

Advances in Mental Health and Addiction
Series Editor: Masood Zangeneh

Masood Zangeneh *Editor*

Essentials in Health and Mental Health

Unlocking the Keys to Wellness

 Springer

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Series Editor

Masood Zangeneh, Richmond Hill, ON, Canada

Over the past several decades we have witnessed dramatic shifts in prevailing approaches to mental health and addiction. Significant scientific achievements have led to novel treatment options that impacted the experiences of individuals with mental disorders. In recent years, new perspectives have begun to influence the way we address mental health and substance dependencies, resulting in a greater emphasis on mental health promotion and prevention strategies. Despite these progressions, mental health care systems too often remain stagnant, fragmented, and peripheral.

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Editor

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Introduction

In a world increasingly characterized by rapid change and constant challenges, maintaining good physical and mental health is more important than ever. *Essentials in Health & Mental Health* is a comprehensive exploration of the multifaceted landscape of health and well-being, delving into key aspects that affect individuals of all ages, backgrounds, and circumstances. Through the lens of 20 meticulously crafted chapters, this book takes you on a journey to understand the essential elements that contribute to our overall health, from the invisible struggles of loneliness and mental health problems to the impact of global events like the COVID-19 pandemic.

The book begins with an eye-opening chapter that sheds light on the pervasive nature of loneliness and its profound impact on the functioning of individuals. The authors delve into the various costs of loneliness and uncover the under-recognized association between loneliness and mental health problems. In a world interconnected like never before, these insights are essential for anyone seeking to understand the complexities of human well-being.

In the following chapter, the spotlight shifts to Singapore, where a randomized controlled study explores the impacts of life-story book creation for older adults on their life satisfaction. This heartwarming endeavor reflects the power of personal narratives and the potential for storytelling to enhance the quality of life for older individuals.

Chapter 3 tackles the intricate relationship between academic self-efficacy, perceived social support, and academic resilience among students. By investigating these interconnections, the authors illuminate the path to building more resilient and confident learners, offering valuable insights for educators and students alike.

In Chap. 4, the focus shifts to a deeply sensitive and critical issue: suicide. The author examines the role of “mattering” in suicide risk and assessment, emphasizing how promoting a sense of mattering can reduce vulnerability to suicide through prevention programs. The unbearable form of psychological pain experienced by vulnerable individuals, rooted in a feeling of not mattering to anyone, is explored in depth.

Chapter 5 delves into multisectoral collaboration, highlighting the importance of involving all relevant stakeholders in suicide prevention. A comprehensive approach is presented, emphasizing the need for a collective effort to make a meaningful impact on this urgent and complex issue.

Turning to the challenges faced by young individuals, Chap. 6 explores the potential of Acceptance and Commitment Therapy (ACT) in fostering youth mental health and well-being within school settings. The authors emphasize the importance of promoting psychological flexibility and values-driven actions to address a wide range of student concerns, including anxiety, peer relationships, and student attendance.

In Chap. 7, the book addresses the vulnerability of refugee youth to poor mental health due to exposure to trauma and disruptions to their psychological, emotional, and physical development. It underscores the need for early mental health intervention and support for this group during and after resettlement in host communities.

Chapter 8 takes a closer look at school-based prevention and intervention programs that focus on the well-being of the school environment and examine how it contributes to student psychological outcomes. These programs play a crucial role in creating nurturing and supportive educational environments for young learners.

In Chap. 9, the book turns its attention to a global concern: the characteristics of e-cigarette and vape use among high school students in Colombia. The authors explore the complexities of this issue, shedding light on the challenges of addressing youth tobacco use in a changing world.

Chapter 10 brings us to Russia, where researchers report on five separate studies on women's mental health. These studies examine various aspects of women's mental health, from the socio-psychological and clinical features of non-psychotic mental disorders in middle-aged women to the impact of menopausal symptoms on mental well-being. Gender differences in the adverse effects of antipsychotic therapy for schizophrenia are also explored, offering valuable insights into gender-specific mental health challenges.

In Chap. 11, the book explores the mental health issues faced by Palestinian women living in a society characterized by high levels of war catastrophes, prolonged conflict, and collective trauma. These challenges highlight the resilience of women in the face of adversity and the need for culturally sensitive mental health support.

In Chap. 12, the book addresses the importance of strategies for inclusion and engagement to increase the overall participation of young Black women in youth spaces within low-income and underserved inner-city neighborhoods. Recognizing the connections between positive mental health, community engagement, and peer support, this chapter offers guidance on fostering well-being in marginalized communities.

In Chap. 13, the book delves into strategies for promoting male mental well-being through public health-focused community-based approaches. It explores the unique challenges faced by men in seeking and maintaining good mental health and offers promising practices for addressing these challenges.

In Chap. 14, the focus shifts to educators in higher education as they navigate the return to on-campus teaching following the COVID-19 pandemic-induced shift to remote course delivery. The author highlights the need for post-secondary institutions to support professors' mental health and discusses its implications for public mental health models. As educators play a crucial role in shaping the future, their well-being is essential to the success of the education system.

Chapter 15 investigates the key factors contributing to job-related stress among educators, with a focus on schoolteachers in Nepal. This chapter sheds light on the unique challenges faced by educators in various settings, offering insights into the broader issue of workplace stress and its implications for mental health.

In Chap. 16, the book explores the ramifications of COVID-19 on the mental well-being of emerging adults in Canada. Within this exploration, the authors highlight the depth of resilience displayed by young adults amid the challenges of the pandemic. They also present pivotal questions for public health officials and other stakeholders to address and enhance the support systems for emerging adults and their mental health.

In Chap. 17, the book presents an explanatory model that dissects the impact of macroeconomic, sociodemographic, and health status-resources factors on life expectancy in Kuwait. This chapter provides a fascinating exploration of the various forces that shape the health and well-being of populations on a national level.

Chapter 18 takes a more holistic approach, reporting on a component of a large-scale project that engages with traditional, alternative, or complementary therapies and products for health and mental health promotion and prevention. This chapter reflects the diverse landscape of approaches to mental health and well-being.

Chapter 19 introduces a new computerized global psychopathology (CGP) model that takes into account the advances in measurements, information technology, and neurosciences of the twenty-first century. This model is designed to meet the challenges of accelerated globalization, including its impact on mental health problems, and facilitate data collection and research across the globe.

The book concludes with an innovative proposal in Chap. 20, exploring the implications of emerging complexity theory for mental health systems. More specifically, mental health systems was explored from an anthro-complexity perspective, which provides a focus on the complexity of human systems in particular. In this collection, each chapter offers a unique perspective on various aspects of health and well-being, from the profound impacts of loneliness and the complexities of youth mental health to the challenges faced by educators and the intricacies of global mental health models. As you journey through the pages of this book, you will gain a deeper understanding of the key factors that contribute to our physical and mental well-being, ultimately unlocking the keys to a healthier, happier life.

Contents

1	The Pervasiveness and Public Mental Health Significance of Loneliness: Assessing, Understanding, and Preventing Unbearable and Enduring Loneliness.	1
	Gordon L. Flett, Alison L. Rose, Joel O. Goldberg, and Taryn Nepon	
2	Life-Story Book Creation to Enhance Life Satisfaction for Older Adults	27
	Moon Fai Chan	
3	Impact of Online Learning Experience During COVID-19: Exploring the Relationship Between Academic Resilience, Academic Self-Efficacy, and Perceived Social Support.	39
	Smita Singh, Jie Ying Loh, and Patrick K. F. Lin	
4	Mattering and Feelings of Not Mattering in Suicide Risk and Prevention: Conceptualization, Review, and Public Health Recommendations.	57
	Gordon L. Flett	
5	Suicide: Epidemiology, Prevention, Assessment, Treatment, and Outcomes	77
	Vikas Menon, Karthick Subramanian, and Ilambaridhi Balasubramanian	
6	Acceptance and Commitment Therapy (ACT): A Powerful Contextual Approach to Promoting Youth Mental Health in Schools	93
	Gökmen Arslan, Ahmet Tanhan, and K. Fatih Yavuz	
7	Refugee Youth: Early Mental Health Intervention and Support	105
	Hellen Gateri and Fiona Edwards	
8	Promoting and Supporting Well-Being in Schools.	117
	Murat Yıldırım and Gökmen Arslan	

9	E-Cigarette and Vaping Use Among High School Students in Colombia: Analyzing Characteristics and Health Concerns	127
	Orlando Scoppetta and Augusto Pérez Gómez	
10	Mental Health of Women in Midlife and Beyond.	141
	N. A. Bokhan, M. F. Belokrylova, E. V. Gutkevich, E. G. Kornetova, I. E. Kupriyanova, V. F. Lebedeva, A. I. Mandel, V. B. Nikitina, E. V. Didenko, N. I. Kisel, and S. N. Vasilieva	
11	Womens' Mental Health and War Catastrophes in Palestine.	177
	Dana Bdier and Fayez Mahamid	
12	Participation and Engagement Barriers Faced by Young Black Women Within Health Promotion Youth Programming and Community Drop-In Spaces	187
	Rahma Togane, Krystle Skeete, and Vasthi Seide	
13	Promoting Male Mental Well-Being Through Community-Based Strategies	199
	Roxann McNeish Taormina and Quynh Tran	
14	Faculty Expectations and Experiences: The Return to On-Campus Teaching and Learning.	207
	Maria Lucia DiPlacito-DeRango	
15	Understanding Stressors of School Teachers in Nepal	221
	Khem Raj Bhatta, Rita Dhungel, Narendra Singh Thagunna, Rupesh Koirala, Jyotsana Dangi, and Gopilal Shrestha	
16	What's Next? Surviving the COVID-19 Pandemic Era and the Mental Health Ramifications Among Emerging Adults (18–25 Years) in Canada.	235
	Donna Richards and Samantha Zerafa	
17	The Impact of Macroeconomic, Sociodemographic, and Health Status-Resources Determinants on Life Expectancy in Kuwait Population from 1980 to 2020	249
	Anak Agung Bagus Wirayuda, Abdulaziz Al-Mahrezi, and Moon Fai Chan	
18	Alternative and Complementary Practices for Mental Health Care in the CDMX: The Voice of Therapists and Storekeepers	267
	Ingrid Vargas-Huicochea, Ana Carolina Rodríguez-Machain, and Janny Laurean	
19	The Initiative for Computerized Global Psychopathology (CGP) Model	291
	Ahmed Aboraya	

20 Can Complexity Theory Help Us to Understand Mental Health Policy? 329
Sonja Blignaut and Ray MacNeil

Index..... 343

Chapter 1

The Pervasiveness and Public Mental Health Significance of Loneliness: Assessing, Understanding, and Preventing Unbearable and Enduring Loneliness



Gordon L. Flett, Alison L. Rose, Joel O. Goldberg, and Taryn Nepon

Do you suffer from loneliness? If so, the good news is you are far from alone. It is generally recognized that there is a global epidemic of loneliness (see Killeen, 1998; Murthy, 2020), and the main contentious issue here is whether loneliness is an epidemic or a pandemic. Estimates vary considerably as a function of factors such as how loneliness is measured, where it is measured, and the age of participants, but there is ample evidence to indicate that in adolescents and older people, more than 50% of people experience loneliness at some point in their lives and it may indeed be normative to experience loneliness (see Crowe et al., 2022). The reality for people who feel alone is that they have plenty of company and they probably don't realize how much they have in common with so many other people.

Loneliness is one of the greatest and most vexing public health issues. This claim is beyond dispute. The case for loneliness as a public health crisis and a matter of urgency was made by Holt-Lundstad (2017) in her testimony before the U.S. Senate Aging Committee. More recently, Holt-Lundstad (2022) presented a compelling argument for lack of social connection as a public health matter. The urgent need to address loneliness as a public health matter is all the more evident now that we have experienced the COVID-19 pandemic (for a discussion, see Flett & Zangeneh, 2020). Lockdowns with their accompanying social restrictions and requiring people to isolate made loneliness much more salient and it seemed to increase levels of loneliness in certain segments of the population. For instance, a review and meta-analysis found that loneliness in children and adolescents increased during the pandemic when assessed in longitudinal research. Moreover, in cross-sectional research,

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loneliness was associated with lower well-being and higher symptoms of depression and anxiety, as well as gaming addiction, and sleep difficulties (see Farrell et al., 2023). The impact of the global pandemic with its remarkably surprising and sudden onset and mental health consequences (Flett & Zangeneh, 2020; Galea et al., 2020) underscores the need for updated models of loneliness to reflect situational factors and to place an emphasis on perceived controllability and the presence or absence of feelings of control.

Given the myriad indicators of the relevance and pervasiveness of loneliness, we believe that a chapter on loneliness is essential in this book on public mental health. In an ideal universe, we hope that we will witness in the next decade a prioritization for the development of global intervention strategies designed to prevent loneliness and associated mental health concerns among people of all ages.

Any comfort that might come from knowing you are not alone if you are lonely is likely limited by the extensive bad news about loneliness as well as how it feels to be lonely. Cacioppo and Cacioppo (2018) succinctly summarized this bad news by asking readers to imagine a condition linked with making people depressed, irritable, and self-centered that afflicts at least 1 in 3 people in industrialized countries, with 1 in 12 people being severely impacted by loneliness. They then noted the physical health costs and the link between loneliness and mortality. Associations with health problems and all-cause mortality have been confirmed via meta-analyses (see Park et al., 2020; Rico-Uribe et al., 2018), and the association between loneliness and poor health is believed to be reciprocal in nature (see Ingram & Kelly, 2022). The association with health problems is due, in part, to the tendency for lonely people to have higher levels of stress (see Park et al., 2020). The link with early mortality is strong enough for researchers to propose that loneliness *can cause early death* (see Luo et al., 2012). Given this evidence, there is a growing and urgent need to develop and broadly apply interventions and prevention strategies that will reduce its prevalence and mitigate the severity and chronicity of loneliness.

Perhaps the most succinct way of framing loneliness is to consider it from a quality of life perspective. It is difficult, if not impossible, to envision a great quality of life for someone who is lonely and enduring a lonely life. There are countless empirical studies linking loneliness with a lower quality of life (Rokach, 2019) and this association should come as a surprise to virtually no one.

This chapter focuses on documenting and understanding the loneliness of people who experience it at a level that does indeed cause significant distress and dysfunction. A central premise of this chapter is that there is an extreme form of unbearable loneliness that wreaks havoc in people's lives and prevention and intervention efforts are needed to specifically ameliorate unbearable loneliness. This type of loneliness is especially likely to be accompanied by significant mental health problems and associated risks and vulnerabilities.

