Holmes et al., 2020). In particular, it is estimated that 9%–53.5% of young adults have suffered from acute stress disorder, depression, and anxiety (Cao et al., 2020; Liu et al., 2020; Tang et al., 2020). Moreover, these psychological distress symptoms showed a significant increase among university students (Li et al., 2020). In Greece, 68% of the university students reported moderate anxiety symptoms, while 32.3% reported moderate depressive symptoms (Konstantopoulou et al., 2020). As a result of the strict social isolation and the physical distancing measures taken by the governments in response to the COVID-19 pandemic, tertiary education institutions shifted to online learning platforms, which would be expected to further exacerbate academic stressors for university students who were experiencing a period of unprecedented disruption and uncertainty, necessitating immediate action to reduce the adverse academic and psychosocial impact of the COVID-19 pandemic (Grubic et al., 2020).

17.2 Positive Stress Mindset

Stress can be defined as the individual's response to events or expected future events with the related appraisals of predictability, control, and coping resources (Cohen et al., 1983). Stress mindset is conceptualized as one's belief that stress itself has either enhancing or debilitating consequences for outcomes such as health, performance, and wellbeing (Crum et al., 2013). Research suggests that "stress-is-enhancing" (SIE) and "stress-is-debilitating" (SID) mindsets can differentially affect

physiological and behavioral responses under stress (Crum et al., 2013; Podsakoff et al., 2007; Updegraff & Taylor, 2000).

Previous research suggests that the enhancing stress mindset is positively correlated with higher levels of resilience, positive emotions and also positive ways of perceiving stress (self-efficacy when confronting stress) and coping with it (e.g., humor and spirituality). Moreover, enhancing stress mindset was found negatively correlated to negative experiences, like feeling helpless when confronting with stress, and less effective ways of coping with stress, like expressing negative feelings (Karampas et al., 2020). Also, SIE mindset predicted increased life satisfaction, reduced anxiety and depressive symptoms, more optimal neuroendocrine responses, positive affect, reduced bias for negative faces, improved cognitive flexibility, increased desire for social feedback, greater self-control, as well as higher dispositional resources such as optimism, resilience, and mindfulness (e.g., Crum et al., 2013, 2017; Goyer et al., 2018; Park et al., 2017). To the contrary, SID mindset was found to be negatively correlated to positive wellbeing outputs (lower levels of satisfaction with life, positive emotions, resilience, and self-efficacy when confronting stress) and effective coping mechanisms, like using humor. Besides, a debilitating stress mindset was found to be positively correlated with psychological symptomatology (high levels of depression, anxiety, and stress), negative feelings (perceived helplessness when confronting stress and negative emotions), and ineffective ways of coping with stress, e.g. avoidance, behavioral disengagement, and expression of negative feelings (Karampas et al., 2020). In addition, individuals with a weaker SIE mindset were found to be more stressed and reported more negative emotions (Kilby & Sherman, 2016).

The Stress Mindset Training Program (SMTP) is an intervention designed to shift participants' mindset regarding the nature of stress, independently by their actual and perceived levels of stress. Participants are provided with information about the nature of stress and the influence of their mindset in determining the stress response, in conjunction with a specific skill set designed to help them adopt an enhancing mindset actively and deliberately (Crum, 2011; Crum et al., 2013).

17.3 Acceptance and Commitment Therapy (ACT)

Acceptance and Commitment Therapy (ACT; Hayes et al., 2011) is an empirically based psychological intervention, which fosters mental health skills through the creation of psychological flexibility (Biglan et al., 2008). Based on ACT principles, psychological flexibility is one's ability to choose to do what works in order to move toward who or what is important, even in the presence of obstacles (Polk & Schoendorff, 2014). Moreover, psychological flexibility is a competence that incorporates two mutually dependent processes: acceptance of experiences and value-based action (Hayes et al., 2006).

According to the ACT framework, psychological flexibility is enhanced through six core processes: cognitive defusion, acceptance, committed action, values, contact

with the present moment, and self-as-context; these processes constitute important resources for improving mental health (Hayes et al., 2011). Several studies have shown that ACT treatment is effective in improving mental health and wellbeing in clinical and nonclinical populations (A-Tjak et al., 2015; French et al., 2017; Ruiz, 2012). Research showed that university students who received ACT treatment reported less stress, decreased anxiety and depressive symptoms, greater psychological flexibility and general mental health, as well as improved mindful acceptance (Grégoire et al., 2018; Levin et al., 2017).

17.4 The Effectiveness of Internet-Delivered Interventions

Previous research supported the effectiveness of Internet-delivered interventions for several populations, such as university students and the general population (Andersson et al. 2016, 2019). A recent meta-analysis showed that Internet-delivered interventions for mental health and wellbeing in university students can be effective for a range of psychological conditions, and they can have a beneficial impact on university students' functioning (Harrer et al., 2019).

More specifically, Internet-delivered ACT interventions for university students with varied levels of practitioner involvement led to improvements in depression, social anxiety, academic concern, wellbeing, mindful acceptance, life satisfaction, and academic performance (Chase et al., 2013; Levin et al., 2014, 2016; Räsänen et al. 2016). Moreover, Internet-delivered ACT interventions have been found to produce similar results compared to face-to-face ACT therapy, with medium to large effect sizes (Lappalainen et al. 2007).

17.5 The Aim of the Chapter

The aim of this chapter is to present the development of an Internet-delivered psycho-educational intervention called "ReStress Mindset," that combines the principles of the Stress Mindset Training Program (SMTP; Crum, 2011; Crum et al., 2013) with ACT (Hayes et al., 2011), and to examine its effectiveness on stress mindset and stress response among emerging adult university students during the COVID-19 pandemic.

The following research questions will be addressed: Does an Internet-delivered intervention combining SMTP with ACT, and implemented during the COVID-19 pandemic (a) lead to increased levels of SIE mindset and more positive ways of perceiving stress? (b) lead to decreased levels of the SID mindset and less negative ways of perceiving stress? (c) lead to an increase in levels of resilience, positive emotions, and life satisfaction? (d) lead to a decrease in levels of depression, anxiety, and negative emotions?

17.6 Method

17.6.1 Participants

The total sample consisted of 35 undergraduate Psychology students aged 19–29 years ($M_{age} = 22.68$; 91.7% women), who responded to an online invitation from Panteion University of Social and Political Sciences in Greece. Participants were randomly assigned to the intervention ($N = 17$) and control ($N = 18$) groups. All the participants in the intervention group were women ($M_{age} = 22$), and the majority were unemployed (41.7%) and in a relationship (41.7%). In the control group ($M_{age} = 23.4$), most participants were women (92.9%), unemployed (57.1%) and in a relationship (50%).

17.6.2 Measures

Besides demographic information regarding their gender, age, marital and employment status, participants were asked to complete the following instruments:

1. Stress Mindset Measure (SMM; Crum et al., 2013; Greek version: Karampas et al., 2020). In the SMM the participants are rating on a 0 (strongly disagree) to 4 (strongly agree) scale their agreement with eight statements (e.g., the effects of stress are positive and should be utilized, the effects of stress are negative and should be avoided) In the Greek study, two factors were identified, representing two different mindsets on the effects of stress: either it is enhancing ($\alpha = 0.74$) or debilitating ($\alpha = 0.75$).
2. Satisfaction With Life Scale (SWLS; Diener et al., 1985; Greek version: Galanakis et al., 2017). The scale measures individual's cognitive assessment of his/her life indicating satisfaction with life levels. The SWLS consists of five items rated on a 7-point Likert-type scale (1-Strongly disagree to 7-Strongly agree).
3. Depression Anxiety Stress Scales-9 (DASS-9; Yusoff, 2013; Greek version: Kyriazos et al., 2018b). DASS-9 is an empirically derived version based on DASS-21 (Lovibond & Lovibond, 1995; Pezirkianidis et al., 2018). It measures three negative emotional states: depression, anxiety, and tension/stress. Respondents report the presence of related symptoms over the previous week using a Likert-type scale (0-Did not apply to me at all to 3-Applied to me very much or most of the time). The three subscales of the DASS-9 were each cumulatively scored between 0 and 9, with higher scores demonstrating poorer mental health.
4. Perceived Stress Scale (PSS; Cohen et al., 1983; Greek version: Andreou et al., 2011). The PSS was developed to measure general stress as an appraisal of something threatening that people cope with more or less effectively (Lazarus & Folkman, 1984). Participants are asked to reflect on the past month and answer questions such as "Have you been upset by something that happened

unexpectedly?” and “Have you felt that you could not cope with all the things you had to do?” (Scale: 0 = never to 4 = very often).

5. Brief Resilience Scale (BRS; Smith et al., 2008; Greek version: Kyriazos et al., 2018a) contains 6 items measuring the ability to bounce back from stress and difficulties (e.g., “I usually come through difficult times with little trouble”). The items are rated on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The total score ranges from 1 (minimum resilience) to 6 (maximum resilience). Three items are negatively worded and are reversed scored.
6. Scale of Positive and Negative Experience (SPANE; Diener et al., 2010; Greek version SPANE-8: Kyriazos et al., 2018c). SPANE-8 is a short form of the original SPANE (Diener et al., 2010), including four positive (Pleasant, Happy, Joyful, Contented) and four negative (Bad, Sad, Afraid, Angry) items. Items are scored on a Likert scale from 1 (very rarely or never) to 5 (very often or always).

17.6.3 Procedure

All participants ($N = 35$) were informed on the purpose of the study and gave their informed consent online. They were randomly allocated in the intervention ($N = 17$) and control ($N = 18$) groups and completed an online battery of questionnaires at the beginning (T1) and at the end of the intervention (T2). The intervention ran online for five weeks during the second wave of the COVID-19 pandemic, in November and December 2020, with each module lasting two hours. After each module, participants completed online written feedback forms, which were later utilized for the revision of the material and the exercises. In Table 17.1, the material of each module and the homework allocated is presented.