Below, we consider some further costs of loneliness and then provide an extended definition and description of loneliness. We then examine the alarming but at times under-recognized association between loneliness and mental health problems with a particular emphasis on the clinical significance of loneliness. The second main segment of our chapter proposes that when considering pathways and routes to

loneliness, a logical place to begin is with the self-concept. Specifically, there are various negative forms that the self-concept can take in ways that can be seen as providing a bridge that links loneliness with mental health problems. This emphasis on the negative self leads into our discussion of the more extreme form of unbearable loneliness that we see as largely responsible for the costs and consequences of loneliness. Finally, in keeping with the public mental health focus, we briefly discuss key themes to emphasize in prevention and intervention efforts designed to alleviate the terrible suffering caused by loneliness.

Additional Costs of Loneliness

There are many ways to calculate the costs of loneliness, including the human costs. Loneliness is also a public health concern because it also involves significant economic costs. This was the conclusion that emerged recently following an analysis of 20 years of annual survey data from Australia. This analysis by Kung et al. (2021a) also found that the social gradient of health also applies to loneliness. They found that much higher rates of loneliness were detected among people with socioeconomic disadvantage. Kung et al. (2021b) replicated this finding based on biobank survey data from the United Kingdom. Why is there an economic cost to loneliness? Analyses of age trends show an increasingly stronger association among loneliness, declining health, and greater health care usage. Sirois and Owens (2021) confirmed via meta-analysis that loneliness is associated with greater health-care usage and more visits to primary-care practitioners.

Kung and associates (2021b) cautioned that loneliness is not solely applicable to older people despite some public misperceptions. They noted that the link between loneliness and poorer mental health is strongest among younger people in these surveys. They note that across all age groups, loneliness is more prevalent among females than males, and between 15% and 20% of 15- to 24-year-olds in Australia are lonely. Thus, about 1 in 6 or 1 in 5 young people experience loneliness. Most notably, Kung et al. (2021a) noted that beginning in 2013, there has been an increase in the proportion of those people between the ages of 15 to 24 years old who agreed with the statement, “I often feel very lonely.”

As alluded to earlier, numerous authors have surveyed the prevalence of loneliness in multiple locations around the world and concluded we are experiencing a loneliness epidemic. Other authors also recognize the high incidence rates of loneliness but suggest that though it is prevalent, the pervasiveness of loneliness has been overstated. A recent cross-temporal meta-analysis by Buecker et al. (2021) found that rates of loneliness in emerging adults have slightly increased between the years of 1976 and 2019. While these findings suggest that claims of a “loneliness epidemic” may be exaggerated, the results of this meta-analysis still very much illustrate an urgent need to design interventions to address loneliness among the emerging adult age group (see Buecker et al., 2021).

Historical analyses point to consistent increases over time in the number of people who live alone (see Snell, 2017), and how this emerging asocial context may have set the stage for increases in the prevalence of loneliness. Another contributing factor is the greater longevity of people and the increasing number of people who may live into old age and who may be increasingly susceptible to loneliness. The growth in loneliness problems is concerning enough to warrant public institutional responses. For instance, Great Britain created the Ministry of Loneliness in 2018 and committed to making loneliness reduction a governmental priority. Most recently, in 2023, U.S. Surgeon General Vivek Murthy issued an advisory and unveiled his plan to combat loneliness and social disconnection. There are also an increasing number of proactive steps being taken around the world to heighten awareness of loneliness and what can be done to combat it.

Loneliness has garnered considerable research attention, and there is now a plethora of systematic reviews and meta-analyses on loneliness, and even a review of existing reviews (see Leigh-Hunt et al., 2017). Could this broad interest reflect, at least in part, the fact that everyone, researchers included, can truly relate to how it feels when someone feels lonely and alone? Meta-analyses have linked loneliness with sleep disturbance (Griffin et al., 2020) and increased risk of dementia (Lara et al., 2019). Buecker and associates (2020) established via their meta-analysis that loneliness has links with the elements of the five-factor personality model in the pattern typically associated with poor adjustment (i.e., high neuroticism and low agreeableness, extraversion, conscientiousness, and openness).

In the current chapter, we provide a definition and description of loneliness and then offer a selective rather than a systematic review of the existing literature. Our overarching goal in writing this chapter is our concern that the mental health implications and clinical relevance and importance of loneliness are not sufficiently understood or recognized at present because key elements and types of loneliness are not being broadly assessed and evaluated.

The next segment of this chapter builds on our expanded definition of loneliness and considers loneliness in terms of its mental health correlates with a particular focus on the links between loneliness and social anxiety. Reasons for links between loneliness and mental health problems are then considered and key processes and mechanisms are outlined. Our analysis focuses on the role of self and identity in vulnerability to loneliness.

As suggested earlier, a central component of this chapter is the segment that considers our proposed contention that there is an extreme form of loneliness that merits much more attention and more proactive intervention. We maintain it is crucial to recognize the heterogeneity that is evident among people who are lonely, and there is a need to distinguish milder versus more severe forms of loneliness and to increasingly focus on people who suffer from chronic and intensely felt loneliness. Most notably, we consider a type of loneliness we refer to as “unbearable loneliness” and how unbearable loneliness is accompanied by considerable psychological pain. We describe recent research in our laboratory on the assessment of unbearable loneliness from a cognitive perspective. Finally, we discuss key targets for prevention and intervention and associated public health policy issues.

Defining and Describing Loneliness and Its Clinical Significance

Loneliness is a negative emotional experience resulting from a discrepancy between “one’s desired and achieved levels of social relations” (Perlman & Peplau, 1981, p. 32). Loneliness is tied more closely to the quality of social interaction and exchanges rather than the frequency or amount of social interaction (Cacioppo & Hawkley, 2009). One does not have to be alone to feel lonely.

An overlooked analysis by Joiner et al. (2002) revealed that loneliness has two distinguishable components; people can feel lonely as a form of painful disconnection but it can also reflect a lack of pleasurable engagement with other people. Joiner et al. (2002) showed that this lack of pleasurable engagement was more relevant in terms of the link between loneliness and depression onset in adolescents. However, painful disconnection can be at the core of loneliness for some young people. One interview study found that some adolescent girls characterized depression as a blend of depression, disconnection, and loneliness culminating in a sense of “only-ness,” a poignant term which depicts the felt undesirable experience of standing apart from others (see Hetherington & Stoppard, 2002).

We believe another overlooked aspect of loneliness is its temporal component. When someone is experiencing extreme and chronic loneliness, they typically project this into the future. Lonely people find it very difficult to keep their hopes up and when they experience chronic loneliness, they tend to see little chance of escaping future loneliness. Below, we describe some evidence that links loneliness with social hopelessness. We also briefly describe a new measure of severe and enduring loneliness that was the focus of dissertation research by the second author (see Rose, 2024). Evidence confirmed a robust link between severe and chronic loneliness and a lack of hope. This research signifies considerable risk for lonely people with high levels of hopelessness and is in keeping with research suggesting that hopelessness is a critical yet under-recognized variable that links both loneliness and suicidal tendencies (see Joiner & Rudd, 1996).

The experience of loneliness should, of course, be differentiated from solitude and simply being alone without social interaction. Although there are associated negative feelings that tend to accompany loneliness, these feelings can also motivate and propel us to seek reconnection with others (Cacioppo & Hawkley, 2009; Qualter et al., 2015). Loneliness not only has motivational and emotional consequences but it also has significant cognitive and behavioral consequences (see Hawkley & Cacioppo, 2010), and as such, it can involve multiple forms of impairment that can have a debilitating impact on people.

Cacioppo and Hawkley (2009) observed that once loneliness is activated, it operates more like a stable and enduring trait rather than a state, even when loneliness has been induced and has not naturally occurred. They further noted that when loneliness is activated, it seems to entail what they describe as “a ‘lonely’ social cognition – that can make every social molehill look like a mountain” (p. 231). This tendency to process life experiences through a “loneliness” lens ought to influence

cognitive and emotional self-regulation so as to accentuate negative experiences and blunt or minimize positive experiences.

Loneliness is especially maladaptive and potentially deadly when it is severe and persistent. It is possible to identify a group of persistently lonely people using trajectory analyses to analyze longitudinal data (see Vanhalst et al., 2013). People with chronic loneliness have considerable levels of heightened risk. When it comes to viewing loneliness as a risk factor for mortality (Holt-Lunstad et al., 2015; Rokach, 2019), persistently lonely people have been found to have a slightly greater mortality risk using a Cox proportional hazards model with time to death as the outcome variable and loneliness as the predictor (Shiovitz-Ezra & Ayalon, 2010). These results were found even after controlling for potential confounding factors such as age, gender, education level, medical conditions, functional impairments, and depression. Park and associates (2020) analyzed their data and proposed that chronic loneliness is accompanied by maladaptive chronic stress responses that in turn trigger inflammatory pathways in the body and poor health behaviors.

Scales that assess loneliness tend to focus on its level and do not assess chronic loneliness. Accordingly, as noted above, a measure that taps enduring chronic loneliness and severe loneliness was the focus of recent dissertation work conducted by the second author of this chapter. Rose (2024) found that enduring chronic loneliness in emerging adults was associated with lower reported adaptability to the experience of loneliness, feelings of not mattering to others, unbearable psychological pain, worry, depression, and self-stigma for seeking help. Moreover, a series of regression analyses showed that two subscales of this new measure (i.e., enduring chronic loneliness and severe loneliness) predict significant unique variance in several of these measures beyond the variance attributable to a brief eight-item version of the UCLA Loneliness Scale. Notably, analyses of data from a second sample revealed that the subscale measuring an enduring chronic form of loneliness was uniquely predictive of a lack of hopefulness above and beyond the regular UCLA Loneliness Scale.

While loneliness and mental health issues have now been studied for many years, an influential early review by Heinrich and Gullone (2006) focused on the clinical significance of loneliness that has proven to be prescient in anticipating ensuing research (also see Cacioppo et al., 2015). They highlighted more than a decade and a half ago the high prevalence of loneliness and concluded that loneliness is actually more prevalent, though at times less noticed during the adolescent years. Their analysis focused on the central role of loneliness in understanding poor social relationships and their sense that because loneliness can have severe mental health consequences, clinicians should make this neglected phenomenon more of a key focus.

As suggested above, loneliness has been linked to a multitude of mental health problems including various types of anxiety, depression, and suicide ideation. Accordingly, it has been concluded recently that loneliness is transdiagnostic and the presence of one or more clinical conditions is linked with substantially elevated levels of loneliness (see Hickin et al., 2021). The association between anxiety and loneliness is believed to be due to a heightened vigilance to social threat among

people prone to loneliness (see Ingram & Kelly, 2022). Perhaps not surprisingly, the link between loneliness and social anxiety has been long recognized and extensively studied (see Jones et al., 1990). Further, a central focus over several decades is empirical research evaluating the relationship between loneliness and depression. Erzen and Cikrikci (2018) described a meta-analysis based on data from 88 studies and over 40,000 participants, and it was concluded that loneliness had a moderately significant association with depression.

Similarly, a meta-analysis established that loneliness is also linked longitudinally with subsequent levels of suicide ideation and suicidal behavior (see McClelland et al., 2020). Clearly, there are myriad physical and mental health concerns linked with loneliness. Given the well-established link that persistent, long-term loneliness has with health problems and earlier mortality (see Cacioppo & Patrick, 2008), it seems essential to routinely measure self-reports of chronic loneliness in research and in individual assessments of people in counselling and clinical settings.

We now turn to an analysis of the role of the negative self in loneliness. Why focus on the negative self? Our decision to do so reflects not only what can be gleaned from case accounts and research evidence but also the sense that bolstering a negative sense of self should be a key element of treatments, preventions, and interventions.

Factors Contributing to Loneliness: Self and Identity Considerations

When a construct is linked broadly with various mental health problems and associated interpersonal problems, as is the case with loneliness, it is safe to assume a role for the self, in terms of its content, structure, and cognitive processing. We maintain that focus on the self and identity should be the starting point when seeking to understand loneliness. Indeed, decades ago, von Witzleben (1958) characterized primary loneliness as being a loneliness of one's self and indicated this primary loneliness is responsible for feeling alone and helpless in the world. Similarly, Sadler (1978) proposed that loneliness is a form of self-definition and self-perception that can often entail an acute self-awareness of deprivation. We feel that when loneliness is chronic and intense, issues of self and identity are important and can account for mental health difficulties. The self is implicated when people have thoughts such as "There must be something wrong with me" that accord with observations that loneliness is a deficit condition and involves an abiding sense that there is a missing part of the self (see Weiss, 1973).

If the self is a central focus in loneliness, the self should surface as a key theme when people are asked to consider and describe their own experiences of loneliness. This is indeed the case. For instance, when examining antecedents of loneliness, Ami Rokach identified several clusters of factors including a key cluster related to the negative self. Rokach (1989) conducted a content analysis of the open-ended

responses of 526 participants. This content analysis yielded a cluster around the central theme of “personal shortcomings.” These shortcomings included reports of negative self-perceptions and related themes about feeling unimportant (i.e., not mattering), feeling unattractive to others, and low self-worth. People in this study linked their loneliness with being a failure, feeling inadequate, and having little of value to offer. Similarly, a recent interview study of adolescents and emerging adults implicated a negative self-image, low self-esteem, and an insecurity involving the self as core contributors to loneliness (see Sundqvist & Hemberg, 2021).

It has been observed that lonely people “... are readier than other people to use negative terms to describe themselves and their performance” (Vitkus & Horowitz, 1987, p. 1272). This negativistic tendency can be detected among children prone to loneliness. Hymel and Franke (1985) observed that lonely children tend to ascribe social success to external factors but attribute social failure to internal and stable elements in a self-blaming way. This negative orientation toward the self often takes the form of dispositional self-criticism and both loneliness and self-criticism weigh heavily on people of various ages. Typically, the link between loneliness and self-criticism is moderate to strong in magnitude and it is stronger than the link between loneliness and other personality traits such as dependency (see Schachter & Zlotogorski, 1995). Wiseman (1997) examined students making the transition to university in longitudinal research and found that trait loneliness was associated with higher levels of self-criticism and lower levels of self-efficacy. Moreover, higher self-criticism and lower self-efficacy at the beginning of the school year predicted subsequent decreases in state loneliness. Besser et al. (2003) showed that self-criticism was associated with loneliness, but this link was stronger among university students not in a current romantic relationship ($r = 0.62$) versus those students in a romantic relationship ($r = 0.43$). The magnitude of the link between loneliness and dependency was comparatively much smaller.