Table 17.1 Modules of the intervention

	Module 1 Stress Mindset Week 1	Module 2 Rethinking Stress Toolkit Week 2	Module 3 ACT Overview Week 3	Module 4 ACT Matrix Week 4	Module 5 Final Week 5
In Module	The Paradox of Stress & The Power of Mind set	Three Steps to a SIE Mindset Exercise	ACT Overview & Ranking your Values Exercise	ACT Matrix & Values Form Exercises	Review Material
Homework	Mindfulness Exercises	Mindfulness Exercises	Mindfulness Exercises	Mindfulness Exercises	N/A

17.6.4 Study Design

The first step was the development of the material to be used in the intervention. In this study we assume that the shift to a SIE mindset (Crum et al., 2013) can be promoted and further enhanced through the ability of psychological flexibility and its processes of acceptance of the experience and valued action (Hayes et al., 2006).

To test this assumption, we combined the SMTP (Crum, 2011; Crum et al., 2013) with the ACT matrix protocol (Polk & Schoendorff, 2014) in a unified psycho-educational intervention. The main reason for combining these two models is that SMTP shares many common features with ACT like the therapeutic focus on the present moment through mindfulness, the acceptance of the experience, and valued action (Hayes et al., 2011). Moreover, integrating both models in one intervention may be beneficial for emerging adult university students, since they are offered a bigger repertoire of strategies and varied tools to deal with their challenges.

The “ReStress Mindset” intervention consists of five weekly Internet-delivered modules. Module 1 includes two parts: (a) The Paradox of Stress: Information on the nature of stress—both honoring the research on the deteriorating nature of stress, but also orienting them to the possibility that stress can also be enhancing, and (b) The Power of Mindset: A basic definition of mindset and several research examples of how one’s mindset can produce meaningful changes in psychological and physiological responding (Crum, 2011; Crum et al., 2013). Module 2 is a simple three-step technique designed to help participants adopt a SIE mindset actively and deliberately (Crum, 2011; Crum et al., 2013). Module 3 includes an ACT Overview & Ranking your Values Exercise. Module 4 includes ACT Matrix & Values Form Exercises. The ACT matrix (Polk & Schoendorff, 2014) is a protocol for teaching psychological flexibility in six basic steps or processes (cognitive defusion, acceptance, committed action, values, contact with the present moment, and self-as-context). The ACT matrix is composed of two bisecting lines. The vertical line is the experience line and represents the difference between the aspects of the experience that come through the five senses and the part of the experience that arises from the mental activity. The horizontal line is the behavior line and represents the difference between actions aimed at moving away from unwanted experience (experiential avoidance) and actions aimed at moving toward who or what is important (valued action). The ACT matrix theorizes that the key to psychological flexibility and valued living is noticing the difference between five senses and mental experience and noticing the difference between moving toward who or what is important and moving away from unwanted inner experience (Polk & Schoendorff, 2014). This action of noticing may offer an opportunity to consider the purpose of one’s actions in relation to one’s values and goals and this may reduce away moves linked to ineffective patterns and behaviors, while increasing more successful and sustainable behaviors linked to one’s values (Levin et al. 2017). Module 5 is a review of the material. The modules of the intervention are presented in Table 17.1.

Mindfulness exercises are presented in the intervention as homework part of the modules 1 to 4 (audio guided Mindful Breathing and Body Scan Meditation; UCLA

Mindful Awareness Research Center). Mindfulness practice can create awareness of existing stress mindsets that are guiding automatic functioning and biasing responses, and then help transform them, thereby harnessing the enhancing effects of stress (Crum & Lyddy, 2014).

17.6.5 Statistical Analysis

The data collected was analyzed using the Statistical Package for Social Sciences (SPSS), version 25. Firstly, we computed the means, standard deviations, and Cronbach's α for each scale and subscale and a series of normality tests was conducted. Secondly, to test possible mean differences between participants as a function of Time and Condition, we ran paired t-tests for each group pre and post and independent samples t-test among Time 1 and 2 between the groups. A Bonferroni correction was applied to the significance level ($0.05/4 = 0.013$). Thirdly, a two-way (2x2) repeated measures mixed design ANOVA was performed to further investigate the research questions.

17.7 Results

17.7.1 Preliminary Analyses

Means, standard deviations, and Cronbach's alpha coefficients were computed for each of the study variables (see Table 17.2). Differences in mean values emerged between the two time-points. Also, the internal consistency coefficient in two time-points suggests adequate reliability of all scales and subscales apart from the DASS-9 subscales, whose internal consistency ranges from 0.40 to 0.65. Regarding the normality testing, Kolmogorov–Smirnov tests indicate that most of the variables follow a normal distribution in both time-points.

17.7.2 Mean Comparisons as a Function of Time and Condition

As illustrated in Table 17.3, participants in the intervention group reported significantly higher levels of positive stress mindset and SIE mindset and lower levels of SID mindset after the intervention. Moreover, as reported in Table 17.4, significant differences were found between the two time-points only for the intervention group regarding positive stress mindset, SIE mindset, and SID mindset. Finally, no

Table 17.2 Means, standard deviations, alpha Levels, and normality coefficients of study variables pre and post the intervention ($N = 35$)

Variable	Time	<i>M</i>	<i>SD</i>	α	<i>K-S D</i>	<i>df</i>	<i>p_{K-S D}</i>
Positive stress mindset	pre	1.03	0.67	0.82	0.143	35	0.061
	post	1.89	1.05	0.95	0.136	35	0.092
SIE mindset	pre	1.19	0.81	0.74	0.152	35	0.036
	post	1.89	0.99	0.89	0.203	35	0.001
SID mindset	pre	3.14	0.71	0.75	0.115	35	0.200
	post	2.11	1.18	0.92	0.196	35	0.001
Satisfaction with life	pre	4.78	1.64	0.78	0.123	35	0.190
	post	4.80	1.15	0.87	0.141	35	0.069
Depression	pre	1.14	0.75	0.65	0.152	35	0.034
	post	0.93	0.70	0.54	0.164	35	0.015
Anxiety	pre	0.77	0.69	0.62	0.225	35	0.000
	post	0.71	0.71	0.69	0.192	35	0.002
Stress	pre	1.49	0.62	0.40	0.184	35	0.004
	post	1.34	0.62	0.50	0.135	35	0.094
Perceived helplessness against stress	pre	2.44	0.66	0.79	0.095	35	0.200
	post	2.26	0.65	0.79	0.127	35	0.149
Self-efficacy against stress	pre	2.30	0.61	0.84	0.118	35	0.200
	post	2.32	0.49	0.76	0.088	35	0.200
Psychological resilience	pre	3.41	0.71	0.76	0.133	35	0.110
	post	3.41	0.81	0.88	0.122	35	0.198
Positive emotions	pre	3.30	0.82	0.87	0.179	35	0.005
	post	3.13	0.78	0.86	0.132	35	0.114
Negative emotions	pre	2.87	0.84	0.67	0.104	35	0.200
	post	2.76	0.84	0.71	0.112	35	0.200

Note: pre = first measurement before the intervention, post = second measurement after the intervention

differences emerged between the two time-points for psychological resilience (both conditions), life satisfaction (both conditions), and SID mindset (control group).

Additionally, several significant differences were found between the two conditions at each time-point (see Table 17.5). More specifically, the two groups were found to differ on their levels of positive stress mindset, and SIE mindset at both time-points, while difference on the levels of SID mindset was found only at the second time-point.

Based on Table 17.3, the participants of the control group reported significantly lower levels of positive stress mindset and SIE mindset before the intervention than the participants of the intervention group. After the intervention, these differences strengthened and, thus, the participants of the intervention group reported higher levels of positive stress mindset and SIE mindset and significantly lower levels of SID mindset than the control group. To end up with, there were no significant differences between the two conditions in life satisfaction and psychological resilience (pre and post).

Table 17.3 Mean (standard deviation) of each variable as a function of Time and Condition ($N = 35$)

Variable	Time	Intervention group ($N = 17$)	Control group ($N = 18$)
Positive stress mindset	pre	1.32 (0.56)	0.76 (0.65)
	post	2.81 (0.45)	1.05 (0.66)
SIE mindset	pre	1.54 (0.76)	0.88 (0.74)
	post	2.72 (0.46)	1.14 (0.69)
SID mindset	pre	2.89 (0.67)	3.35 (0.68)
	post	1.08 (0.52)	3.02 (0.75)
Satisfaction with life	pre	4.68 (1.28)	4.88 (0.84)
	post	5.03 (1.17)	4.60 (1.12)
Depression	pre	1.17 (0.64)	1.10 (0.84)
	post	0.86 (0.61)	0.98 (0.77)
Anxiety	pre	0.68 (0.58)	0.84 (0.78)
	post	0.54 (0.37)	0.86 (0.91)
Stress	pre	1.60 (0.56)	1.38 (0.65)
	post	1.27 (0.66)	1.40 (0.59)
Perceived helplessness against stress	pre	2.23 (0.69)	2.63 (0.58)
	post	2.04 (0.61)	2.45 (0.62)
Self-efficacy against stress	pre	2.35 (0.66)	2.24 (0.57)
	post	2.48 (0.44)	2.18 (0.49)
Psychological resilience	pre	3.36 (0.64)	3.45 (0.77)
	post	3.52 (0.65)	3.31 (0.92)
Positive emotions	pre	3.25 (0.87)	3.35 (0.78)
	post	3.11 (0.94)	3.14 (0.63)
Negative emotions	pre	2.80 (0.94)	2.92 (0.76)
	post	2.66 (1.03)	2.84 (0.67)

Note: pre = first measurement before the intervention, post = second measurement after the intervention

Table 17.4 Paired-samples t-test coefficients for the mean comparison of pre-post pairs as a function of Condition

Pairs	t	df	p
Condition: Control			
Positive stress mindset pre-post	-2.462	17	0.024
SIE mindset pre-post	-2.580	17	0.019
SID mindset pre-post	-1.747	17	0.098
Satisfaction with life pre-post	2.317	17	0.032
Psychological resilience pre-post	1.261	17	0.223
Condition: Intervention			
Positive stress mindset pre-post	-8.171	16	0.000
SIE mindset pre-post	-4.933	16	0.000
SID mindset pre-post	-8.917	16	0.000
Satisfaction with life pre-post	-1.468	16	0.161
Psychological resilience pre-post	-1.572	16	0.135

Table 17.5 Independent samples t-test coefficients for the mean comparison of control and intervention groups as a function of Time

Variables based on Time	<i>t</i>	<i>df</i>	<i>p</i>
Positive stress mindset pre	-2.725	33	0.010
Positive stress mindset post	-9.181	33	0.000
SIE mindset pre	-2.632	33	0.013
SIE mindset post0	-7.896	33	0.000
SID mindset pre	2.030	33	0.050
SID mindset post	8.820	33	0.000
Satisfaction with life pre	0.562	33	0.578
Satisfaction with life post	-1.132	33	0.266
Psychological resilience pre	0.391	33	0.699
Psychological resilience post	-0.788	33	0.436

17.7.3 Two-Way Repeated Measures Mixed Design ANOVA

In order to test the main effect of time (before and after the intervention) and the two-way interaction between time and condition (control and intervention) for each study variable we conducted a two-way (2x2) repeated measures mixed design ANOVA. The required assumptions were met.