The link between loneliness and self-criticism can escalate into more extreme forms such as self-disgust (Ypsilanti et al., 2019) and self-hate. Supplementary analyses of data from our Collegiate Health Study confirmed a strong positive association between loneliness and self-hate ($r = 0.52$) along with equally strong associations with measures of rumination, distraction, neuroticism, social hopelessness, preoccupied attachment style, and depression. Impressively, as seen in Table 1.1, despite its strong associations with key vulnerability factors including self-hate, loneliness remained a significant and unique predictor of depression when considered in a regression analysis with other predictors.

Table 1.1 Regression analysis predicting levels of self-reported depression in university students

Predictor	Beta	<i>t</i>	<i>p</i>
Unbearable loneliness	0.362	4.80	<0.001
Neuroticism	0.140	2.44	<0.05
Hate self	0.319	5.38	<0.0001
Preoccupied attachment style	0.153	2.33	<0.03

Note. $N = 246$ university students. This block of predictors was significant ($F = 29.90, p < 0.0001$) and accounted for 51.7% of the variance in depression scores

Besser et al. (2003) suggested that factors and processes involving the self represent a good starting point when responding to the call from Dill and Anderson (1999) to identify mediators of the link between loneliness and depression. Below we outline several ways of conceptualizing the self that we propose have a role to play in loneliness. Our emphasis on the self reflects our sense that bolstering the self should be at the center of preventive, proactive attempts to mitigate loneliness, and reduce the possibility of someone developing unbearable loneliness.

Loneliness can also involve a form of self-blame that encompasses the themes that the lonely individual is personally responsible for being lonely in the first place or is responsible for not being able to overcome the loneliness. Vanhalst et al. (2018) showed that adolescents identified through trajectory analyses as having chronic loneliness were distinguished from adolescents in other groups by an exceptionally high level of self-blame on a multidimensional emotion regulation measure. They also had higher levels of rumination and catastrophizing and less reported capacity to be able to put things in perspective.

While self-blame seems to play a role, it is another matter entirely to suggest that lonely people may have actually acted in ways that have set the stage for loneliness or added to existing levels of loneliness. Nevertheless, Rook (1988) called for a more differentiated approach to understanding loneliness that recognizes multiple possible pathways, including the possibility that some lonely people have engaged in self-defeating patterns in order to gain the approval of other people. When it comes to loneliness, self-defeating tendencies include avoidance and self-induced isolation (see Rokach, 1990). However, Rokach (1990) refers to these tendencies as “nonconstructive methods” of coping with loneliness.

Regardless of whether lonely people are truly self-defeating, an association has been found between loneliness and seeing oneself as being someone who generates stress for oneself and makes bad situations and problems worse. This self-perpetuating cycle research fits with the notion that self-generated interpersonal stress can, in turn, result in isolation and rejection (see Hammen, 1991). Regarding a link with loneliness, we found in a sample of 247 university students that elevated scores on self-generated stress (see Flett et al., 2020) were associated jointly with loneliness ($r = 0.39$) and depression ($r = 0.53$). Our results suggest that lonelier students tend to agree with self-reported items on the Self-Generated Stress Scale such as “Much of the stress I experience is due to the choices I make,” and “I have a habit of putting myself in situations that are more stressful than they need to be.” A dual treatment focus here is learning new ways of behaving that don’t add to stress and addressing the self-perception of being responsible for additional stress.

The tendency to be false and inauthentic or self-suppressing is another element of the self that can be a pathway to the experience of loneliness. The study by Besser et al. (2003) mentioned above also found robust links between loneliness and a tendency to silence the self among students in a relationship ($r = 0.60$) and those not in a relationship ($r = 0.51$). As part of their discussion of Jack’s (1999) conceptualization of self-silencing, Joiner et al. (1999) proposed that depressive orientations could result in loneliness via a process that involves silencing the self. They noted that trying to be good and keep relationships going through self-sacrifice is intended

to increase closeness to others, but this is typically not a true closeness and is likely to result in hopelessness and loneliness.

Regarding the role of self and identity in loneliness, there is a seminal carefully documented clinical case study that is quite informative. As part of his unique analysis of the case of Ellen West, Carl Rogers (1961) identified the psychological conditions underscoring a profound sense of aloneness. He posited that people become estranged from their “experiencing organism” and there is “a potentially fatal division” between actual experience and the experience the conscious self clings to in order to gain love and acceptance from significant others. The second element in loneliness, according to Rogers (1961), is an unwillingness to communicate one’s real self to others. Instead, the person relies on an idealized façade when interacting with others; using this façade only serves to add to a heightened sense of loneliness and estrangement from the actual self.

The insights provided by Rogers decades ago set the stage for subsequent theory and research focused on connections between loneliness and being someone who is inauthentic due to needing to seem perfect to other people. If this process proposed by Rogers is interpreted with perfectionistic self-presentation in mind, the person who is invested in seeming absolutely perfect will be plagued by a sense of self-inconsistency and a growing sense of detachment, not only from other people, but also from the self. Hewitt, Flett, and associates sought to understand the interpersonal problems of perfectionists by proposing the perfectionism social disconnection model (PSDM) (see Hewitt et al., 2017). The essence of this work is that loneliness is one clear cost of perfectionism. One element of the PSDM is the notion that subjective and objective social disconnection in the form of loneliness stems from needing to project an image of being perfect. The PSDM applies to children and adolescents as well as adults, and it has received considerable empirical support (for summaries see Flett & Hewitt, 2022; Hewitt et al., 2017).

Finally, consistent evidence indicates that loneliness is associated negatively with trait self-disclosure (e.g., Franzoi & Davis, 1985; Leung, 2002; Solano et al., 1982). Thus, it is not surprising that loneliness should be associated with the non-disclosure facet of perfectionistic self-presentation that assesses an unwillingness or inability to disclose imperfections to others.

A focus on shame and loneliness illustrates how the negative self-views of lonely people can easily result in growing social detachment, isolation, and alienation. Shame is the sense that the self is broadly deficient, and deficiencies are visible to the point that other people can see them and are well aware of them. One lonely adolescent described the sense of living with deep scars and a flood of shame that was so damaging it led to painfully questioning herself to the point of wondering whether she was even a person (see Hemberg et al., 2022).

Qualitative accounts of loneliness tend to confirm this emphasis on the negative self-concepts of young people prone to loneliness, but also their tendency to put on a front and hide their loneliness from others (see Verity et al., 2022). We have emphasized the role of self, in part, because we feel that it is particularly germane to the extreme form of loneliness we describe below in the next segment of this article. In addition, we believe that addressing this negative sense of self should be

the core focus of prevention and intervention efforts. We will revisit this theme later in the final segment of this chapter.

Unbearable Loneliness

Our focus in the current chapter on unbearable loneliness stems from the realization that there is an extreme form of loneliness, which is felt as truly unbearable and is the type of loneliness that is not receiving sufficient attention in terms of research, practice, and prevention. We propose that it is essential that we begin to assess this form of loneliness and take preventive steps in public health campaigns to control it and limit its prevalence. It is our sense that this form of loneliness has largely flown “under the radar” due to the tendency for researchers to focus on cross-sectional research from a variable-centered perspective and not embrace a person-focused perspective.

The notion of a more extreme form of loneliness that wreaks havoc on people is not a new one. Frieda Fromm-Reichmann (1959) described this type of loneliness at length and noted that her observations were in keeping with Harry Stack Sullivan’s emphasis on an extremely unpleasant and disquieting form of loneliness that arises from unmet longings for human intimacy. Fromm-Reichmann (1959) based her description on her clinical patients. She described a psychotic loneliness that leaves people feeling emotionally paralyzed and helpless. She added that it is so severe, people are unable to talk about it and many try to conceal it. She concluded her seminal paper by noting that what she has seen clinically resembles vivid accounts of loneliness depicted by famous poets.

What are the defining features of unbearable loneliness as we see it? This is an intense form of loneliness that is marked by significant psychological pain. It is the type of loneliness referred to in suicide notes by people who say they could not bear to be alone (Coster & Lester, 2013). Unbearable loneliness is marked by psychological pain and the unbearable self-consciousness that Shneidman (2001) sees at the core of the suicidal mind; unbearable loneliness tends to dominate and overwhelm people in terms of their current experiences, but it is also projected into a hopelessness and sense of unavoidability in the future.

The link between unbearable loneliness and psychological pain can be understood based on classic accounts of the nature of psychological pain. It is widely regarded that there are three core needs implicated in happiness and well-being—the needs for autonomy, competence, and connection. One prerequisite for the pain of loneliness is a failure to satisfy the need for connection. The notion that loneliness is linked with psychological pain accords with Shneidman’s views of psychological pain, also known as psychache. Shneidman (1996) stated that psychache is a feeling of psychological pain that can be due to various overwhelming negative emotions (e.g., shame, guilt, angst, and fear) including loneliness.

Shneidman is credited with placing importance on psychological pain as the key component in susceptibility to suicide. Shneidman (1993) concluded that

psychological pain is experienced when important psychological needs are frustrated to the point of feeling and seeming unendurable. Shneidman was a proponent of the psychological needs theory of his mentor Henry Murray (see Murray, 1938). Shneidman identified several psychosocial themes, including the need to affiliate and the need to be loved. Unbearable loneliness tinged with psychological pain should result when these types of needs are unsatisfied, and the prospects for addressing these needs seem bleak. Specifically, through this lens of unmet needs, loneliness should seem particularly unbearable when it is accompanied by feelings of helplessness and hopelessness, and with no clear steps or pathways to addressing feeling so overwhelmingly alone.

Aloneness Intolerance

Eccles and Qualter (2020) have noted that learning to tolerate feelings of loneliness is considered an adaptive, natural, and necessary component of human life. Some people do manage to cope with loneliness through acceptance and reflection and other strategies (Rokach, 2018). What is crucial to consider is that there are individual differences in the ability to adapt to being alone and experience feelings of loneliness, and unfortunately, many people seem to lack this tolerance capacity.

Windy Dryden (1999) has described a form of aloneness intolerance that seems to be clearly implicated in a vulnerability to unbearable loneliness. As described by Dryden (1999), there is an irrational aspect to this intolerance that seems to be rooted in our beliefs that a person must have the company of others and should have an emotional connection to these others. In keeping with our discussion of negative self-views, Dryden suggested further that this intolerance is fueled by ego-related concerns that result in a person concluding that loneliness means being less worthy. This intolerance can apply to being physically alone or emotionally alone, but most importantly, it is both seen as intolerable and it feels painfully intolerable.

This inability to tolerate being alone and loneliness is frequently mentioned by guests appearing on the longstanding BBC radio show *Desert Island Discs*. Most guests are asked if they could actually stand it if the show's premise came true (i.e., being castaways by themselves on a desert island). The responses have varied considerably with some people indicating that it would be no problem and some indicating they couldn't bear it for very long, if at all. This aloneness intolerance has been documented in case examples. For instance, Blatt (1974) recounted the case of Mrs. H., whose clinical condition was marked by a great difficulty in tolerating feelings of distress. She had extensive depressive features and related concerns that could be traced to feelings and thoughts of being unwanted, unloved, and abandoned. Another case, this one taken from an emotion-focused therapy perspective recounted by Dillon et al. (2018), also identified loneliness as the core emotion for a client suffering from depression and how her loneliness was linked complexly with shame and fears of abandonment.

Despite what seems to be compelling clinical and anecdotal accounts, the lack of an extensive focus on unbearable loneliness in the broad empirical literature is

somewhat ironic given the number of scientific authors who routinely refer to “the pain of loneliness.” Even a brief and cursory survey of the published literature yields countless references to loneliness as a form of pain and which accords with clinical case accounts which describe how for some people, loneliness can be severe and persistent and simply unbearable (also see Hyatt, 2010; Stein et al., 1989).

As a source for identifying an important phenomenon, case analyses of people suffering from extreme forms of loneliness such as the one of Mrs. H. cited above are highly instructive and illustrative in terms of providing a clear sense that unbearable loneliness exists and is devastating at the individual level. Case accounts represent useful reminders of the need to take a person-focused perspective and not simply focus on variables. Indeed, in addition to the published case accounts described above, we would be remiss if we did not mention celebrities and public figures who clearly have suffered from unbearable and painful loneliness. Such accounts of people in prominent view provide compelling stories for discourse about public health matters. They also remind us that fame is not a panacea for loneliness and may in fact contribute to loneliness. Judy Garland is arguably the most well-known example. It is evident in reading accounts of this iconic singer-actor’s life story that loneliness and insecurity fuelled her problems with depression and addiction and associated relationship problems. Indeed, Judy Garland once stated that “If I am a legend, then why I am so lonely?”. Garland’s unbearable loneliness was so painfully evident and so prominent that it resulted in a *New York Times* article in 1969 at the time of her tragic death at age 47 with the headline “Judy Garland: Loneliness and Loss” (see Canby, 1969).

The acclaimed author Sylvia Plath described a loneliness tinged by psychological pain when she wrote in her journal, “Yes, there is joy, fulfillment and companionship – but the loneliness of the soul in its appalling self-consciousness, is horrible and overpowering” (Plath, 2000, p. 31). Vincent Van Gogh is another famous individual, an innovative artist whose persona paints a poignant example of unbearable loneliness. He shared his private suffering from overwhelming loneliness in his personal letters to his brother Theo (see Stone, 1969). For instance, in a letter dated September 1883, the genius artist who depicted with swirling brushstrokes the uncertainty and solitude of a starry night referred to “the peculiar torture of loneliness” (p. 260) and the loneliness he had to bear now that he was regarded by everyone as “... a lunatic, a murderer, a tramp.”

Autobiographical accounts such as Van Gogh’s offer a window into the soul of the exceptionally lonely person who is also a well-known public figure. Poignant references to unbearable loneliness are also on display in the publicly available diary accounts of Canadian Prime Minister Mackenzie King. King is Canada’s longest serving Prime Minister. King retired from politics in late 1948, and it was not long after that he died in July 1950. King never married and had incurred the loss of most of his family members as well as his beloved dogs. King may be someone who represents an individual example of how loneliness contributes to mortality. Regarding loneliness, his diary accounts found on the Government of Canada site include such statements as “I continue to feel desperately lonely,” “I felt rather helpless when I got back ... and feeling so completely alone”. This refers to when he

lived by himself at his Kingsmere Estate. He summarized this phase of his life by writing “It is inexpressibly lonely here, all alone.” It should be noted that King expressed his wishes that his diaries never be made public, so his diary accounts can be regarded as representing an unvarnished look at his internal world.

A related question that struck us while considering these case examples of people suffering from unbearable loneliness was “To what extent do existing loneliness measures assess unbearable loneliness?” Our analysis of the original 20-item UCLA Loneliness Scale (Russell et al., 1978) identified several items that seemingly tap unbearable loneliness. Perhaps this reflects the origins of these items. The 20 items in the original loneliness scale were first included in a dissertation by Sisenwein (1964) who compiled a list of 75 items. These items came from published descriptions of loneliness and the descriptions of loneliness provided by a group of psychologists who were surveyed. The items reflect a blend of feeling abjectly alone, having no one to provide contact and comfort, and not being about to tolerate the loneliness. Russell (1982) noted that mean scores on the original UCLA Loneliness Scale were considerably higher among people presenting at a clinic due to problems with loneliness when their scores were compared to the scores for a nonclinical sample, a pattern which recognizes the clinical significance of loneliness.

The seven items we deemed as having high content and face validity in terms of representing unbearable loneliness are listed in Box 1.1. Note that we selected items that did not have explicit references to item content specifically related to depression, sadness, or lack of happiness. However, we did select items that tap an “all-ness” or “completeness” in terms of being away *from everyone* and feeling cutoff from *all meaningful ties*. Collectively, these items tap into a sense that loneliness is intolerable and entails feeling extremely and entirely isolated from people with the prospect of not feeling lonely seeming remote and unlikely to achieved.

Russell (1982) detailed how a revised UCLA Loneliness Scale was developed because the original 1978 version consisted entirely of items worded in the loneliness direction (e.g., I cannot tolerate being so alone). Unfortunately, the creation of a more balanced version with items worded in the non-lonely direction resulted in dropping several items tapping more extreme aspects of the construct. Thus, in more contemporary versions of the UCLA Loneliness Scale, the items that remain do not assess unbearable loneliness. Further, among other extant loneliness questionnaires, in most instances, key facets of the loneliness construct with considerable clinical relevance are not being measured (for an analysis, see Maes et al., 2022).

Box 1.1 Unbearable Loneliness Items (from Sisenwein, 1964)

I have nobody to talk to
I cannot tolerate being so alone
I feel completely alone
I can't bear being alone
I feel starved for company
I feel far away from everyone
I feel cutoff from all meaningful ties

The proliferation of loneliness measures that fail to assess unbearable and enduring loneliness has some key implications. For instance, it has been concluded on the basis of a review and meta-analysis that psychological interventions addressing loneliness are effective, with about 90% of the studies being based on the evaluation of cognitive-behavior therapy (see Hickin et al., 2021). But it is unknown at present whether treatment is effective for unbearable loneliness because this form of loneliness is simply not assessed by the outcome measures used thus far in intervention research. In general, it is typically the case that more extreme levels of distress and dysfunction pose unique treatment challenges; when people have forms of distress that are extreme, enduring, and unbearable, successful treatment often means reducing but not alleviating distress as people continue to experience residual symptoms that still leave them vulnerable.

Clearly, an important question moving forward is, “To what extent do psychological treatments ameliorate unbearable and enduring loneliness?” It is unlikely that brief interventions of limited scope will address the needs and vulnerabilities of people with extreme loneliness, especially if they also having limited conditions that add to their sense of isolation.

Automatic Thoughts About Loneliness

What internal thoughts reflect unbearable loneliness? We are conducting a line of investigation centered on the premise that loneliness is accompanied by distress due to the tendency to experience frequent automatic thoughts about being and feeling lonely. That is, extreme loneliness can reflect an internal world reflecting Sadler’s (1978) contention that loneliness is an intensely private experience and, clearly, it is one that carries a heavy cognitive load.

Our emphasis on the internal dialogue is in keeping with prior work linking loneliness and rumination, including the results displayed previously in Table 1.1. It has been found in several studies that loneliness is linked with ruminative brooding as described by Nolen-Hoeksema and colleagues (e.g., Zawadzki et al., 2013). However, some earlier research on the cognitive manifestation of loneliness also documented the presence of measurable and meaningful individual differences in rumination about loneliness (Vanhalst et al., 2012). This research with a sample of 370 university students from Belgium showed that loneliness-related rumination was linked with peer-related loneliness and depression, but not with parent-related loneliness and this form of rumination. Moreover, rumination about loneliness mediated the link between peer-related loneliness and rumination. More recent qualitative research also attests to the salience of loneliness-related rumination (see Yun et al., 2023). The findings have clear clinical implications in terms of needing to remove uncontrollable ruminative thoughts about loneliness.

The Loneliness Automatic Thoughts Questionnaire we developed is comprised of nine thoughts that possibly reflect the current experience of loneliness. The concept of loneliness-related automatic thoughts was informed by case accounts of

Box 1.2 Loneliness-Related Automatic Thoughts Questionnaire (LATQ) Items

1. Why am I so lonely?
2. I cannot stand to feel this alone
3. It's weak to be this lonely
4. I feel helpless being by myself for too long
5. Will this loneliness ever end?
6. I cannot escape this loneliness
7. Something must be wrong with me to feel this alone
8. I cannot handle feeling alone
9. Other people are not this alone

lonely people characterized by ruminative thoughts and tendencies (e.g., Cheng & Merrick, 2017; Tarocchi et al., 2013). It was also informed by the work by Horowitz and associates (1982). They described a “fuzzy set prototype” for loneliness that seemed to inextricably link loneliness with depression and associated negative judgments of the self. Relevant themes include a sense of being different from others, something being wrong with the self, and a sense of “I cannot” in terms of failing to establish personal connections with other people.

Box 1.2 lists the nine thoughts represented on the LATQ. Participants are asked to indicate the frequency of these thoughts over the past two weeks. The unbearable nature of loneliness and not being able to tolerate it are best represented by thoughts such as “I cannot stand to feel this alone,” and “I cannot handle feeling alone,” while the negative self is implicated in feelings of being helpless and weak and unable to escape these thoughts.

Research results involving the LATQ are summarized in Rose et al. (2024). The first study with the LATQ evaluated 462 university students from Israel during the pandemic (see Besser et al., 2022). The LATQ was found to have one factor based on a principal components analysis with data from 462 university students from Israel. Item loadings ranged from 0.68 to 0.82. The alpha was 0.79. Correlations showed that the LATQ scores were linked positively with dependency, self-criticism, lower self-esteem, and measures of feelings of not mattering to others. Importantly, as anticipated, the LATQ was also strongly correlated with a measure of loneliness. It was also associated significantly with more frequent negative automatic thoughts ($r = 0.57$) and less frequent positive automatic thoughts ($r = 0.40$).

More recently, we examined the characteristics of the LATQ by including this measure in two studies conducted by our second author as part of her dissertation work. It was confirmed in both samples that the LATQ consists of one factor, and the items are measured with an adequate degree of internal consistency and do not suffer from social desirability response bias. Correlations suggest links between elevated scores on the LATQ and measures of social hopelessness, persistent and intrusive negative thoughts, and unbearable psychological pain (i.e., psychache).

One regression analysis indicated that significant unique variance in LATQ scores was predicted by social hopelessness, feelings of not mattering, and psychache.

Our findings indicate that many students with high levels of loneliness experience an ongoing internal dialogue involving thoughts that will make feelings of loneliness highly salient at a cognitive level. The persistence of these thoughts contributes to enduring loneliness but in ways that can make feeling lonely seem simply unendurable. When abject loneliness is experienced in this form, it really is no wonder that loneliness can translate into significant stress-related health and mental health problems. It is difficult to imagine students with these tendencies having much success, either in college or university or in life, if they do not receive effective treatment and counseling that addresses their loneliness in general and feelings of unbearable loneliness and related thoughts in particular.

Implications for Prevention, Intervention, and Public Policy

Below, we briefly consider what we have learned thus far about loneliness in terms of key implications from an applied perspective. There is a clear need for loneliness prevention, and Crowe and associates (2022), among others, have emphasized the key role of the public health system; they outlined myriad ways of proactively addressing loneliness and associated mental health challenges. Clearly, a complex array of factors contributes to loneliness, and this includes macro-level and micro-level influences. One implication of system-level influences is that while much of prevention is focused on the individual person, there is a need for a prevention focus that considers group processes and social dynamics and changes to physical and social settings (for discussions, see Rook, 1984; Trach et al., 2018). In short, it is not just up to the individual. A broad public health initiative embraced by communities and organizations is needed. There are numerous opportunities for innovative solutions, including digital solutions (see Guerra et al., 2022) and progress is being made through socially prescribed solutions to loneliness, which have deemed to be both necessary and useful (see Reinhardt et al., 2021).

A central premise of our approach to understanding and conceptualizing loneliness is that much of the distress and dysfunction can be traced to the experience of more extreme and persistent forms of loneliness that reflect unbearable loneliness, as outlined above. Because unbearable loneliness seems to be more likely among people who define themselves in negative ways, it is important to focus on developing a more positive self-view and being able to stand being alone with oneself. Thus, there is a need for an intrapersonal focus along with an interpersonal focus as well as a focus on social and societal settings.

The various ways of conceptualizing the self translate into multiple potential targets in terms of developing a more positive self-view. Possibilities here included increasing perceived self-efficacy and confidence in social situations and developing unconditional self-acceptance that should counter self-criticism and self-hate. Most importantly, there is a need to build self-compassion. Rose and Kocovski

(2021, 2023) have taken a domain-specific view and highlighted the need to develop social self-compassion as a response to adverse interpersonal experiences and situations. For instance, people who have been excluded, bullied, or humiliated by someone else will need to learn to be especially kind to themselves when they have been mistreated. The natural tendency is to blame oneself to try to create a sense of controllability, but blaming the self, especially in dispositional terms, will not only add to distress but it can also foster increases in avoidance behavior.

It is known from developmental research that there are interventions with a social-emotional learning (SEL) focus that can be taught in schools and these interventions are effective in reducing internalizing and externalizing problems in general (see Durlak et al., 2011). The goal of SEL is to provide young people with the social and emotional interpersonal and intrapersonal competencies that are needed to thrive from an interpersonal perspective. Ideally, this type of learning fosters the kind of interpersonal resilience that is seen as a key domain-specific facet of the broader resilience construct (see Flett et al., 2015). It is not difficult to envision a version of SEL with an interpersonal resilience focus that can be developed to protect young people from bouts of unbearable loneliness and increase their capacities to be resilient and adaptable when feelings of loneliness are experienced. This focus can include specific themes such as how to promote a feeling of mattering to others and how to adaptively disengage by not using social comparison information as a basis for making negative self-appraisals rooted in unfavorable comparisons with peers.

One key developmental asset is to be able to adapt to situations in which being alone can escalate into feelings of loneliness. We have conducted some initial research indicating that there are individual differences in the reported capability to adapt to being alone and not surprisingly, lower adaptability is linked with elevated levels of self-reported loneliness. This work reflects a conceptualization and assessment of adaptability introduced by Martin et al. (2013). This approach to adaptability emphasizes cognitive adaptability, emotional adaptability, and behavioral adaptability. This framework has considerable utility from a prevention perspective because it should be possible to provide people with training that will enhance their ability to adapt on multiple levels to novel uncertain situations and isolating circumstances that can result in feelings of loneliness.

Given our earlier observations and evidence cited linking loneliness with hopelessness, a focus on reducing hopelessness and boosting hope within a social framework is essential and this should apply to lonely people of various ages. Hopefulness will be encouraged to the extent that people will develop a stronger and more positive sense of self, but we have also found that it effective to share narrative accounts of people who have overcome adversity and found meaningful ways of connecting with other people.

Any program targeting the prevention of loneliness should jointly aim to heighten awareness of loneliness and normalize feeling lonely as something that is part of most people's lives. This normalization is required in order to decrease the general tendency to see loneliness as a reflection of the self. Young people who are

presented with information about the prevalence of loneliness may not believe it based on their understanding and perception of peers. Here it is important to discuss the tendency to hide loneliness and depression behind a front. We have discussed these tendencies at length within the context of young people needing to present as perfect and maintaining their public image by keeping feelings of distress and isolation to themselves (see Flett et al., 2018). This analysis includes a specific emphasis on hiding feelings of loneliness, perhaps due to the stigma associated with loneliness. Unfortunately, this tendency to maintain a perfect front or at least seem as if everything is fine is quite common and extends to false and highly curated portrayals of the self on social media. The vulnerable person who believes and espouses these false portrayals can find it all too easy to feel uniquely inadequate and deficient, relative to peers.

One key prevention target is the tendency for lonely people to internalize the stigma. Rose et al. (2018) have provided an extensive analysis of the tendency for certain young people to stigmatize themselves. It has often been mentioned that loneliness carries a perceived stigma with it, and it should be almost certain that people who are characterized jointly by loneliness and psychological distress will be hypersensitive to social evaluation and they will anticipate being stigmatized for being lonely and not coping very well. Research has confirmed the tendency for loneliness to carry a stigma, especially when the lonely person is also someone who is reclusive (see Kerr & Stanley, 2021). Any stigma experienced by someone who is lonely will likely be magnified among those people who suffer from unbearable and chronic loneliness.

It is likely that given the propensity for people with high levels of loneliness to experience a sense of shame (see Sundqvist & Hemberg, 2021), lonely people who have experienced stigma or fear stigma will internalize it and experience self-stigma. Indeed, both the stigma and self-stigma of loneliness have been examined in recent research (see Barreto et al., 2022), and a measure of the stigma of loneliness has been developed. Clearly, given these findings, one vital prevention focus is to proactively address the stigma and self-stigma of loneliness through such means as heightening awareness of the prevalence of loneliness and normalizing loneliness. Moreover, in terms of self-stigma, an intervention focused on promoting self-acceptance and self-compassion can be put into place to specifically target feelings of shame and the internalization of stigma. Prevention efforts should begin early and include a focus on children and adolescents given evidence that children in grades two and four tend to stigmatize a hypothetical other portrayed as having chronic loneliness (see Rotenberg et al., 1997). This work signifies that at a relatively young age, children have developed negative views about the character or the stable personality attributes of people who are chronically lonely. As such, children may also have learned at an early age to hide their feelings of loneliness, perhaps as part of a general tendency to limit discussion or displays of negative feelings that might be seen as reflecting poorly on the self.

Summary

The current chapter began by discussing the prevalence of loneliness and how it is highly relevant to a focus on public mental health. Loneliness was discussed in terms of its myriad costs and consequences. A central focus was on the role of the self in loneliness and the description of a more extreme form of unbearable loneliness. While all types of loneliness need to be addressed in proactive interventions, this more extreme form of loneliness is highly deleterious in terms of mental health and physical health problems; as such, it represents an important initial focus. We also noted that much of the focus is on the individual, but it is important to consider broader societal and system-level influences on loneliness and this fits well with the need to counter the stigma and self-stigma that confronts people. One key thing we should all reflect on post-pandemic is that everyone has a basic need for satisfying connections with other people and there are some fundamental changes that can be implemented so that millions more people around the world are able to benefit from rich and satisfying relationships with the people in their lives.