The results indicated a significant main effect of Time on stress mindset (single factor, Crum et al., 2013), SIE mindset, SID mindset, and perceived helplessness against stress. Furthermore, a significant interaction between Time and Condition was found for stress mindset, SIE mindset, SID mindset, satisfaction with life, and marginally for psychological resilience.

Figures 17.1, 17.2, and 17.3 depict the interaction between Time and Condition for stress mindset, SIE, and SID mindset, respectively. After the intervention, an increase of stress mindset and SIE levels was detected in the intervention group, whereas no changes were found for the control group. As shown in Fig. 17.3, a decrease of SID mindset levels was observed in the intervention group at the second time-point, while no change was detected for the control group.

As illustrated in Figs. 17.4 and 17.5, a different pattern in the interaction between Time and Condition emerged for life satisfaction and psychological resilience. While in the intervention group life satisfaction and psychological resilience levels showed an increase after the intervention, in the control group they decreased at the second time-point.

17.8 Discussion

In the context of emerging adulthood, a life period in which both common themes and diverse paths are present (Arnett, 2015), the aim of this study was to design an Internet-delivered intervention combining the principles of the Stress Mindset Training Program with Acceptance and Commitment Therapy to change the stress

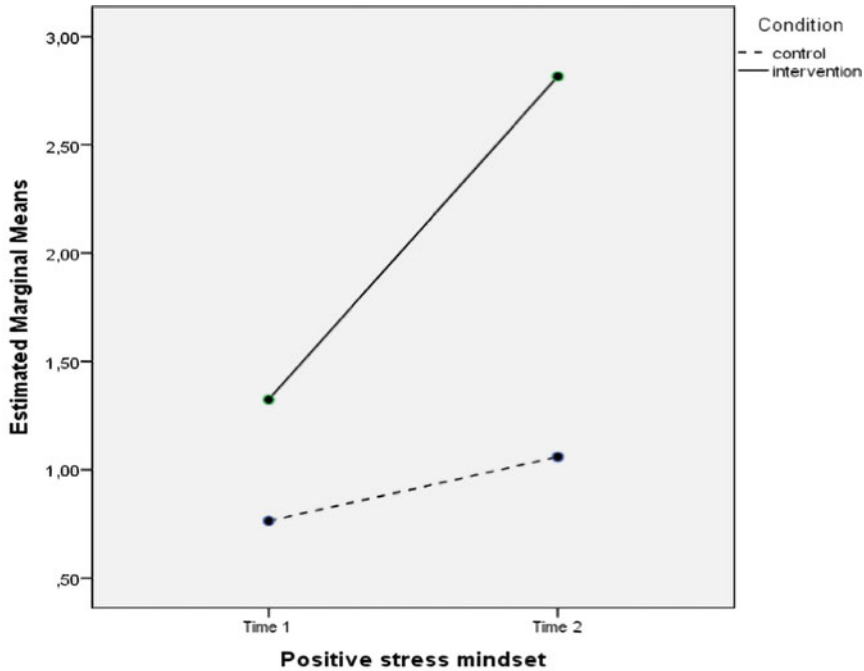


Fig. 17.1 Mean of stress mindset showing time effects for control and intervention groups

mindset and stress response among emerging adult university students during the COVID-19 pandemic.

The results showed that the intervention led participants to an increase in SIE mindset and a decrease in SID mindset. These results are confirming our hypothesis regarding the shift of the participants' stress mindset to a more SIE mindset and a less SID mindset. Also, the results are in line with Crum et al. (2013) research, indicating that university students' stress mindset can be changed independently by their actual and perceived levels of stress. In addition, by enhancing mindfulness and thus psychological flexibility, the ACT protocol contributed to the students' stress mindset shift by raising awareness of existing stress mindsets that are guiding automatic functioning and biasing responses, and then help transform them (Crum & Lyddy, 2014).

The current findings have significant implications for emerging adult university students because stress mindset, over and above the effects of stress levels, influences both the extent to which stress is psychologically experienced and the way is behaviorally approached, two variables that are important in determining health and performance outcomes under stress (Crum et al., 2013; Jamieson et al., 2013). These results are especially relevant in the Greek context, as previous research revealed that having a SIE mindset is positively correlated with higher levels of wellbeing indices and positive ways of perceiving and coping with stress, and with lower levels of negative experiences and less effective ways of coping with stress; to the contrary,

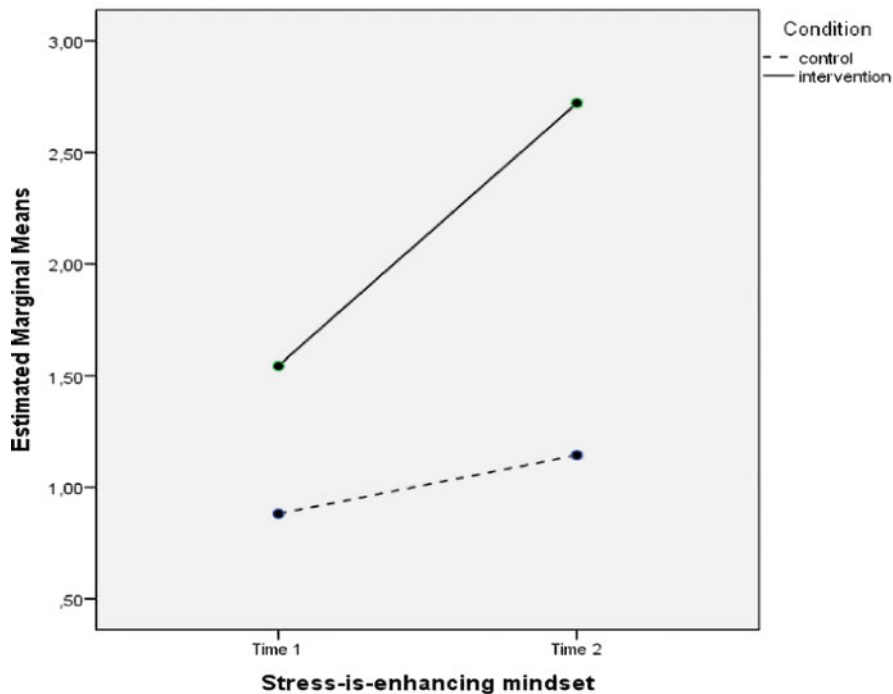


Fig. 17.2 Mean of SIE mindset showing time effects for control and intervention groups

having a SID mindset is negatively correlated with wellbeing outputs and effective coping mechanisms, and positively correlated with psychological symptomatology and negative feelings (Karampas et al., 2020). Moreover, the findings of this study provide preliminary evidence for the effectiveness of the “ReStress Mindset” intervention, which is consistent with previous research supporting the beneficial impact of Internet-delivered interventions for university students (Andersson et al. 2016, 2019; Harrer et al., 2019).

To summarize, the findings of the present study are a first step to understand emerging adult university students’ stress mindset and design suitable interventions. Also, these findings become more important, since research has linked the negative consequences of the COVID-19 outbreak to increased stress levels and lower self-rated health among university students (Ryerson, 2022; Zurlo et al., 2020). Moreover, during the COVID-19 pandemic, university students experienced severe lifestyle and mental health disruptions, which had serious consequences for their wellbeing, and thus developing and implementing effective intervention programs should be a primary concern (Cao et al., 2020; Cénat et al., 2021; Grubic et al., 2020; Li et al., 2020; Liu et al., 2020; Rogowska et al., 2021; Tang et al., 2020).

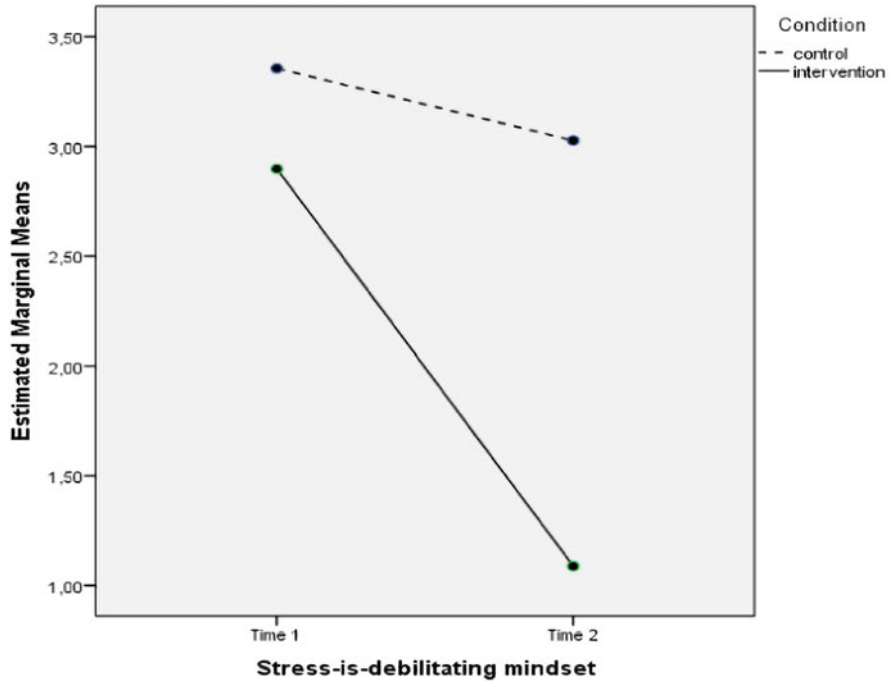


Fig. 17.3 Mean of SID mindset showing time effects for control and intervention groups

17.9 Limitations and Recommendations for Future Research

The results of this study should be examined in the light of its methodological limitations. First, the sample was limited in number, the vast majority of participants were women, and they were all Psychology students, who are generally more motivated to understand mental processes and related interventions. In addition, participants only completed self-report scales, of which the DASS-9 demonstrated low reliability levels. Further, even though the participants were randomly assigned to the two groups, significant group differences were detected on the main study variables before the intervention. Finally, no follow-up assessment was conducted, making thus impossible to check for the stability of the mindset changes. In order to corroborate these results and investigate the long-term impact of the changes identified following the program's completion, adding this step will be necessary.