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Chapter 2

Life-Story Book Creation to Enhance Life Satisfaction for Older Adults



Moon Fai Chan 

Introduction

Life satisfaction is a cognitive evaluation of an individual's overall life status; in other words, it is an estimation of how much an individual likes his life (Erikson, 1980). The concept of life satisfaction denotes the overall evaluation of life, which contrasts with the “*subjective well-being*” in response to a person's current feelings or specific psychosomatic symptoms (Veenhoven, 1996). Early studies have linked many factors to life satisfaction in older adults. Jelacic and Kempen (1999) examined community-dwelling elderly persons' life experiences and found that the more chronic conditions they had, the lower their life satisfaction levels. Another study found that older adults with better financial and social support and higher education had higher life satisfaction (Chi & Chou, 1999). Another previous study showed that social interaction, perceived control, social position, and health are predictors of life satisfaction in community-dwelling older adults (Pinto & Neri, 2013). A meta-analysis confirmed that social position, social networks, and sense of well-being are positively associated with life satisfaction in older adults (Pinquart & Forstmeier, 2012).

It has been suggested that narrating one's life story can improve life satisfaction in older adults (Roesler, 2006). According to Erikson (1980), each older adult has eight psychosocial life stages span across the life cycle that consists of “*trust versus mistrust, autonomy versus shame and doubt, initiative versus guilt, industry versus inferiority, identity versus role confusion, intimacy versus isolation, generativity versus self-stagnation, and ego integrity versus despair.*” In terms of human

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developmental status, these eight stages can be classified into four stages: childhood, adolescence, adulthood, and old age (Erikson, 1963).

Butler (1963) extends Erickson's work by proposing that "*ego integrity can be attained through recalling one's past from an analytical and evaluative viewpoint*," which indicates the important function of reminiscence and life review in an older adult's successful life adaptation. Reminiscence is a spontaneous and naturally occurring process of recalling the past as an older person when triggered by thoughts of one's approaching death (Butler, 1974). According to Butler (1974), an older person loses his or her sense of competency as a productive individual, leading to discrepancies in self-concept, which may initiate a life review process. Haight (1988) introduced using life review as a therapeutic intervention to decrease depression by allowing an individual to identify with his or her past accomplishments and affirm present self-worth.

Many published papers have examined the effectiveness of the life review process for older adults, but few studies have focused on its influence on life satisfaction. Haight (1988) conducted a life review process for 60 homebound older adults in the United States and found a significant improvement in life satisfaction in the intervention group. Serrano et al. (2004) used life review therapy as an autobiographical retrieval practice in depressed elderly aged 65 to 93 years. Their results showed an increased life satisfaction score at two weeks post-intervention compared with the control group. Meléndez Moral et al. (2015) found a significant improvement in life satisfaction for older adults in the reminiscence group than in control groups. More recent studies on older adults in nursing homes found that residents in the life review group had better life satisfaction levels than the control group (Lan et al., 2018; Ejaz et al., 2022). However, in a subsequent study, Lai et al. (2018) found no significant difference between the life review and the control group in life satisfaction scores of community-dwelling older adults in Hong Kong. Hanaoka and Okamura (2004) reported no significant difference between the life review and control groups in life satisfaction scores of older adults in Japan. However, they suggested that an older adult's context may influence the life satisfaction they derive from a life review. Ligon et al. (2012) examined the effect of life review on life satisfaction among older adults, with no significant difference between the two groups. However, there was a significant difference 10 weeks later, implying that a life-story review may improve life satisfaction among older adults over time. A meta-analysis reported that older adults did not receive any beneficial effects on life satisfaction via reminiscence (Chin, 2007). In contrast, two other meta-analyses found that the effect of reminiscence on older adults on life satisfaction was from moderate ($d = 0.54$) to small ($d = 0.22$) (Bohlmeijer et al., 2003; Pinquart & Forstmeier, 2012). However, no conclusive results from previous studies suggest that further experimental studies need to be conducted to examine the potential effects on different ethnic groups.

This study aimed to examine the impacts of life-story book creation for older adults on their life satisfaction. We hypothesized that participants in the life-story book group would have a better life satisfaction than the control group.

Methods

Design, Setting, and Sample

This is a randomized controlled trial design, and subjects were enrolled at one community center in Singapore, and the data collection was covered for 8 months. All subjects were community-dwelling Singaporean older adults aged 60+ years. They communicated in either Mandarin or English easily without a hearing aid and were able to read and sign the consent form. We excluded those who had a medical diagnosis with either Parkinson's disease, dementia, or Alzheimer's disease. Also excluded are those receiving medications, such as hypnotics, sedatives, antidepressants, antihistamines, tranquilizers, and/or melatonin, because of the potential of these medicines to affect their cognitive function (Katzung, 2018; Polit & Beck, 2022). In addition, subjects allocated to the life-story group who did not wish to be audio-recorded were excluded because audio transcripts were required to create their life-story book.

The required samples were based on the difference between the life-story and control groups on life satisfaction levels. A previous study conducted by Ligon et al. (2012) reported that the effect size on life satisfaction levels for older adults by using reminiscence-related activities was 0.41 compared with the control group. Assuming a similar effect size and based on a repeated measures design for this study. The PASS 11 (Hintz, 2011) showed that at least 48 subjects (24 per group) would be needed to achieve 80% power on between groups (effect size = 0.41), 82% power on within-time (effect size = 0.51), and 81% power on the interaction (effect size = 0.51) effects at 5% significance levels.

All potential subjects were recruited using convenience sampling at one community center. In total, 119 older subjects were approached and 91 participated (response rate = 76.5%). Each participant was asked randomly to pick up a ball from a bag to assign him or her into either the life-story book or control group, while the bag contained two balls only one labeled as "*life-story*" and the other as "*control*". After an initial screening by our interviewers, who are registered nurses, 47 out of 91 were eligible. There were 23 and 24 subjects randomly assigned to the life-story and control group, respectively, and all 47 subjects completed the study.

Measures

The instrument has two sections: Section 1 collected subjects' demographic (e.g., age, gender, and education) characteristics and health (e.g., existing chronic illness, hypertension, diabetes, and depression levels) information. The 15 items Geriatric Depression Scale (GDS-15) was used to assess the depressive symptoms of each

subject (Chan, 1996). Section 2 used the 20 items Life Satisfaction Index A (LSIA) scale to collect subjects' life satisfaction levels (Adams, 1969). The two-point scoring was selected instead of the three-point scoring because it is simpler and easier for subjects to answer. There are no significant statistical differences between them (Neugarten et al., 1961). For the two-point scoring, "No = 0" represented unsatisfied in each question, and "Yes = 1" represented satisfaction with life. Hence, 20 and zero were the maximum and minimum scores of LSIA, respectively. A higher total score indicated better life satisfaction. LSIA has a good internal consistency (Cronbach's α) in the English (0.86) and Chinese (0.67) versions (Neugarten et al., 1961; Lou et al., 2008).

Training for the Interviewers

All interviewers were required to attend a training course before starting the interview process. The training course focused on understanding the skills of conducting a life-story interview with the older adults by practicing how to talk appropriately with the elderly using the interview guide questions. A role-play interview was included in the training to ensure a standardized and reliable intervention. To ensure good inter-rater reliability, all interviewers were required to rate the same standardized subjects' LSIA scores (intra-class correlation coefficient = 0.84). Samples of the life-story books were shown to the interviewers, which facilitated the understanding of the book production process.

Life-Story and Control Groups

The research process of creating the life-story book for the participant in the intervention group was through interviews and took place in his/her home. A set of semi-structured questions helped guide each interview developed from the previous studies (Chan et al., 2013; Birren & Deutchman, 1991), which span the human development into childhood, adolescence, adulthood, and old age stage. All conversations between the interviewer and participants were audio-recorded for 30–45 minutes. The interview sessions included memory recall assisted by sharing their stories and expressing their feelings. The subjects' life stories were transcript into text and included with related photographs. A bounded book was compiled and presented to them on week 8. The interviewer will collect participants' life satisfaction 4 times per week in the first 4 weeks and 1 time in week 8. While subjects from the control group also met with the interviewers in their homes. The number of visits was the same as the intervention group. However, no life-story sharing during the meeting and the interviewer collect their life satisfaction levels at each meeting.

Ethical Issues

Ethical approval was obtained from the target community center and the Institutional Review Board (NUS-IRB: 12–161). Subjects had to sign the consent before participating in the study. At the same time, they are on a voluntary base and free to withdraw at any time point.

Statistical Analysis

Descriptive statistics (e.g., mean, standard deviation, frequency, and percentage) were used to describe subject profiles. Independent t-test, Mann–Whitney *U* test, χ^2 test, and Fisher's exact test were used to compare groups on demographic and health information to ensure homogeneity. A generalized estimating equation (GEE) method was used to determine the impacts of the life-story book creation on life satisfaction levels while adjusted by demographic and health factors. IBM SPSS v23 performed all data analyses, and significant levels were set at a 5% alpha level.

Results

Participant Characteristics

In Table 2.1, there are 47 participants, aged 61–85 years (mean \pm SD, 69.9 ± 7.0), and more female ($n = 32$, 68.1%) than male ($n = 15$, 31.9%). The majority were married ($n = 37$, 78.7%), had religious beliefs ($n = 41$, 87.2%), had primary or below educated level ($n = 25$, 53.2%), and had no habits of diary writing ($n = 45$, 95.7%). Sixty-eight percent of them had chronic diseases ($n = 32$), 44.7% had hypertension, 25.5% suffered from diabetes, and 10.6% suffered from cardiovascular diseases. All subjects had a mild depression level (GDS-15 6.6 ± 2.6), and no statistical differences between the two groups were found in all demographic characteristics and health information at baseline.

The Impact of the Life-Story Creation on Life Satisfaction Overtimes

Life satisfaction scores were compared between the intervention and control groups (see Table 2.2). Over time, older adults' life satisfaction score in the life-story group improved dramatically (baseline: 12.0 ± 2.1 vs. week 8: 15.3 ± 2.5), while the life satisfaction score in the control group slightly increased (baseline: 10.5 ± 3.0 vs. week 8: 11.0 ± 4.1) (see Fig. 2.1).

Table 2.1 Baseline characteristics of the study sample by group

	Group			
	Total <i>n</i> = 47 <i>n</i> (%)	Life story <i>n</i> = 23 <i>n</i> (%)	Control <i>n</i> = 24 <i>n</i> (%)	Life story vs. control statistics (<i>p</i> -value)
Characteristic				
Demographic				
Age (years) Mean ± SD	69.9 ± 7.0	68.1 ± 6.5	71.6 ± 7.8	1.66 ^a (0.104)
Gender				
Male	15 (31.9)	7 (30.4)	8 (33.3)	0.05 ^b (0.831)
Female	32 (68.1)	16 (69.6)	16 (66.7)	
Religion				
None	6 (12.8)	4 (17.4)	2 (8.3)	6.89 ^b (0.142)
Taoist	10 (21.3)	5 (21.7)	5 (20.8)	
Catholics	2 (4.2)	0 (0.0)	2 (8.3)	
Christian	15 (31.9)	10 (43.5)	5 (20.8)	
Buddhist	14 (29.8)	4 (17.4)	10 (41.7)	
Education				
Primary or below	25 (53.2)	11 (47.8)	14 (58.3)	1.87 ^b (0.600)
Secondary	17 (36.2)	10 (43.5)	7 (29.2)	
College / University	5 (10.6)	2 (8.7)	3 (12.5)	
Marital status				
Married	37 (78.7)	19 (82.6)	18 (75.0)	3.81 ^b (0.283)
Unmarried	1 (2.1)	0 (0.0)	1 (4.2)	
Divorced / Widowed	9 (19.2)	4 (17.4)	5 (20.8)	
Financial status				
Supported by children	22 (46.8)	13 (56.5)	9 (37.5)	2.60 ^b (0.458)
Savings	18 (38.3)	7 (30.4)	11 (45.8)	
Others ^c	7 (14.9)	3 (13.0)	4 (16.7)	
Habit of writing diaries (yes)	2 (4.3)	0 (0%)	2 (8.3)	0.48 ^c (0.489)
Health indicator				
Chronic disease (yes)	32 (68.1)	17 (73.9)	15 (62.5)	0.28 ^c (0.534)
Hypertension (yes)	21 (44.7)	11 (47.8)	10 (41.7)	0.18 ^b (0.671)
Diabetes mellitus (yes)	12 (25.5)	6 (26.1)	6 (25.0)	0.06 ^c (0.981)
Cardiovascular (yes)	5 (10.6)	2 (8.7)	3 (12.5)	0.003 ^c (0.991)
LSIA Mean ± SD	11.2 ± 2.7	12.0 ± 2.1	10.5 ± 3.0	185.00 ^d (0.051)
GDS-15 Mean ± SD	6.8 ± 2.7	6.2 ± 2.4	7.4 ± 2.9	203.50 ^d (0.118)

GDS-15 Geriatric Depression Scale—15 items, ranging from 0 to 15; the higher the value, the more depressed; ^at-test; ^b χ^2 test; ^cFisher's exact test; ^dMann–Whitney *U* test; ^esuch as old age allowance; *LSIA* Life Satisfaction Index A—20 items, ranges from 0 to 20; the higher the score, the more satisfied; *SD* standard deviation

To address our hypothesis, using the GEE analysis to examine between-group differences in the life satisfaction score over 8 weeks adjusted by age, gender, religious belief, marital status, educational level, chronic illness, and depression scores. Results show that the change in LSIA score was statistically significantly between

Table 2.2 Generalized estimating equation (GEE) analysis of life satisfaction scores by groups at each time point

LSIA scores	Group		β (SE)	χ^2 (<i>p</i> -value)
	Life story (<i>n</i> = 23)	Control (<i>n</i> = 24)		
Week 1 (reference)	12.0 ± 2.1	10.5 ± 3.0	1.84 (0.87)	13.12 (<0.001)
Week 2	13.2 ± 2.3	10.6 ± 2.8	1.31 (1.02)	4.43 (0.026)
Week 3	14.0 ± 2.7	11.1 ± 3.9	1.15 (0.82)	4.09 (0.021)
Week 4	14.8 ± 2.2	11.3 ± 3.8	2.16 (1.12)	15.25 (<0.001)
Week 8	15.3 ± 2.5	11.0 ± 4.1	1.23 (0.12)	5.93 (0.011)
Average (8-week)	13.9 ± 1.8	10.9 ± 3.2		

GEE analysis adjusted by age ($\beta = -0.10, p = 0.019$), gender (male: $\beta = 1.23, p = 0.112$), religious belief (yes: $\beta = 0.67, p = 0.429$), married (yes: $\beta = -0.87, p = 0.068$), educational level (primary: $\beta = 0.82, p = 0.077$), chronic illness (yes: $\beta = -0.63, p = 0.077$), and GDS-15 ($\beta = -0.88, p = 0.032$); *SE* standard error, *LSIA* Life Satisfaction Index A—20 items, ranges from 0 to 20; the higher the score, the more satisfied

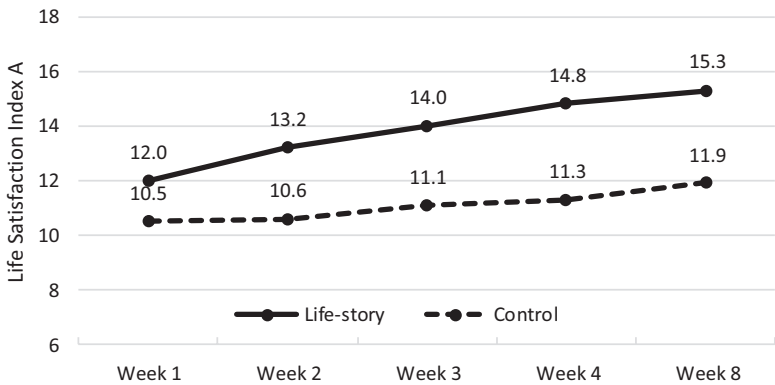


Fig. 2.1 Comparison of the life satisfaction level between older adults in the life story and control group

the groups at week 2 ($\beta = 1.84, p < 0.001$), week 3 ($\beta = 1.31, p = 0.026$), week 4 ($\beta = 1.15, p = 0.021$), and week 8 ($\beta = 2.16, p < 0.001$). In the 8-week study, the life satisfaction score was significantly increased in the intervention group ($\beta = 1.23, p = 0.011$). In addition, the subject’s age ($\beta = -0.10, p = 0.019$) and depression levels ($\beta = -0.88, p = 0.032$) have a statistically significant impact on life satisfaction. Results show that subject’s life satisfaction score decreased by 0.10 and 0.88 for each increase in age of 1 year and 1 unit of depression score, respectively.

Discussion

The findings indicate that the life-story book creation process efficiently improves life satisfaction scores among older Singaporean adults in the community. Compared to the control group, life satisfaction scores improved significantly after eight weeks

and positively impacted the older adult's life satisfaction levels after the start of the life-story book creation process. Our finding was consistent with Ligon et al. (2012), who evaluated the impact of oral reminiscence on life satisfaction among the elderly with an experimental pre-post-and-follow-up design. Their results showed statistical significance only at the 10-week follow-up between the control and experimental groups. However, there was no significant difference in life satisfaction scores between groups immediately at the post-test for the previous three episodes. Differed from our result, we found a significant difference from the second-week life satisfaction score onward throughout the 8-week study period between the two groups. Similar to previous studies, this study's findings indicated that the life story improved the older adult's life satisfaction (Haight, 1988; Serrano et al., 2004; Meléndez Moral et al., 2015). The dramatic improvement from the second week of our study indicates that the life-story creation process was more effective than the previous study focused on the oral history interview process (Ligon et al., 2012). Our study finding is consistent with another study relating to life review therapy in older adults, which showed increased life satisfaction scores at two weeks (Serrano et al., 2004; Chung, 2009; Haight et al., 2006; Lan et al., 2018).

Our study finding is similar to previous studies focusing only on a life review or a life-story book creating process, which improved life quality and satisfaction among the elderly population (Chung, 2009; Haight et al., 2006). However, these studies did not use a structured life-story review process as part of the intervention, and they were conducted with older adults with mild dementia. Another study that combined life reminiscence and narrative therapy showed significant improvements in life satisfaction in older adults with mild to moderate effects (Bohlmeijer et al., 2009). However, the intervention of life reminiscence was not focused on the four life stages, as was our study. Therefore, it is difficult to compare the significance of the findings due to differences in the population and the intervention.

The current study indicates that the life-story book creation process affected subjects' life satisfaction levels within the intervention group due to the cumulative effects of this creation process (Ligon et al., 2012). Throughout the meeting, negative feelings associated with different life periods may have been resolved, in which case the life satisfaction scores may have improved gradually. In contrast, there were no significant changes in life satisfaction scores in the control group throughout the study period. A previous study showed no significant difference in life satisfaction after the life review therapy (Selva et al., 2012). However, this study involved participants suffering from severe depression and receiving psychiatric pharmacological therapy. The life-story review intervention was based on 14 questions to prompt specific positive memories of each specific life period. The current study was based on the life-story book creation process, and questions in the intervention included the recall of both positive and negative memories. According to Erikson (1980), the eighth stage and final developmental task is retrospection. Through the retrospective life review process, the elderly subjects may have gained a sense of contentment and integrity. Thus, they may have developed a sense of meaning and satisfaction with their lives over time.

The current findings suggested that the life-story book creation process can improve life satisfaction among older Singaporean adults over 8 weeks. However, this finding was based on a small study sample only, and there were insufficient published studies for comparison. Creating a life-story book could serve as a type of accomplishment and a source of pride for older adults, improving life satisfaction (Guse et al., 2000). Therefore, in the present study, we ensured that participants received their life-story book on week 8 to maintain their interest and focus. We also encouraged subjects in the life-story group to search for related photographs that would be used to enrich the contents of their life-story book. This action may enhance their responsibility for their choice and equip them with a sense of autonomy, which could have been another significant factor in improving their life satisfaction (Reker, 1997; Heathcode et al., 2005).

The other significant factor that impacted subjects' life satisfaction was their depression score. We realized that for the older adults in the life-story group, interacting with empathic listeners may have given subjects a sense of being appreciated, acknowledged, heard, and understood, which had the potential to enhance life satisfaction for these depressed elderly significantly make their lives more worthwhile (Gaydos, 2005). Narrative intervention, in the form of reminiscence and life review, has been proven to be a potent therapy for treating depressive symptoms in older adults (Pinquart et al., 2007). Cully et al. (2001) asserted that narrating one's life story provides a formal measure for older adults to express and release unresolved feelings, thereby reducing their level of depression. In our study, the subjects benefited from a narrative intervention. However, it was also conducted as a one-to-one meeting in each subject's home, which provided them with a safe environment for emotional catharsis.

Another reason postulated for this study's finding is that 68% of the subjects in this study were female. Bohlmeijer et al. (2003) claimed that women are more amenable to reminiscence because they are more willing and able to remember and express their detailed personal experiences, which improves their life satisfaction levels. In addition, we anticipated that when subjects received their life-story book, communication, and social interaction with their families and friends improved as they talked about it, which further enhanced their psychosocial well-being (Guse et al., 2000).

Limitations

Although a convenience sampling method was used to enhance the recruitment of older adults, this sampling method is not recommended because of its potential to induce bias in the results. Further studies use random sampling, and larger sample sizes are recommended to ensure the objectivity and generalizability of the results. Blinding was not possible in this study because subjects were aware they were narrating their life stories and reviewing their life-story book. Therefore, the Hawthorne effect may partly account for the positive psychological responses. Other variables

could also account for the results, such as the interactive nature of weekly interviews. Also, it was not possible to control confounding factors, such as interactions with relatives and friends during the 8 weeks of sharing their life stories. Even though these social factors may have influenced subjects' life satisfaction scores, it was unethical and impossible to control these variables in the private space of a person's own home.

Implications for Clinical Practice

The study highlighted the importance of initiating early and effective intervention to improve older adults' quality of life. A study conducted a life-story program in a nursing home and reported that participants had positive experiences with the program initially (Ejaz et al., 2022). Perhaps, by collating the experiences into a life-story book, participants could find a deeper sense of coherence, continuity, and meaning in life (Chiang et al., 2010). The book creation process also helped the subjects to improve their life satisfaction. The intervention could also prove valuable for elderly clients in hospitals, daycare centers, and nursing homes. Healthcare providers may better understand the individual story, facilitate individualized care, and improve life quality through the book creation process (Clarke et al., 2003). The life-story book sharing requires communication and interview skills, so careful training of interviewers is essential (McKeown et al., 2006). Sensitive monitoring for signs of distress in subjects is also necessary. The study complements the existing body of knowledge regarding the efficiency of the life review with life-story book production in moderating life satisfaction. However, this result was based on a relatively small sample size study. Thus, this claim needs to be considered with caution. Future studies need to focus specifically on the progressive effects of an intervention on the late life of older people.

Conclusion

There has been scant evidence supporting the efficacy of the life-story book creation in mediating life satisfaction in older adults. This study showed statistically significant improvements in life satisfaction in the life-story group compared to the control group. Our study found that the life-story book creation process improved life satisfaction for older adults from session to session. This might be due to the cumulative effects of this process. While the study demonstrated the benefits of the life-story process in improving older adults' life satisfaction scores, more research is needed. The intervention could also be of value for elderly clients' life satisfaction, whether they are community dwelling or in community centers or nursing homes.

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Conflict of Interests The author(s) declare that they have no conflict of interests.

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Chapter 3

Impact of Online Learning Experience During COVID-19: Exploring the Relationship Between Academic Resilience, Academic Self-Efficacy, and Perceived Social Support



Smita Singh, Jie Ying Loh, and Patrick K. F. Lin

Introduction

The COVID-19 pandemic, one of the worst global health crises of this century, has dramatically transformed the lives, functioning, and behaviors of university students. After Singapore went into lockdown on April 7, 2020, universities were forced to transition entirely to virtual delivery, with little time to prepare lessons and assessments for implementation through online-based platforms (Crawford et al., 2020; Ng, 2021). This unexpected transition required faculty members to adjust and adapt their teaching styles and methods accordingly. At the same time, students were expected to cope with a different learning mode and modality with which they had little or no experience (Bartusevičienė et al., 2021). When matters of life and death are at stake, focusing on academic goals may be more strenuous than ever (Besser et al., 2020). Mental health issues such as high levels of despair, anxiety, and perceived stress were also linked in university students during COVID-19, as found in studies conducted in various countries, including Saudi Arabia (Alyoubi et al., 2021), Bangladesh (Khan et al., 2020), and China (Jiang, 2020).

According to Chen and Lucock (2022), more than half of the 1173 students questioned in the study had levels of anxiety and depression that were over the clinically acceptable thresholds. The findings also indicated relatively low levels of resilience, which could be attributed to limitations and isolation that limited opportunities to participate in constructive coping mechanisms and activities. Hence, studying student *academic resilience*—the capacity to navigate challenges and adversities during education—is essential (Ang et al., 2021; Beale, 2020).

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Given the uncertain future of the pandemic, there has been a dramatic increase in the adoption of online learning in higher education around the world. Multiple researchers have predicted that online education will become a mainstream and necessary tool for academia (Goh & Sandars, 2020; Palvia et al., 2018; Sobaih et al., 2020). Therefore, it is imperative to better understand the effects of online learning on students and its implications to develop responsive strategies and recommendations. In the context of social distancing and pandemic-related stress, online learning has caused challenges for real-time interactions among peers, students, and lecturers, leading to a lack of social support for students (Ang et al., 2021; Means et al., 2020). Therefore, students must rely more on social support from family, friends, and or significant others (Mai et al., 2021).

Emerging research into online student learning has highlighted the importance of social support for students to cope with pandemic-related stress (Huang & Zhang, 2021). However, while external factors like perceived social support are worth exploring, internal factors like self-efficacy—which determines academic resilience (Cassidy, 2015)—also demand attention (Narayanan & Onn, 2016). To our knowledge, academic resilience has not received much attention in COVID-19-related research. Therefore, the main aim of the current study is to address this gap by examining whether perceived social support and self-efficacy mediate the link between online student learning and academic resilience.

Literature Review

Online Learning Experiences During COVID-19

Before the COVID-19 pandemic, exclusively online learning for local universities was uncommon (Müller et al., 2021). Research from the pre-pandemic period indicates both benefits (Seiver & Troja, 2014) and challenges resulting from online learning (Hodges et al., 2020; Martin et al., 2017). For example, in a study by Means et al. (2020), undergraduates' satisfaction ratings with their courses dropped dramatically (from an original satisfaction rating of 50% to 19%) after the forced shift to online learning. Students' attitudes toward online learning also shape student experiences, as shown by Aguilera-Hermida (2020), who found that student attitudes toward a specific mode of lesson delivery (mainly face-to-face) were correlated with their motivation, cognitive engagement, and self-efficacy for learning.

Lack of motivation was rated as the most pressing challenge that many students faced (Jaggars et al., 2021; Means et al., 2020; Tichavsky et al., 2015). In addition, the lack of daily class routines and studying in non-academic environments due to pandemic lockdowns have exacerbated this by causing a significant loss of focus for many (Ang et al., 2021; Bartusevičienė et al., 2021; Means et al., 2020). Many students have also had to deal with the loneliness and isolation that come with following rules that call for social or physical seclusion. Circumstances that have

completely disrupted everyday routines can also cause stress and anxiety (Son et al., 2020).

Another frequently cited challenge of online learning is the absence of community building in the learning process (Jaggars et al., 2021). The lack of real-time interaction between students, teachers, and peers can also lead to delays in receiving constructive feedback for learning (Means et al., 2020) and undermine their understanding of the subject matter (Aguilera-Hermida, 2020; Bartusevičienė et al., 2021; Dodd et al., 2021; Goh et al., 2020; Wut & Xu, 2021). In addition, interviews with teaching staff indicate that online teaching-learning outcomes are more student-dependent than face-to-face learning (Müller et al., 2021), suggesting that students should be more proactive in reaching out to their professors and peers virtually as they might in person (Goh et al., 2020).

These findings imply that the personal reach of teaching staff and support to students has been limited by the barriers to interaction characteristic of the virtual setting. It is also evident that the changes to study routines and the learning environment imposed by the pandemic have caused dramatic disruptions to students' motivation and self-regulation. While COVID-19 and its associated restrictions challenge student learning, it is also important to examine students' internal factors that determine how they are impacted, such as ability, resilience, and coping skills.