Despite the aforementioned limitations, this study may serve as a basis for further research testing the effectiveness of this or similar interventions. Also, the findings may provide research and clinical suggestions during the COVID-19 pandemic or any other highly stressful period or crisis. Future studies should involve more diverse

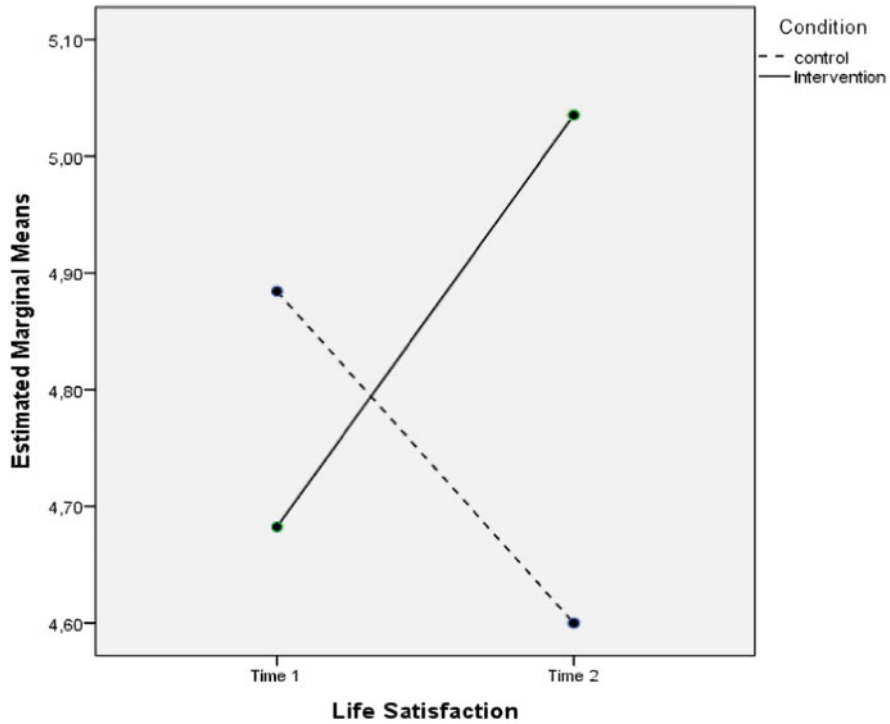


Fig. 17.4 Mean of life satisfaction showing time effects for control and intervention groups

samples in terms of gender, career, and marital status, to ensure that the findings are generalizable.

The material of this program can be easily integrated into educational or counseling programs offered by universities to their students, aiming to help them tackle not only academic stress, but also stress that may accrue from several different sources (e.g., loneliness, financial insecurity, identity search, feelings of in-between), due to the period of transition to adulthood with all the life changes. Also, educators can use the current intervention to help emerging adults falling under the categories of not in education, employment and training (NEETs), unemployed, or with low employment skills overcome stress in times of crisis and instability, and develop psychological skills and resources to flourish in their personal and professional life.

Furthermore, the program material can be easily transferable to other populations and contexts due to its Internet-delivered nature. Future research could target individuals at risk of developing stress-related physical or/and mental health issues, such as people with long-term illnesses, as well as people who work in high-stress environments, such as doctors and nurses, teachers, police officers, military personnel, professional athletes, or caregivers of people with learning, physical, or mental disabilities.

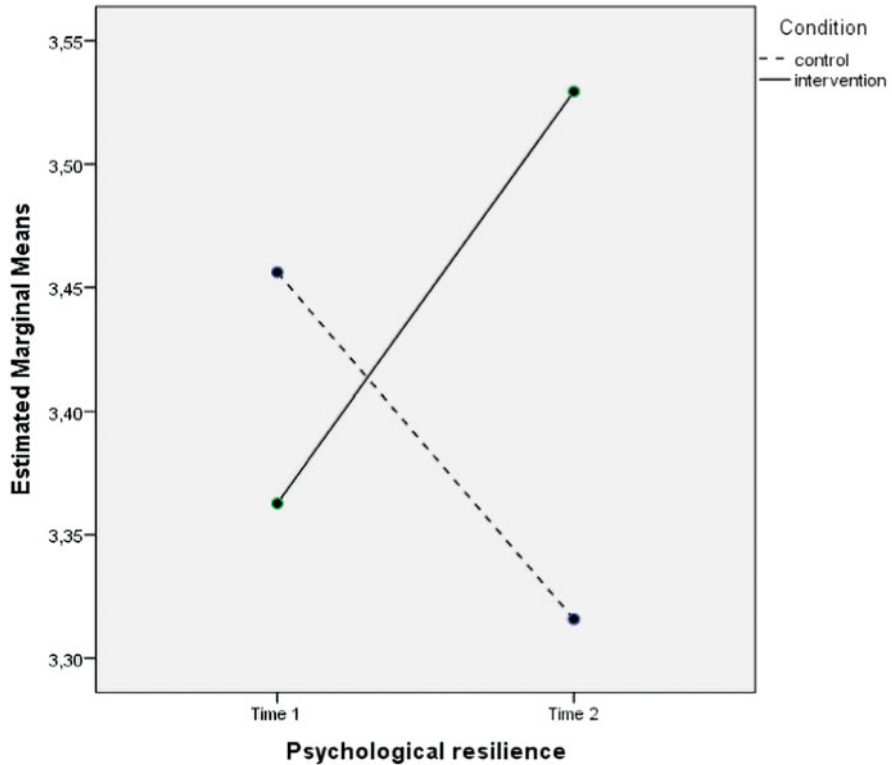


Fig. 17.5 Mean of psychological resilience showing time effects for control and intervention groups

Given the effectiveness of the program in shifting participants’ stress mindset to a more SIE mindset, mental health clinicians and counseling psychologists may also find inspiration for Internet-delivered stress mindset interventions that can be employed not only in group settings, but also in individual sessions during COVID-19 pandemic or any other highly stressful period.

17.10 Conclusions

The results showed that the “ReStress Mindset” intervention combining Stress Mindset Training Program with Acceptance and Commitment Therapy (ACT) led participants to an increase in SIE mindset and a decrease in SID mindset. Our findings suggests that the “ReStress Mindset” intervention could be offered to emerging adult university students to cultivate a positive stress mindset even during COVID-19 pandemic. Further studies are required in this field to establish the stability of the results over longer periods of time.

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Chapter 18

A Crisis-Adaptive Approach to Resilience-Building in Pre-service Teaching and Librarianship Education: Learning *About* and Learning to *Be*



Rebecca B. Reynolds

Abstract This chapter offers curriculum design guidelines for higher education coursework on the topic of resilience, tailored to pre-service emerging adult students in the fields of librarianship and primary and secondary school teaching. Professionals in these fields face stress and challenging work conditions exacerbated by global crises. These external conditions place increasing community-level demand on teachers and librarians for care-based service work, often without added funding resources. Resilience is a multi-disciplinary construct involving both adaptation to the realities of changing external conditions and constructive capacity-building in individuals to personally cope with and manage such pressures. The construct holds promise as a topical domain of study and focus for pre-service teachers and librarians who often serve as information and service referral guides to the public during crises. The chapter provides inter-disciplinary guidelines for resilience coursework emphasizing both a “*learning about*” and “*learning to be*” approach.

Keywords Resilience · Librarians · Teachers · Pre-service education

18.1 Introduction

Young people are experiencing increasing levels of stress around the globe due to a growing number of societal crises, including climate change disasters, public health emergencies such as the COVID-19 pandemic, gun violence, wars, and growing societal inequality, instability, and unrest (UNESCO, 2020; Liu et al., 2020; Wang et al., 2020). Many scientists are indicating a likelihood that society will now

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persistently face ongoing environmental crises such as pandemics and climate change for the foreseeable future, posing increased risks to life, livelihood, health and well-being, and resulting in strains on societies and their members, requiring human adaptation (Baum & Tonn, 2015; Coates, 2009). Populations will need to adapt at many levels, and this will necessarily include adoption of new and different work roles and functions among professionals in a variety of disciplines, including social services, healthcare, and human services, to meet new and evolving needs and challenges faced by diverse populations (Baum & Tonn, 2015).

Re-definition of job roles across professions requires new forms of training and educational preparation for pre-service students, to align curriculum and learning experiences with the evolving demands of ongoing crisis contexts and circumstances. Recognizing this need, government policy-makers and national funding agencies in a plurality of research fields and disciplines, such as the National Science Foundation (NSF) and National Institutes of Health (NIH) in the USA, have earmarked funds within new programs such as “The Future of Work” in several directorates, focused on adapting and revising undergraduate- and graduate-level curricular material in the sciences and computing, technology, and engineering fields, as well as the public and behavioral health and medical fields. Indeed, new books such as this one recognize the need for adaptation as well, encouraging scholarly discourse, conceptual development, and new empirical research that more squarely address the psychological and behavioral health needs of emerging adults, given external crises’ growing demands.