Academic Resilience

Abiola and Udofia (2011) describe resilience as inner strength, competence, optimism, and flexibility, comprising an effective coping mechanism for facing adversity. These qualities can minimize the impact of stressful life events and enhance the protective factors that improve one's ability to deal with life's challenges. Academic resilience is a type of resilience specific to the domain of education that promotes better academic achievement, engagement, and motivation—even in the face of stressful events that might otherwise cause poor performance or even dropping out (Hwang & Shin, 2018; Martin & Marsh, 2009). Highly resilient students are also more likely to set higher academic goals with determination to enhance their skills and knowledge and may therefore be more adaptive in educational settings (Choo & Prihadi, 2019; Kwek et al., 2013). A longitudinal study conducted by Wu et al. (2020) examined the bidirectional relationship between resilience and mental health of university students in China. There was a significant reciprocal association between resilience and mental health status, showing that resilience predicted the degree of mental health status within 1 year and vice versa. However, when looking at 2 years, mental health was found to predict resilience level.

Self-regulated learning and self-efficacy are central concepts in the literature on academic resilience. For example, Martin and Marsh (2006) have proposed a “5-C” model consisting of five factors that are significant predictors of academic resilience: (1) self-efficacy; (2) commitment (also known as persistence); (3) coordination (i.e., planning skills); (4) control (i.e., a combination of hard work and useful

strategies helps one achieve); and (5) composure (i.e., low anxiety). Martin and Marsh (2006) further describe that academically resilient students tend to be highly self-efficient and disciplined, show great perseverance, are good in planning, and low in anxiety.

In the context of the pandemic, it could be argued that academic resilience is more indispensable now than ever. However, students are experiencing higher levels of academic stress during online distance learning (Quintiliani et al., 2021), and findings have shown that academic stress can stimulate negative emotions that are detrimental to learning and cause pessimistic evaluations of education (Kumalasari & Akmal, 2021).

Kumalasari and Akmal (2021) examined this question in a study of the effects of academic stress and academic resilience on online learning satisfaction. They found that satisfaction decreased with more academic stress, and academic resilience moderated the relationship, buffering against this reduction in satisfaction. Academically resilient students can also respond more adaptively to academic challenges (for example, by considering difficulties as opportunities to improve or maintaining an optimistic belief that things will get better) and accordingly also tend to be more satisfied with their academic experiences (Hwang & Shin, 2018; Meneghel et al., 2019). Interestingly, a study by Ramadhana et al. (2021) highlights converging qualities between people who excel in an online learning environment and those with high academic resilience. They further found that online learning readiness was predictive of academic resilience.

Academic Self-Efficacy

Academic self-efficacy is a student's beliefs and confidence in their academic skills (Chemers et al., 2001; Khan, 2013). It is also one of the "5-C" characteristics described by Martin and Marsh (2006) as a significant predictor of academic resilience, describing an inherent human ability that can be cultivated as a buffer against stress and adversity (Narayanan & Onn, 2016). People with high self-efficacy can control their thoughts and emotions when facing challenges and are more likely to persist in their endeavors and rebuff pessimistic thinking about themselves and their capabilities (Ozer & Bandura, 1990). Stated, those who do not believe they can attain their goals will have little motivation to keep trying when faced with difficulties (Hamill, 2003).

Cassidy (2015) showed that academic self-efficacy could predict academic resilience, finding that students with higher self-efficacy responded more positively to statements corresponding to high academic resilience than those with low self-efficacy. Chemers et al. (2001) found that academic self-efficacy correlates positively with higher grades, greater academic expectations, and better performance. Self-efficacy is also crucial in determining how positive a student's online learning experience will be (Albelbisi & Yusop, 2019; Alghamdi et al., 2020). Aguilera-Hermida (2020) found that prior experience with technology use before COVID-19

and attitudes toward online learning could influence students' efficacy beliefs. Thus, the context carries weight in influencing students' academic self-efficacy in online learning as well as in traditional classroom learning.

Perceived Social Support

Besides the innate qualities described in the “5-C” model (Martin & Marsh, 2006), academic resilience may also be influenced by external factors such as social support within the individuals' social environment (Permatasari et al., 2021). For example, positive social support from friends has been shown to act as a buffer for students under stress (Wilks & Spivey, 2010) and can influence the effects of self-efficacy in students (Narayanan & Onn, 2016). It has also been shown to predict academic resilience among first-year Malaysian students (Narayanan & Onn, 2016), social work students (Wilks & Spivey, 2010), and, most recently, during the pandemic among undergraduates in China (Mai et al., 2021) and the United States (Lady, 2021).

Social support covers a broad system of family, friends, significant others, classmates, lecturers, and the community. It can be defined as a relationship formed among at least two individuals, with the perception that said individuals feel cherished and supported through their difficulties (Brief & Weiss, 2002). Perceived social support is a component of social support based on one's subjective view of feeling cherished, and worthy, and having a social network that one can rely on for support in times of need (Mai et al., 2021). And in the context of social distancing and lockdown restrictions during the pandemic, students' need for social support becomes more crucial.

The value of social interaction has been shown by Sarmiento et al. (2021) to be a protective factor against the rise in stress, worry, dread, loneliness, and other negative emotions that university students experienced during forced confinement during the pandemic. Although the transition to online learning may have produced a useful option to support students who continue their education from a distance, it has been discovered that online learning results in a greater sensation of loneliness and isolation than face-to-face sessions (Saltzman et al., 2020). Face-to-face sessions allow students to engage and build social networks because of their close physical contact. By preventing students from forming relationships and fostering interpersonal connections, social distancing rules will likely worsen students' feelings of isolation and lower psychological wellness throughout the epidemic (Liu et al., 2021).

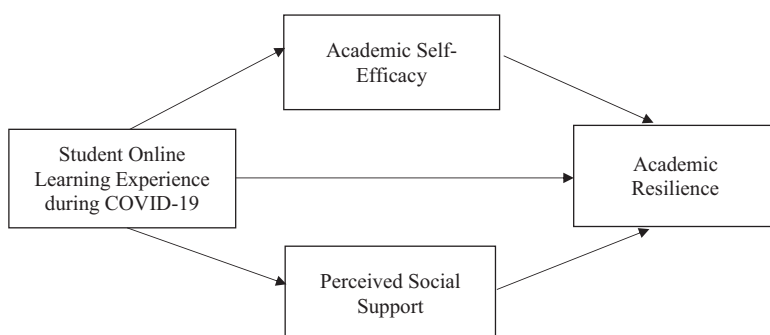
Sun et al. (2020) investigated the relationship between perceived peer support and depression among Hong Kong university students. Their findings revealed a negative relationship between students' perceived accessible peer support and self-reported depressive symptoms, emphasizing the importance of relational elements, such as perceived available peer support, for students' mental health during the pandemic. A mixed-method study by Lady (2021) on the importance of social

support for American undergraduate students' academic resilience found that participants reported fewer social interactions and a smaller social circle during the pandemic, leading to feelings that significantly influences academic resilience among Indonesian students. Thus, while the COVID-19 pandemic has caused restrictions to social interactions and lower quality relationships with other students and teachers, perception of support, encouragement, and care coming from their social circle can boost their academic resilience to better face the challenges of online learning.

The Current Study

As previously outlined, academic resilience can be predicted by online learning readiness (Ramadhana et al., 2021). However, the mechanism that drives this link has not been sufficiently researched to explain it. Therefore, we investigated the following model (Fig. 3.1) to gain insight into how social support and academic self-efficacy perception could affect the relationship between students' online learning experience during COVID-19 and their academic resilience.

We hypothesized that positive online learning experience during COVID-19 would predict higher academic resilience, and that this relationship would be mediated by academic self-efficacy and perceived social support. We also hypothesized that students with positive experiences would also show higher levels of academic self-efficacy and perceive their social support system to be stronger.



Notes. IV = Student Experience during COVID-19, MVs = Academic Self-Efficacy and Perceived Social Support, DV = Academic Resilience.

Fig. 3.1 Proposed mediation model for the impact of student online learning experience during COVID-19 on academic resilience via academic self-efficacy and perceived social support. Notes. IV Student Experience during COVID-19, MVs Academic Self-Efficacy and Perceived Social Support, DV Academic Resilience

Methods

Participants and Design

An a priori power analysis using the G*power software prescribed an estimated sample size of 119 for our target alpha level of 0.05, power of 0.95, and moderate effect size of $f = 0.15$. After data screening, the final sample size consisted of 187 university students (128 females, 54 males, and five undisclosed) based in Singapore and enrolled in an online course (e.g., lecture/tutorials using Zoom or Blackboard Collaborate). Their ages ranged between 18 and 40 years ($M = 21.86$, $SD = 3.96$). The study utilized a nonexperimental cross-sectional design that was correlational, using quantitative measures.

Materials and Procedure

Student Online Learning Experience During COVID-19

Nine-item questionnaire constructed by Dodd et al. (2021) was used to measure student's online learning experience. This questionnaire includes statements about difficulties with social interaction online, preference between online and face-to-face lessons, confidence in online learning and interactions, and whether their home environment and computer skills supported online learning. For example, "I prefer online learning to face-to-face," was judged on a seven-point scale (1 = "strongly disagree" to 7 = "strongly agree"). No reliability estimate for the questionnaire was reported by Dodd (2021).

Academic Resilience

The 30-item Academic Resilience Scale (ARS-30; Cassidy, 2016; $\alpha = 0.90$) was used to assess students' responses to vignettes describing hypothetical academic situations. Participants rated the likelihood of certain behavioral, cognitive, and affective responses to academic problems on a five-point scale (1 = "likely" to 5 = "unlikely"), with items like, "I would keep trying," "I would give myself encouragement," and "I would probably get annoyed."

Academic Self-Efficacy

The eight-item Academic Self-Efficacy Scale (ASE; Chemers et al., 2001; $\alpha = 0.80$) was used to measure various skills required for academic success in University, such as scheduling tasks, taking notes, and writing papers. Participants responded to

items like, “I am a very good student” on a seven-point scale (1 = “very untrue” to 7 = “very true”).

Perceived Social Support

The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988; $\alpha = 0.88$) was used to assess perceptions of social support. It consists of 12 items, categorized into three different support sources: family, friends, and significant others. Participants responded to items like, “My family really tries to help me” on a seven-point scale (1 = “very strongly disagree” to 7 = “very strongly agree”).

Sociodemographic Survey

The sociodemographic survey consisted of basic demographic information, living arrangements, and questions about how COVID-19 had impacted them in the past year (Dodd et al., 2021). Table 3.1 (in the Results section) presents a detailed summary of this data.

Procedure

Ethical clearance for the study was granted by the Human Research Ethics Committee of James Cook University, Australia (Ref. H8451). The full survey took about 20 minutes to complete and was posted on the Qualtrics platform. In addition, research posters carrying the survey link were circulated via the University’s research sites and social media platforms like Facebook. Psychology undergraduate students of received course credits as an incentive for their participation. The survey was administered between June 2021 and November 2021.

Results

Descriptive and Reliability Analysis

Descriptive results are presented in Table 3.1. Reliability analysis for Dodd’s online learning experience questionnaire, the ARS-30, the ASE, and the MSPSS indicated internal consistencies of $\alpha = 0.74$, 0.91, 0.90, and 0.93, respectively.

Table 3.1 Demographic characteristics of the study sample ($n = 186^1$)

Demographic characteristics	n (%)
Age: $M = 21.86$, $SD = 3.96$	
Gender	
Male	54 (28.9)
Female	128 (68.4)
Prefer not to disclose	4 (2.1)
Current Location or Living Arrangements impacted by COVID-19?	
No	140(74.9)
Yes	
Returned to home country	15 (8.0)
Unable to travel to Singapore to begin to resume study	22 (11.8)
Moved out of student accommodation	0 (0)
Others, please specify	9 (4.8)
Mode of Study Enrolled in (i.e., before COVID-19)	
Face to Face	93 (49.7)
Online	51 (27.3)
Blended Learning (Combination of Face to Face and Online)	42 (22.5)
“COVID-19 has had a huge impact on my studies since it started in 2020”	
Agree ²	138 (74.2)
Neither Agree nor Disagree	23 (12.3)
Disagree ³	27 (13.4)
How their Study was Impacted:	
Units shifted online	123 (65.8)
Units of study canceled	22 (11.8)
Units of study postponed	23 (12.3)
Changes to assessment format	105 (56.1)
Changes to assessment timelines	64 (34.2)
Changes to frequency of contact with lecturers	101 (54.0)
Others	12 (6.4)
Impact of COVID-19 on Overall Learning Experience	
Negative	70 (37.4)
Neutral	88 (47.1)
Positive	28 (15.0)

Notes. ¹One participant did not complete any demographic questions. Hence, $n = 186$ and not 187. ²“Agree” includes strongly agree, agree, and slightly agree. ³“Disagree” includes strongly disagree, disagree, and slightly disagree

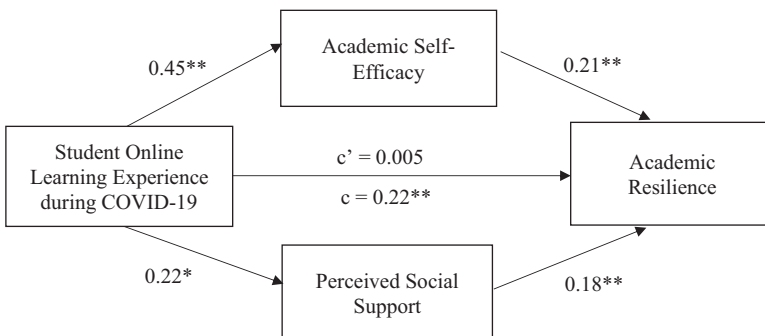
Hypotheses Testing: Mediation Analysis

Mediation analysis was conducted to test if the relationship between student online learning experience during the COVID-19 Pandemic (IV) and academic resilience (DV) was mediated by academic self-efficacy (MV1) and perceived social support (MV2). We examined the models with MV1 and MV2 entered simultaneously. The

mediation analyses were conducted using the PROCESS Macro Version 4.0 (Hayes, 2022) to test the bias-corrected 95% CIs around the indirect effect (IE) of the IV through the MV on the DV. The macro also examined a bootstrap resampling of $n = 5000$. The MV was found judged to be significant if the biased corrected 95% CIs of the indirect effect from the bootstrap resampling excluded zero; otherwise, it was considered nonsignificant (Williams & MacKinnon, 2008). Complete mediation occurred when the direct effect was nonsignificant, and partial mediation occurred when it was significant (Baron & Kenny, 1986). All calculations yielded unstandardized coefficients.