This chapter focuses on some suggested adaptations within professional pre-service education, in two inter-related community-based care fields being affected in similar ways by global public health crises like the COVID19 pandemic: primary and secondary teaching, and public and school librarianship. Teaching and librarianship are both fields in which professionals serve communities and publics in support of some pivotal and vital societal functions: learning, knowledge-building, inquiry, and information-seeking. Crises are challenging educators and librarians with role and work task shifts while physical settings are being coopted and usurped. For instance, under public health concerns and mandates such as the COVID19 pandemic, scholars are noting adaptation of schools and libraries and their staff into triage-based health clinical roles, vaccine and testing administration centers, as well as specialization as targeted information and resource centers related to public and behavioral health and social service provision (Calzer, 2021; Schaffer et al., 2021). In other disaster scenarios such as hurricanes, floods, wildfires, and extreme weather events, similar makeshift adaptation of roles and physical settings occur, forcing teachers and librarians to temporarily adopt and support entirely new job functions unrelated to their prior training, for instance as crisis coordinators and relief support staff in environmentally based community emergencies (Young, 2018).

The strain of external crisis conditions may place pre-service students preparing in these fields in a crucible of sorts, as they are often emerging adults undergoing a transitional developmental stage involving significant personal-level growth of self-understanding and the stabilization of one’s own mental health and capacity

for self-management (Arnett et al. 2014; Bayram & Bilgel, 2008). In the USA, most students entering these fields are still in their early 20s, preparing for professional trajectories, in accredited higher education programs, and becoming licensed and certified by US states and other regional oversight governing bodies. Further, during their training and fieldwork, young people who choose community-based care fields like health care, clinical psychology, social work, teaching/education, librarianship and/or child care, during their training and fieldwork, must navigate how to meet the complex needs of community members (i.e., their students, patrons, patients, clients, and families), who are often experiencing under-resourcing and managing inequitable social conditions stemming in part from a variety of systemic oppressions. Navigating sensitive scenarios of addressing community members' needs is complicated by the reality of demographic asymmetries in the US between teacher and librarian populations (well known to over-represent white women) and their community constituents, which invites more culturally responsive and explicitly anti-racist pre-service pedagogy, training and curriculum development (Cooke, 2018; Gibson et al., 2021; Jackson et al., 2019).

Research has found that young new emerging adult professionals in service- and care-based fields like teaching, librarianship, and health care often report significantly lower job satisfaction than their older colleagues, likely due to the complex array of conditions they manage and the difficulty of discerning the interplay of so many factors, due to their limited experience (Mauno et al., 2013). In summary, factors compounding pre-service and early career workers' difficulty in these fields include the exigencies of the emerging adulthood developmental stage, noted role shifts during crisis circumstances, evolving work conditions requiring training shifts that have not yet occurred in higher education institutions, demographic asymmetries with constituents which challenge those young professionals untrained in social and cultural competency, and, the real inequalities and heightened levels of material need being faced by often under-resourced local community members. As a result, increasingly, calls for reform of pre-service education in these fields are being sounded to help support emerging adults as they are in a state of becoming professionals, in order to continue to carry forward the vital sustaining roles that engaged teachers and librarians play in communities and societies (Wilkins Jordan, 2014; Mansfield et al., 2016).

Resilience is a construct studied scientifically in a range of scholarly research disciplines, conceptualized as a process-oriented, embodied, physiologically and psychologically linked result of individuals' interactions with (and responses to) the stress, pressures, and complexity of conditions present in one's environment (Zautra et al., 2010). Stressors vary greatly from individual to individual; any one person's response to the same stressors may differ based on cultural, social, and psychological factors, one's history, and earlier life experiences. Thus resilience is considered contextual (Elliott & Urquiza, 2006), and resilience-building often involves supporting one's adaptation to life's circumstances, realities, opportunities, and limits in ways that validate these conditions while recognizing that individuals and groups also bear agency in our capacity to constructively seek out and engage in helping modalities and practices that can improve embodied capacities to cope.

Such constructive modalities and pathways might include intellectual, psychological, and physiological practices and treatment pursuits. Avenues might include formal medical and pharmacological treatment; psychotherapeutic interventions; education; practices in self-care such as mindfulness, breathwork, and movement/exercise; harm-reduction approaches involving limiting one's exposure to external sources of stress and traumas (Loizzo, 2021). In increasingly persistent crisis scenarios, professionals like librarians, teachers, and other social work-engaged actors in community often can play a key role in linking publics to information resource supports and other more direct types of social services, related to the specific challenges they face, at multiple levels. Thus, understanding resilience in oneself and in others represents a way of helping community-based care workers better cope with and manage adaptations to crises themselves, while helping others also do the same, often quite eclectically.

This chapter describes one approach designed and targeted toward emerging adult pre-service teachers- and librarians-in-training that is responsive to increasing demands in crises, and that focuses on the construct of individual-level resilience. The chapter offers instructional design guidelines for adapting higher education curriculum supplements in teaching and librarianship to include opportunities for pre-service teachers and librarians to learn about stress and resilience, drawing from the fields of neuroscience and psychology research for knowledge-building purposes, to better understand the nature of human stress and response. The recommended curriculum also proposes trying out experiential practice protocols for resilience-building activities centering on mindfulness and compassion/empathy that are pragmatic and feasible for those in schools and library settings.

The recommended approach of supplementing pre-service education thereby centers opportunities for emerging adult pre-service students, to both *learn about resilience* and *learn to be resilient*—combining knowledge-building and experiential practice. The aim is to support these community resource providers personally at the individual level, and to improve the quality of their applied professional practice and care of community members. The chapter's approach to pre-service higher education curriculum supplementation and reform can be seen, in itself, as an adaptation to the pressures from growing crises upon emerging adults that we, as academic faculty, can readily observe in our students and often indeed co-workers; it acknowledges the need to facilitate in these professional communities greater capacities for responsiveness, adaptation and adjustment to external crises, while also constructively engaging in mind and body self-care practices to strengthen one's interior resilience capacity. The chapter advocates specifically, for doing so at earlier preparatory stages of emerging adult students' pre-service education and training, to better set them up for greater success in the field.

18.2 Background

An overview of the literature on stress in the fields of teaching and librarianship supports the argument on the importance of developing a curriculum on resilience in pre-service education in these professions.

18.2.1 Stress Among Teachers in Primary and Secondary Education

Teaching has long been acknowledged and discussed as a stressful field of work and under pandemic conditions, teachers face elevated difficulty and challenge (Klassen et al., 2010). Teacher stress is defined as the experience of unpleasant emotions resulting from multifaceted job-related aspects (Kyriacou, 2001). Teachers cite various causes of their stress, including lack of resources; excessive workload; school-level disorganization; managing behavior problems; accountability policies (Stauffer & Mason, 2013; Shernoff et al., 2011); resource shortages (Betoret, 2009); workload and time pressure, adapting teaching to students' needs, disruptive student behavior, value conflicts and lack of autonomy, challenges of teamwork, and lack of status (Skaalvik & Skaalvik, 2015). Work in the sociology of education (e.g., Stoll, 2013) indicates that under-resourcing challenges teachers' ability to meet student learning needs and can make them a target for blame and accountability for intractable racial and socio-economic inequities of educational provision and systemic-level shortfalls in state, district, and local funding and resources provided to schools and families. As a result, teachers are at an elevated risk of burnout—especially those who teach in lower-resourced, high-poverty schools (Hakanen et al., 2006) and such stress is negatively related to job satisfaction (Klassen et al., 2010).

Studies have shown relationships between stressful teaching conditions and a broad range of negative outcomes, including lower teacher well-being (Skaalvik & Skaalvik, 2015); less effective teaching and obstacles for student learning (Herman et al., 2018); impeded ability to engage students (Mérida-López et al., 2017); more disruptive student behavior (Herman et al., 2018); worse student–teacher relationships (Hoglund et al., 2015); more teacher turnover (Perrone et al., 2019); higher levels of student stress (Oberle & Schonert-Reichl, 2016); and poorer student achievement outcomes (Klusmann et al., 2016). As for remedies, teachers highlighted need for increasing of human and material resources (Shernoff et al., 2011; Skaalvik & Skaalvik, 2015), and notably, provision of more substantial socio-emotional supports during pre-service education (Aspelin, 2019; Le Cornu, 2009; Mansfield et al., 2016).

18.2.2 *Stress in the Field of Librarianship*

Research on stress in librarianship has provided similar findings, given librarians' roles as information and social service support personnel for local community members with wide-ranging demographics and needs. Throughout the USA, community-level public libraries and librarians serve as hubs of local municipal infrastructure and a sustainable public democratic sphere (Audunson et al., 2019). In addition to their standard tasks, public librarians have long performed front line social service and relief aid support roles, in areas such as welfare and other social service awareness raising and application and public health and mental health access (Malizia et al., 2012); care for the homeless (Greene, 2021); and resource support for those experiencing poverty, food scarcity, and rural isolation (De la Cruz, 2015; Bruce et al., 2017). Librarians and libraries serve in natural disaster response efforts providing utilities such as electricity, Wi-Fi, meeting spots, and even housing for the displaced and for aid workers (Young, 2018; Malizia et al., 2012). During the pandemic, US libraries frequently served as COVID-19 testing and vaccination centers as well as centers of public health education on COVID-19 (Calzer, 2021; Young, 2020).

Farkas (2017) notes librarianship is seen by those within it as complex and stressful, due to the diverse challenges encountered, and the lack of prior training in socio-emotional and social support aspects of this work during pre-service education and licensure. Evidence shows contributors to stress as including difficulties with co-workers, deadlines, budget issues, excessive workload, workplace culture, lack of time to finish work, interruptions, difficulties with management, lack of recognition for work, and managing aging building facilities (Smith et al., 2020; Wilkins Jordan, 2014). Wilkins Jordan (2014) notes that libraries are often the only remaining free public gathering places in localities and found that when conflicts arise, patrons can be perceived as both emotional and physical threats, which requires more directed, specialized training not standard in librarianship curriculum. Shupe et al. (2015) found that librarians also experience role ambiguity, overload, and burnout and that stressors significantly predicted an array of psychological, health-related, and work-related outcomes. Public school librarians encounter the stresses inherent to both fields: teaching (as discussed above) and librarianship. Wilkins Jordan (2014, p. 304) states that "acknowledging the need for more librarianship training in managerial skills, people skills, and emotional intelligence skills is a place to start," while Smith et al. (2020) highlight self-care as a critical aspect of developing coping for library professionals.

In addition to these normally occurring stress conditions, under crises such as the pandemic and mandated remote instruction conditions, teachers are providing new social support roles for families, interfacing much more directly with students' home settings and caretakers (Reynolds et al., 2022). They are also experiencing "techno-stress" due to new forms of online instruction and technical support they must learn on the fly (2022). Research suggests the field of primary and secondary education is facing a looming disaster of burnout and attrition due to increased pandemic

pressures (Reynolds et al., 2022; Goldhaber & Theobald, 2022). Further, unlike US public schools which received significant federal aid under the government's CARES Act to support remote teaching during the pandemic, while librarians saw significant increases (upwards of 50%) in the public's use of regularly available library services including computing and information technology resources, libraries received no additional supplemental financial or human resources despite this uptick, creating library-based labor shortages and issues of overwork, underpayment, and increased stress (Hunt Institute, 2021; ALA, 2021).

18.3 Curriculum Development: Learning *About* Resilience

Resilience is a construct related to stress responsiveness and coping capacity in the individual that has been studied in multiple fields, at many levels of analysis (from individual to societal). In conducting a systematic review of resilience definitions, Aburn and colleagues (2016) identify several categories that address human capacity to: rise above; engage in adaptation and adjustment; recognize one's own life and others' lives as a dynamic process; and deal with difficult life circumstances via normal functioning of human adaptational systems (2015, p. 980). Relevant scholarly theories and paradigms addressing the study of resilience, primarily in psychology and neuroscience, include:

- Trauma-informed resilience models (e.g., Bonanno, 2005; Elliott & Urquiza, 2006; Agaibi & Wilson, 2005).
- Neuroscience and bio-psychological models (Siebert, 2005; Hunter et al., 2018; Creswell et al., 2019; Siegel, 2007).
- Positive psychology perspectives (Gloria & Steinhardt, 2016; Folkman & Moskowitz, 2000; Fredrickson, 2004; Tugade et al., 2004; Magyar-Moe et al., 2015).
- Positive psychology models integrating mindfulness and compassion (Siegel, 2007; Loizzo, 2012; Loizzo et al. 2017; Seppälä et al., 2013; Harris, 2019).
- Developmental psychology models (Luthar et al. 2000; Luthar et al., 2014).
- Social ecological models (Ungar, 2013, 2015).
- Cultural sensitivity-, responsiveness-, and competence-based models addressing racism and other forms of systemic oppression as context factors (French et al., 2020; Poole et al., 2021; de Chesnay et al., 2012; NCES, 2021; Boser, 2014; Kung et al., 2020).

These different paradigms target varying causal contributors of stress (e.g., acute present-day or long-standing early traumas; inter-personal relations; systemic oppression; resource gaps, etc.). Consequently, each paradigm recommends varying and different mechanisms and interventions for stress management, coping and resilience capacity-building. One way to teach pre-service educators and librarians about resilience is to encourage their understanding of the multifaceted nature of its

study, and how different interventions target different causal mechanisms, among complex interacting processes and context factors.

18.3.1 Learning About Resilience: Design of a Pilot Curriculum

Learning about the inter-disciplinary approaches to the science and dynamics of human resilience can offer pre-service emerging teachers and librarians greater insight on the physiological, psychological, and sociological processes that contribute to human stress, stress responses, and their effects on well-being. While the resilience scholarly landscape is complex, those in these professions are pre-disposed to synthesizing and understanding inter-disciplinary scholarly knowledge. Related models applied to-date in teaching and librarianship pre-service curriculum include *trauma-informed care (TIC) approaches* to understanding community members (Hanson & Lang, 2016; Crosby, 2015; Davidson, 2017; Tolley, 2020; Soulen et al., 2021); *cultural responsiveness approaches* addressing systemic oppression, racism and white supremacy, privilege and implicit bias in local communities (Cooke, 2018; Poole et al., 2021; Espinal et al., 2018; Patin et al., 2022; Nasir et al., 2020; Jackson et al., 2019); and *models from the field of social work* in offering care (Zettervall & Nienow, 2019; Mehra, 2021).

This chapter argues that the concept of resilience and the science and psychology of stress and resilience offer an optimal targeted but also a syncretic entry point for raising pre-service students' awareness and understanding about the needs of community members in the pre-service training phase. Covering inter-disciplinary literature can demonstrate how stress and resilience are individual and social phenomena occurring across levels, inviting both adaption to external conditions and constructive capacity-building in the individual. And as crises become more pervasive, they contribute to social inequality conditions in our world. Thus, as we teach about stress and resilience in the context of community care work, it is important to encourage pre-service learners to envision how adaptation to crisis conditions through resilience-building can also empower agency to advance not just coping, but also change- and equity-based stances, actions, and solutions, centering community members' interests (Jackson et al., 2019).

18.3.1.1 Instructional Design

To test some of these propositions, the author created a 3-credit special topics elective class for pre-service professionals entitled "Resilience and Mindfulness in the Information Professions" within the Rutgers University School of Communication and Information master's program in Library and Information Science. The course aimed to introduce students to literature on resilience, motivation, and

positive psychology; it also focused on mindfulness as a related resilience practice modality with potential to calm stress responses and augment overall wellness. The goal was to encourage students to think about and apply these concepts vis-à-vis their intended career, considering needs of local constituents. In Summer of 2020 and Spring of 2021, a total of 16 students engaged across 15 weeks of semester-long curriculum. Instruction included video lectures, readings, weekly online discussion forums, reflection journals, and two major course assignments. One major assignment was a literature review building on course readings, delving into an area of interest. Students engaged in reflective journaling, making connections between the literatures and personal observations of their own stress, responses, and resilience capacities. For the final assignment students identified a “problem scenario” in their given professional setting related to stress conditions, conflict, triggering of stress responses, and/or resilience-building. They described the scenario and its dynamics using concepts, terminology, and definitions from readings and research materials and developed an “intervention plan document” containing practical guidelines at individual/group levels to address the scenario based on resilience-building literatures and practices.

A few examples of students’ highly creative final projects included the following:

- In response to the problem scenario of primary and secondary teachers’ escalating stress levels teaching online during the COVID-19 pandemic, and subsequent return to classrooms managing student disengagement and poorer achievement performance, one school librarian designed and implemented a “Mindful Mondays” group for the school’s teachers, offering pre-recorded guided meditations she had curated by well-known experts followed by supportive, mindful discussions, for group sharing and care. A similar approach was proposed in a library setting among library staff.
- One student described a problem scenario involving observed lack of empathy and compassion on part of library staff, for the experiences of Black and Hispanic youth using the library space who would hang out there in masks during the pandemic once physical gathering was allowable again. The student recounted dialogic interactions she had observed reflecting racial bias and lack of cultural sensitivity and responsiveness by the librarians and other adult patrons, and in turn, a triggered stress/anxiety/anger response among youth, who discussed feeling lack of belonging and less safety in the space. The pre-service student proposed initiating a “Mindful of Race” Book Club including guided “mindful discussion” activities for her library work colleagues that centered on reading and discussing works at the intersection of mindfulness and race. The club was proposed to be offered during paid library staff work hours, as professional development to staff.
- To forge a stronger community residential link among environmental awareness and nature appreciation among town residents, one student developed a creative library poetry project entitled the “Take a Haiku Workshop,” in which participants would take a silent group hike together in nature outside the library, while carrying a journal to jot notes, and return to the library for an indoor session of

haiku poetry writing and sharing of the works. Haikus about nature and the silent walking experience could be featured in a local library display after the initial workshop; ongoing group meet-ups scheduled thereafter.

Applied projects like these, as well as students' in-depth literature reviews earlier in the semester, show that pre-service emerging adult students in these fields are readily primed to engage productively in the scholarly discourse on resilience and find creative outlets for applying their knowledge in the context of their local intended practice communities. Some students implemented some of their ideas while class was underway, and others planned to do so in the future. The course received very positive evaluations; it is scheduled to be offered again in 2023/2024, and then considered as a regular course offering within the State of New Jersey accredited program curriculum for licensing librarians.

18.4 Learning to Be Resilient: Experiential Practices

A social constructivist approach to the study of resilience invites not only to intellectually investigate, but also to experiment with resilience *practice* modalities in group contexts (Vygotsky, 1978). Learning *to be* resilient in mind and body takes effort and sustained engagement, often through personal self-care practices and more formalized interventions across the lifespan. Research indicates that mindfulness meditation practices can improve health and well-being through stress reduction and resilience capacity-building (Khoury et al., 2013; Anheyer et al., 2017). Conscious effortful mindfulness practices focusing on mind, body, and the breath have shown calming effects upon the nervous system's response to adversity and stress triggers, via two main physiological stress pathways: regulatory and reactivity processes (Creswell et al., 2019). Mindfulness practice is hypothesized to bring about regulatory changes in the body's stress pathways in ways that alter our stress appraisals and decrease physiological stress reactivity in the sympathetic nervous system and adrenal system, which can facilitate coping and healthier behaviors (Creswell et al., 2019; Loizzo, 2021). Overall, mindfulness interventions have been shown to increase regulatory activity in prefrontal cortex brain regions and decrease reactivity in biological regions that moderate the body's bottom-up reactivity pathway (i.e., fight-or-flight stress response), leading to improvements in stress-related disease outcomes as well (2019).

18.4.1 Importance of Quality in Mindfulness Interventions

Mindfulness is increasingly seen as a wellness practice that can be engaged as a group activity in leisure time. High-quality, rigorously administered mindfulness programs are also growing as empirically validated supplements in medical and

behavioral health care settings as group-level options to augment formal clinical medical and behavioral health care, seen as beneficial (Loizzo et al., 2010). Pertaining to teachers and librarians in particular—mindfulness programs are increasingly being made available to staff and publics, in community spaces like libraries and public schools (Birchinall et al., 2019; Meeks, 2020; Norton & Griffith, 2020; Pionke & Graham, 2021; Soulen, 2020). For those considering integrating such an intervention in an education setting, quality matters and choosing a protocol with empirical evidence backing it is recommended.

18.4.1.1 Mindfulness-Based Stress Reduction (MBSR)

The design quality of mindfulness interventions is a factor of their effectiveness. One highly structured secularized mindfulness offering with a substantial research evidence base of positive effects is “mindfulness-based stress reduction” or MBSR (Kabat-Zinn, 2003). Building upon Buddhist teachings in Theravada traditions of Zen and Vipassana (Wilson, 2014), MBSR is designed to offer a baseline introduction to focused attention and open monitoring practices (2003). MBSR’s 8-week format is presented as an ongoing supplemental educational programmatic offering in a variety of settings including health care institutions, business and industry, prisons, veteran centers and schools. Roca et al. (2019), for instance, found that healthy participants in the 8-week MBSR intervention showed measurable improvements in mindfulness, compassion, psychological well-being, psychological distress, and emotional-cognitive control.

18.4.1.2 Compassion-Based Resilience Training (CBRT)

Another empirically supported program that combines both mindfulness *and* compassion, but that emphasizes compassion to a greater extent than MBSR, is “Compassion-Based Resilience Training” (CBRT) (Loizzo, 2012, 2021). Similar in structure to MBSR, it comprises 8 weeks of coursework and group practice drawing from Tibetan Buddhism. It was developed by Nalanda Institute in NYC and is run in affiliation with Tibet House, a Buddhist Center in NYC overseen by the Dalai Lama. The program incorporates targeted modules that help individuals negotiate social stress and distress.

Figure 18.1 lists the curriculum modules in the CBRT training. Compassion-focused material takes up 4 out of the 8 weeks of curriculum. Similar to MBSR, CBRT is growing in empirical evidence; findings indicate the protocol can be readily mastered and effectively used by Westerners in health care settings, schools, and clinical psychotherapy contexts, to reduce stress and enhance health, learning, and quality of life (Loizzo et al., 2009, 2010; Loizzo, 2012, 2014; Offidani et al., 2017). Building on neuroscience and Buddhist studies literatures, rationale for the unique coupling of mindfulness *and compassion* meditation and the physiological, psychological, and discussion of the social mechanisms by which positive outcomes and

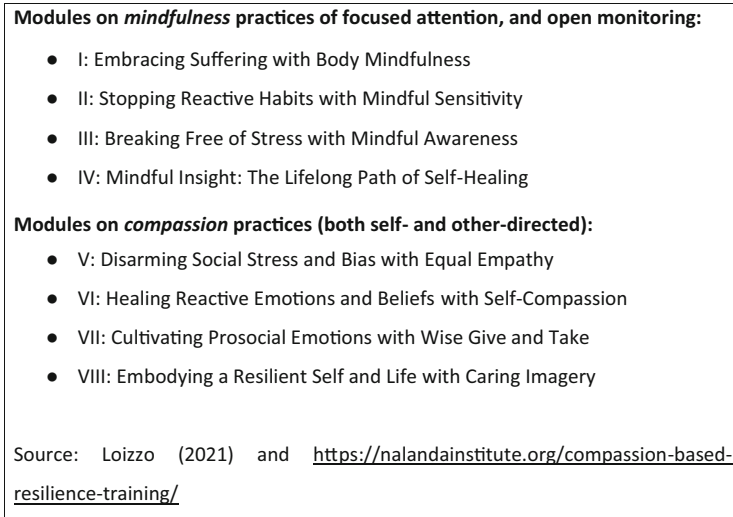


Fig. 18.1 Modules 1–8 of the “Compassion-Based Resilience Training” (CBRT)

benefits come about are offered in detail in Loizzo’s book-length works (Loizzo, 2012; Loizzo et al., 2017; Loizzo & Aslan, 2021).

Compassion approaches aim to cultivate greater understanding of one’s own biases and responses to intersectional differences, and thus, Nalanda programs often center teachings and leadership by Western Buddhist teachers who are non-white and from non-dominant groups. Wise compassion is culturally sensitive compassion, and several of Nalanda’s expert program leaders are BIPOC (Black, indigenous and other people of color); women; non-binary; LGBTQIA+; and otherwise under-represented group members. Guest speakers and source texts include Menakem (2017); Williams et al. (2016), Syedullah (2019), and King (2018). The inclusive integration of teachers from diverse identity positionalities and standpoints who offer anti-racist, emancipatory and liberative perspectives on adversity, adaptation, resistance and strength (per French et al. 2020) creates enriched learning opportunities in cultural responsiveness in ways that are especially well-suited for pre-service teachers and librarians working in diverse communities.

18.4.2 Piloting CBRT with Librarianship Master’s Degree Students

Similar to testing the resilience knowledge-building approach in a pre-service master’s class, the author, who is a certified Nalanda CBRT instructor, tested the 8-week CBRT curriculum as a 0-credit optional practice experience with a small set of master’s degree students in Information Studies at the University of Texas-

Austin's School of Information, during a sabbatical. The full CBRT course was presented for free, weekly to a total 6 students, in Fall 2021, during eight 60–90-minute sessions. The emphasis was on engaging synchronously in meditation in real time together, followed by discussion of experiences and materials provided. Enrollment comes with a PDF reading manual for all students, containing one full chapter per Module week and access to an online course shell full of materials. There are no assignments, grades, or evaluations.

While evidence was not generated for the purpose of a research study, anecdotally the students remained highly engaged, showing up on time, actively participating in the meditations and dialogue. Discussion of students' meditation experiences was particularly rich; one student had prior experience meditating in yoga classes; the rest were completely new to the practice. Students reflected upon discovery of "the observer"—the capacity of their mind to observe itself and its thoughts and, to more actively initiate a "pause," in reacting and responding to triggers in more conscious ways than they had in the past, while working with their breath. They also talked about developing greater "mental clarity" as well as heightened awareness of how mindfulness is linked to compassion and to better understanding the conditions of diverse others. As professionals tasked with navigating many eclectic conditions and factors among their diverse constituents, arguably, presence and mental clarity are qualities that can strongly benefit teachers and librarians as they aim to offer support through communicative engagement and guidance, discerning and identifying constituents' issues, and helping them to meet their needs in context.

Next steps are to offer CBRT again as a free practice-based optional class in my home institution of Rutgers. I strongly suggest that such practice-based offerings remain school-subsidized (i.e., the university pays for the class from department funds, as free and voluntary/optional wellness benefit, for those enrolled in pre-service training). Both CBRT and MBSR have international networks of highly experienced certified instructors, available for hire.

18.5 Conclusion

This chapter provides a rationale for offering both formal and informal opportunities for pre-service teachers and librarians to learn *about* resilience, as well as learn *to be* resilient. The chapter considers a range of scholarly paradigms in which resilience is studied and explores how mindfulness and compassion practices can support resilience development, according to the research. The chapter offers instructional design guidelines for a college-level course on resilience and discusses one particular practice modality developed by the Nalanda Institute called CBRT, advocating formal knowledge-building as well as elective informal practice-based experiences that also deeply integrate considerations of social inequality and systemic oppression as added sources of stress, especially in the context of crises.

One limitation of resilience-building as an adaptive curriculum reform measure stems from research indicating that teachers and librarians cite funding and resource

provision as *the highest priority solution* for improving their workplace stress conditions. Thus, when leaders place the onus on individuals to undertake “self-improvement” practices like mindfulness, personal therapies, and other coping practices and self-help to build resilience capacities, this personal accountability attribution is often seen as misguided, and can become a target of legitimate backlash and “bootstrapping” and “personal responsibility” critique among practitioners. This is especially the case when such recommendations completely override or omit more material resource-oriented solutions, as leaders, policy-makers, and funders encourage staff to endure budget cuts, short-staffing, and to continuously do more with less (Berg et al., 2018; Ferretti, 2020; Farkas, 2017). For the already overworked and burnt out in these professions, individual-level resilience solutions involving calls to “work harder on oneself” can ring as offensive and triggering (2017).

It is for these reasons that this chapter advocates for adaptive, culturally responsive perspectives on resilience to be taught in clear-sighted ways that incorporate awareness building about societal oppression, as well as the realities, limits, and constraints of crisis-based challenges, and facilitate knowledge-building about inequality, as well as encouraging intensive personal work in recognizing one’s biases, alongside of explicit compassion cultivation exercises, to increase empathic understanding of others’ varied experiences with stress (while improving the helpfulness of care workers’ professional engagement and responses).

Further, logistically, pre-service course implementation during students’ training and licensure can (a) count as credits toward their degree as in the case of the formal 3-credit Resilience class curriculum, and (b) address their needs at a point of particular pressure for them—emerging adulthood. The guidelines also advocate for offering the practice-based experiences in the 8-week CBRT offering *for free*, as a high-quality optional wellness training, funded through academic departments and student services offices. Provision of the formal resilience class for-credit towards degree completion, and the informal free CBRT practice experience as a wellness offering sponsored by the school, at this early phase of pre-service graduate school pedagogy in teaching and librarianship present counter-points to the valid bootstrapping and “personal responsibility” critiques mentioned above. Further, cultivating resilience can lead to greater agentive capacity for change-based activism and advocacy, to build motivation among graduates for more directly addressing systemic inequalities and some of the structural resource shortages and material needs targeted as stress-causal by those in these professions—to advocate successfully, for instance, for greater funding resources.

In Buddhist-inspired approaches to resilience, compassion is an extending of careful responsiveness to one another’s suffering that can be learned and cultivated, through practice. Compassion-based approaches to resilience hold promise for those working in community-based care contexts where social distress, conflict, and inequities are experienced by constituents (Loizzo, 2012; Loizzo et al. 2017; Harris, 2019). The culturally responsive, compassion-based elements of CBRT add novel, innovative educational angles for learning about resilience, in that the given compassion practices explicitly target, address, and meet many of the challenges which surface from interpersonal social distress as a main source.

An appropriate end of this chapter is a quote from the recently departed Vietnamese Buddhist master Thich Nhat Hahn (1995, p. 6):

One compassionate word, action, or thought can reduce another person's suffering and bring him joy. One word can give comfort and confidence, destroy doubt, help someone avoid a mistake, reconcile a conflict, or open the door to liberation. One action can save a person's life or help him take advantage of a rare opportunity. One thought can do the same, because thoughts always lead to words and actions. With compassion in our heart, every thought, word, and deed can bring about a miracle.

As our world conditions continue to evolve so swiftly, in ways we can't help but see as bringing about suffering for so many, may we become increasingly adaptive and resilient. And by cultivating compassion, may our resilience further become an expression of empathy and altruistic responsiveness. May doing so spark more miracles, such as these.

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Chapter 19

Conclusions



Antonella Delle Fave and Sophie Leontopoulou

Abstract The study of challenges and resources perceived by university students in times of crisis pervasively characterizes the contributions to this book, shedding light on the complex interplay between the intrinsically uncertain and unstable period of emerging adulthood and the uncertainty and instability brought about by critical circumstances. In order to better demarcate the boundaries of this book's contribution to the literature, we conducted a SWOT analysis (Benzaghta et al., *Journal of Global Business Insights*, 6(1), 54–72, 2021), a four-axes model used to identify Strengths, Weaknesses, Opportunities and Threats, using the chapters of this volume as analysis material. The SWOT analysis helped us globally and critically summarize the contribution of the authors' collective effort on a topic that will increasingly attract the interest of researchers, practitioners and policy makers. Considering that we are still living in turbulent times, and that future global challenges are already announced and expected in the coming years, we hope that the legacy of this volume will include the opening up and further development of a new area of enquiry, centered on emerging adults, the challenges besetting them, and the resources that can stimulate positive youth development and well-being in times of crisis.

The study of challenges and resources perceived by university students in times of crisis pervasively characterizes the contributions to this book, shedding light on the complex interplay between the intrinsically uncertain and unstable period of emerging adulthood and the uncertainty and instability brought about by critical circumstances. Considering the present and future challenges human societies and their governments are globally facing or attempting to prevent, this topic will increasingly

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attract the interest of researchers, practitioners, and policy makers. In order to better demarcate the boundaries of this book's contribution to the literature, we propose a SWOT analysis (Benzaghta et al., 2021), a four-axis model used to identify Strengths, Weaknesses, Opportunities, and Threats, using the chapters of this volume as analysis material.

19.1 Strengths

The scope of this book is at once focused and wide. The focus on emerging adulthood places it among the few orchestrated attempts to address phenomena and processes that are specific to this period of life across a wide range of countries and cultural contexts. Moreover, the book forwards and updates the extant literature with a unique emphasis on crises, their impact on youths' psychological adaptation, and the efforts implemented in the academic context to help them protect and enhance their own well-being during turbulent times. The specific focus of most chapters on the COVID-19 pandemic, as contemporary example of a planetary crisis, makes the book timely and up-to-date; at the same time, the contributions referring to the pervasive and long-lasting Greek economic crisis shed light on a situation that in today's worrying global context could become a reality for other countries.

Another specific contribution of the book consists of the inclusion and investigation of both positive and negative aspects of emerging adults' adaptation under conditions of crisis. The positive psychology literature has long asked for more integrative approaches to the study of well-being, and positive developmental psychology is also drawing researchers' attention to the same issue.

From a broader perspective, the chapters in this book cover topics situated at the crossroads of different fields of enquiry, including developmental psychology, education, positive youth development, mental health, and crisis. Thus, their collection carves a unique and highly relevant interdisciplinary perspective, which provides useful evidence and suggestions for more effectively understanding and dealing with global and local crises. Toward this end, the book offers an international set of evidence concerning the individual, educational, relational, and social aspects of crises. Moreover, it combines the description of challenges and resources perceived by emerging adults under these circumstances with examples and suggestions for intervention, which can guide programs aimed at promoting adaptive processes in individuals, communities, and societies, in order to help them overcome the adverse effects of crises. This book can thus serve as reference point for professionals, researchers, and practitioners working in different fields.

Another contribution of this book lays in the contextualization of this interdisciplinary perspective: not only does it acknowledge, but also explicitly addresses educational, societal, economic, and cultural issues at the conceptual and empirical levels. It portrays the interactions of contextual dimensions, including pandemic-related restrictions, academic activities, and interpersonal relations, with a wide range of psychological constructs, from mental health and flourishing to purpose

and growth. Moreover, it furthers understanding of normative and non-normative processes taking place during emerging adulthood, linking them to positive and negative aspects of well-being and exploring key resources and challenges during health and economic crises across countries.

Overall, this volume was built with the aim of providing an integrative overview of universal phenomena and mechanisms characterizing emerging adulthood in times of crisis, shedding light on personal and environmental challenges and resources, as well as embedding them in culture-specific contexts. At the structural level, it is characterized by remarkable methodological and epistemological diversity, as it includes empirical chapters providing original and novel quantitative and qualitative findings, interventions studies, as well as critical reviews and conceptual contributions.

19.2 Weaknesses

As is the case with most emerging areas of investigation, the one described in this book—emerging adults' experience in times of crisis—faces both conceptual and empirical weaknesses. A unifying theoretical framework is still lacking. This represents, however, a challenging task, as such a framework should necessarily be the result of an interdisciplinary dialogue that could help identify pertinent dimensions, propose relevant concepts, integrate measurement methods, introduce a common language to interpret findings, and guide practical applications. The chapters arrayed in this book base their rationale on the combination of widely consolidated theories and related research instruments and of newer constructs and measures. Most of them are, however, focused on psychological models and dimensions, while a broader and more integrative perspective, linking individual and context features, would substantially contribute to the clarification of the underlying mechanisms.

Furthermore, while contributors to this book come from different countries, several world regions are unexplored or underexplored, and findings are collected within single countries. A wider international approach as well as comparative studies is required for the field to enrich its outlook, approaches, and outcomes. Cross-national comparisons of challenges and resources available to and utilized by emerging adults in times of crisis will assist this new field to describe universal and local phenomena with higher accuracy and predictive value.

Finally, there are other populations of emerging adults that are not represented in this book. Not all young people are university students, as were most of the research populations in the chapters featured in this book. NEETs, youths working in family businesses, students attending fully distance learning institutions, to mention but a few, also need to be involved in studies to document their experiences, assess their needs and purposes, map their individual and social resources, so that multiple routes to positive youth development can be identified and promoted.

19.3 Opportunities

The recent outbreak of COVID-19 pandemic has boosted the attention of researchers, practitioners, and policy makers to the impact of global crises on individuals and communities in a variety of life domains. Such a multidisciplinary area of research is in its inception, and multiple exciting opportunities are emerging, which could shape its structure formation and development. As more or less explicitly evident across the chapters of this book, the study of emerging adulthood in times of crisis brings individual and relational challenges and resources into the equation; nevertheless, the role of environmental and contextual dimensions needs to be much more thoroughly explored and clarified. Community structure, healthcare and social services, law and economic provisions, and other collective and culture-related aspects should be taken into account in order to attain a comprehensive framework for understanding crises and for guiding psychological, educational, clinical, and social interventions to effectively help young people overcome crises by preserving and strengthening mental health and well-being and by pursuing meaningful goals. This introduces an opportunity that can remarkably enrich the currently available literature, creating the necessary conditions for interdisciplinary research. Even at the level of the single discipline of psychology, this field uniquely lies at the crossroads between developmental, clinical, educational, and positive psychology, with a specific contribution of the crisis and trauma literature; as such, it can foster a more intense dialogue among scholars and professionals with expertise in each of these branches of psychology.

Opportunities can also include conceptual and methodological advancements, leading to the development of interaction models of emerging adulthood in different contexts and culture-bound approaches to positive youth development, and to the identification of culture-specific resources and mechanisms to overcome different kinds of crises—not only health and economic crises, as those presented here, but also ecological, organizational, technological, and societal ones. A descriptive and hermeneutic framework can help toward these ends. Methodological advances, incorporating computer-based approaches and tools will need to be further developed and fine-tuned in anticipation of other pandemic crises, capitalizing on the lessons derived from facing the COVID-19 one, which required rapid adaptation to long-distance modes of learning, working, living, and interacting with others for prolonged periods of time.

On a related vein, existing interventions targeting emerging adults should be adapted for different contexts, and new ones can be developed. This book provides some examples and suggestions toward this goal, with an emphasis not only on educational, but also on clinical interventions. As specifically concerns the promotion of well-being and the strengthening of individual resources, Positive Psychology Interventions (PPIs) can also provide useful guidelines.

19.4 Threats

One of the threats facing the development of any new area of investigation, especially those requiring a multidisciplinary approach like the present one, is the crystallization at a descriptive level, without articulated and at the same time solid theories that can explain the phenomena under study in their interactions. In order to adequately address the main issues characterizing emerging adults, the challenges they may face and the resources they may utilize to overcome different kinds of crises, a conceptual framework incorporating both global and local dimensions is needed. Also, specific pathways should be identified to describe how different kinds of crises are associated with specific facets and components of mental health, well-being, and positive youth development. In order for the field to become relevant for as many young people as possible, the still widespread tendency to rely on Western biases should be overcome. Data collected among different groups of emerging adults, living in diverse parts of the world, and exposed to different critical contexts may help reduce this risk. International collaboration should be built, involving local researchers and stakeholders, in order to ask the right questions, and to establish the appropriate theoretical, methodological, and interpretive frameworks. This approach would allow for designing culture-fair studies and interventions and for explaining the findings in a culturally sensitive manner.

19.5 Final Remarks

In order to highlight and jointly discuss the major points of interests and the limitations of this book, we opted for conducting a SWOT analysis, which helped us globally and critically summarize the contribution of the authors' collective effort. At the end of this task, we feel confident that the information provided across the chapters will be a useful resource for scholars interested in the study of positive development in emerging adulthood under crisis, as well as an accessible and updated overview of the state-of-the-art knowledge in this area for researchers and professionals in other disciplines and also for the general audience. Considering that we are still living in turbulent times and that future global challenges are already announced and expected in the coming years, we hope that the legacy of this volume will include the opening up and further development of a new area of enquiry as defined by its three core themes, centered on emerging adults, the challenges besetting them, and the resources that can stimulate positive youth development and well-being in times of crisis.

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