Results from Process Macro Model 4 revealed that student learning experience during COVID-19 (IV) predicted academic self-efficacy (MV1), $B = 20.45$, $t = 5.95$, $p < 0.001$, perceived social support (MV2), $B = 0.22$, $t = 2.42$, $p = 0.02$, and academic resilience (DV), $B = 0.14$, $t = 3.08$, $p = 0.002$. Academic resilience was also predicted by both academic self-efficacy, $B = 0.21$, $t = 5.56$, $p < 0.001$, and perceived social support, $B = 0.18$, $t = 5.62$, $p < 0.001$. Importantly, after the mediators entered the model, the impact of student learning experience on academic resilience was nonsignificant, $B = 0.05$, $t = 0.11$, $p = 0.91$. The IE of academic self-efficacy (MV1) was 0.10 and significantly excluding zero in the 95% CIs (0.05 to 0.15), and the IE of perceived social support (MV2) was 0.04 and significantly excluding zero in the 95% CIs (0.002 to 0.08) (Fig. 3.2).

The model showed that academic self-efficacy and perceived social support completely mediated the impact of student online learning experience during COVID-19 on academic resilience. Interestingly, academic self-efficacy had a higher IE score than perceived social support, indicating it as the stronger mediator of the two.



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

Fig. 3.2 Mediation model for the impact of student online learning experience during COVID-19 on academic resilience via academic self-efficacy and perceived social support. Note. * $p < 0.05$, ** $p < 0.001$

Discussion

Summary of Findings

The present study found that students' online learning experience was predictive of their academic resilience, while academic self-efficacy and perceived social support were complete mediators of this relationship. These findings confirm the proposed model and suggest that academic self-efficacy could be a stronger mediator of this link than perceived social support.

Implications and Suggestions

Student Online Learning Experience During COVID-19, Academic Self-Efficacy, and Perceived Social Support

Students who rated their online learning experience to be positive showed higher levels of academic self-efficacy. In other words, those who had a positive learning experience during the pandemic had a stronger belief in their ability to manage the disruptions. This belief, therefore, could contribute to academic resilience. These findings align with those of Aguilera-Hermida (2020), which indicated that positive experiences with technology use significantly contribute to students' self-efficacy. Self-efficacious beliefs influence students' motivation, cognitive engagement, and effort, all of which contribute to their academic performance (Chemers et al., 2001; Alghamdi et al., 2020).

Student experience during the pandemic was also found to be positively predictive of perceived social support. This suggests that students who had positive online learning experiences had perceived their social support system of family, friends, and significant others to be more supportive during this period (i.e., an indication of their better mental health).

Our findings also align with previous research, indicating that a lack of real-time interactions with peers and teachers may lead students to feel isolated due to a lack of help-seeking and hampered feedback (Dodd et al., 2021; Lady, 2021; Means et al., 2020). Isolation from peers also causes challenges for students who view themselves as poor self-motivators since they rely on others for support in terms of motivation and regulation in their learning experience (Tichavsky et al., 2015).

Model: Mediators of Student Online Learning Experience During COVID-19 and Academic Resilience

The current study established a significant positive relationship between academic self-efficacy and academic resilience consistent with numerous previous studies (Cassidy, 2016; Hamill, 2003; Hayat et al., 2021; Narayanan & Onn, 2016). This

indicates that students who are more confident in their academic goals are likely to be more effective when faced with academic challenges. In addition, this tendency to hold faith in their strengths helps these students persevere through hardship and are therefore more likely to respond adaptively (Cassidy, 2016). Similarly, this study also found a significant positive relationship between perceived social support and academic resilience. This suggests that students who perceive strong social support from family, friends, and significant others are better able to cope with and persist through academic challenges (Lady, 2021; Narayanan & Onn, 2016; Permatasari et al., 2021).

The most noteworthy finding of this study was that the relationship between student experience during COVID-19 and academic resilience was fully mediated by academic self-efficacy and perceived social support. This finding also conversely indicates that student experience did not directly predict academic resilience when controlling for the effects of academic self-efficacy and perceived social support. Simply stated, the impact of students' online learning experience during the pandemic on their academic resilience depended completely on their academic self-efficacy and perception of available social support. These findings signify that students who regard their online learning experience as positive tend to be more academically resilient because they believe in their self-efficacy and trust in their social support circle.

Our findings echo a similar study by Ramadhana et al. (2021). They found a significant relationship between online learning readiness and academic resilience. Specifically, they noticed that online learning readiness includes two components of self-efficacy, internet self-efficacy, and online communication self-efficacy. While these components of self-efficacy may not be identical to academic self-efficacy as operationalized in our study, the fundamentals of self-efficacy beliefs may arguably remain similar. While Ramadhana et al.'s (2021) examined the direct effects of the dimensions of online learning readiness on academic resilience, we examined a similar relationship between the online learning experience and academic resilience, with multiple mediators that included academic self-efficacy. Thus, these collective results demonstrated the impact of online learning on academic resilience. More importantly, we found that academic self-efficacy and perceived social support emerged as mediators explaining the underlying link between online learning and academic resilience.

An important implication of the current study is that, given the pandemic's impact on students' learning experience, fostering academic resilience may be a redeeming factor in helping students persevere through challenges. Since academic resilience is predicted by academic online learning experience, universities must endeavour to provide students with a more engaging experience and efficient use of technology to enhance academic support and student interaction (Ang et al., 2021; Eri et al., 2021; Wut & Xu, 2021).

Based on our findings, we recommend that higher education institutions work to build their students' academic self-efficacy beliefs. Given the ambiguity of restrictions that may happen in the endemic future of COVID-19, it will be essential for university faculty and staff to find ways of bridging the gaps in course design for

online delivery to transform it into a more effectively designed system that enhances academic resilience rather than impeding it. Teacher support has been firmly established as a driving factor in students' academic self-efficacy and resilience (Ahmed et al., 2018; Cassidy, 2016; Kumalasari & Akmal, 2021). Hence, the academic support team and faculty should work together to foster students' academic self-efficacy by facilitating interactions between students, peers, and educators so that students are more equipped to succeed academically.

It may also be helpful for student academic support to promote self-regulation and self-efficacy skills by giving out tips and encouraging students to reflect on what works for their online learning process and what does not. This could also involve lecturers inviting struggling students to remain behind after online lessons. Such initiation by educators reminds students to monitor their learning progress and invites students facing difficulties to reach out (Aguilera-Hermida, 2020). Further, lecturers can also implement instructional practices during online lessons, such as (1) ensuring students can assess course materials, (2) connecting real-world examples to course content, and (3) having students express what they have learned and still need to learn (Means et al., 2020). While these practices are recommended to boost students' satisfaction with online learning, they can also be regarded as ways to improve students' online learning experience, thus ultimately improving their academic resilience.

Students need to cultivate stronger self-efficacy beliefs and actively reach out for peer support to encourage conversation and convey support for one another. One method to achieve this may be to provide students with information on effective behavioral strategies to overcome academic challenges (Lady, 2021). Such support can alleviate the students' distress by showing examples of others who have had the same problems and the resilience strategies that were effective for them. Witnessing peers whom students can identify with share information and tips on overcoming adversity can also boost self-efficacy, and thus, academic resilience (Johnson et al., 2015).

Limitations and Future Directions

First, our small sample size required us to restrict our interpretation of the results based on the global scales of measures used. With larger sample size we could do more in-depth analyses between the variables and their subdomains. Second, the scale used to measure student online learning experience during COVID-19 (Dodd et al., 2021) needs further psychometric validation. While we elected to use it as a measure and verified its reliability to be fairly acceptable ($\alpha = 0.74$), further factorial analysis is recommended with a larger sample to establish its validity and reliability better.

In addition, we tested the mediation model with the assumption that academic self-efficacy and perceived social support would simultaneously mediate the relationship between students' online learning experience during the COVID-19

pandemic on academic resilience. However, there could be an alternative model which research studies can explore. For example, when students feel positive about their online learning experiences, they might first rely on their social support status, enhancing their academic self-efficacy and thus academic resilience. In this alternative model, the mediators (i.e., academic self-efficacy and perceived social support) function sequentially in the relationship between students' online learning and academic resilience. One important issue to note is that the current study was conducted via a cross-sectional survey, and we understand the limitation of the interpretation might not be causal related, hence, we are cautious of the mediational outcomes. As such, there could be more models (e.g., moderation) to be tested to fully understand these relationships.

Lastly, in the current study, we examined the students' academic self-efficacy, social support from family and friends, and academic resilience as an indirect indication of positive mental health during the COVID-19. However, due to the complexity of mental health, instead of examining only self-efficacy, social support from family and friends, and academic resilience, future researchers could examine student's mental health more directly; for instance, measuring the students' depression or anxiety levels during online learning situations that might happen in the endemic future.

Conclusion

This study examined the impact of students' online learning experiences during COVID-19 pandemic on their academic resilience, and the mediating effects of academic self-efficacy and perceived social support on this relationship. Based on the findings, we can say that academic self-efficacy and perceived social support are significant determinants of students' resilience via a complete mediation effect in the relationship between student experience and academic resilience. This signifies the importance of both internal and external factors for predicting academic resilience and fostering self-efficacy beliefs and encouraging social support for students. Promoting an effective online learning platform that offers social support and skills that boost students' academic self-efficacy will support their academic resilience and good mental health in the long run. With higher levels of academic resilience, students can be better equipped to overcome adversities to achieve success in their academic goals.

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Chapter 4

Mattering and Feelings of Not Mattering in Suicide Risk and Prevention: Conceptualization, Review, and Public Health Recommendations



Gordon L. Flett

The theme “You Matter” is arguably one of the most important public health messages in existence when it comes to understanding and preventing mental health problems. The national suicide prevention program in the United States focused on youth is based on this theme, and it has been a constant focus for over a decade. Initiatives with the “You Matter” theme have emerged throughout North America and around the world.

This universal emphasis on the theme “You Matter” reflects the belief that people who are considering suicide are in need of reasons for living, and one very compelling reason is having suicidal people realize they matter and they would indeed be missed. It is difficult to think of a more poignant and timely message than this one. The emphasis on “You Matter” captures a feeling and a quest for the type of life existence that resonates with virtually everyone.

Given the visibility and core importance of this theme, it is remarkable that the need for people to matter is not a central focus in research on suicide and its prevention. There is mounting research evidence of the benefits of mattering, but programmatic research on mattering and suicide has not yet been conducted. Similarly, feelings of not mattering are not measured routinely in clinical assessments of suicide risk, and there is no programmatic emphasis on people’s need to matter in most prevention frameworks; however, there are some notable and noble exceptions that have been effective (for a discussion, see Flett, 2018b). These exceptions serve as clear illustrations that mattering can be an acquired characteristic. Moreover, extensive financial resources are not required in order to implement ways to make people feel valued in ways that mitigate risk. Most notably, the individual person can show someone who is in need that she or he matters, and this may be enough to save them.

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This was demonstrated poignantly in the movie *It's A Wonderful Life* when the angel Clarence earned his wings by showing George Bailey, portrayed by Jimmy Stewart, how abjectly horrible the local community would have become if George had not been in it to make a difference in so many lives.

Accordingly, in light of these observations and the vital importance of more emphasis on the need for vulnerable people to feel they matter, the current chapter considers the role of feelings of mattering in suicide prevention. The overarching premise of this chapter is that mattering is a unique factor that is unlike any other psychological factor and, given its unique protective powers, mattering needs to become a focal point in the assessment, treatment, and prevention of suicidal tendencies. The uniqueness of mattering is supported by numerous studies in the depression field which shown that mattering is both a significant and unique predictor of distress, even after taking into account the proportion of distress accounted for by other potent predictors such as mastery, self-criticism, self-esteem, social support, and insecure attachment (Flett et al., 2021; Flett & Nepon, 2020; Taylor & Turner, 2001). Moreover, mattering mediates key associations such as the association between socially prescribed perfectionism and depression (Flett et al., 2012) and key outcomes linked with stress (see Giangrasso Casale et al., 2022).

Flett (2022) characterized mattering as double-edged in that people have a vital resource when they feel like they matter and this sets the stage for happiness and life satisfaction, but people also have an immense source of vulnerability when they feel like they don't matter. Given that mattering has a role in both resilience and risk, this chapter will address mattering and the need to promote mattering in public health initiatives, but also the need to focus on feelings of not mattering when someone has become suicidal. It is these people who need to come to the potentially lifesaving realization that they do indeed matter. One overarching theme of this chapter is that the failure to consider mattering and those people who desperately feel a need to matter is a major and costly omission that weakens public health initiatives and their possibilities.

This chapter begins with a description of mattering and its various facets. Next, a summary and review is provided of select research that links feelings of not mattering with suicidal tendencies. This overview is not exhaustive and focuses primarily on research conducted with university students and adults. The need to matter is then considered in terms of its conceptual and applied significance. At a conceptual level, it is uniquely proposed that just as there is an unbearable form of psychological pain that is central to suicide risk, for many people, there is also an unbearable form of feelings of not mattering to others and this results in people feeling like they can't bear to live any longer. The person characterized jointly by unbearable feelings of psychache and personal insignificance is at grave risk. Accordingly, it is suggested that levels of mattering or not mattering should be assessed in any person who either has a high level or is suspected of having a high level of unbearable psychache.

What Is Mattering?

Mattering is unique in terms of psychological constructs because it is, in essence, a part of the self that is based on reflected appraisals of the self (i.e., our perceptions of how much other people regard us). Also, it is rooted in interpersonal relationships, so it is very much as social-cognitive construct.

Rosenberg and McCullough (1981) were the originators of the mattering construct. They emphasized relational mattering in terms of feeling significant to other people. They saw the experience of feelings of mattering as a reflected appraisal with three components: (1) feeling that other people depend on us; (2) perceiving that other people regard us as important; and (3) knowing and feeling that other people are actively paying attention to us. They suggested that the most central element is the facet of mattering that involves positive feelings of being a focus of attention. Rosenberg (1985) further proposed that mattering also includes feeling that other people would miss us if we were no longer around. Schlossberg (1989) added that mattering entails feeling appreciated by other people. This appreciation can be in terms of what someone does for someone, but also entails appreciating the person as a whole. Flett (2018b) added that mattering involves uniquely being noticed as an individual as is the case when someone sees something positive in you that others seemed to have missed. This aspect is most evident when someone is made to feel uniquely special and prized.

When it comes to core elements of this construct, there are other ways of framing mattering that merit consideration. For instance, it has been noted that a key theme when it comes to mattering is the feeling of being cared for and cared about (see Flett & Zangeneh, 2020). There are few better feelings than the feeling experienced at the moment when you realize that someone truly cares about you as a person. This feeling is typically accompanied by the sense of being positively regarded and accepted without any conditions whatsoever. This feeling typically results when someone sees something in you that other people don't see and they clearly believe in you and your potential.

Key extensions of the mattering construct have emerged in recent years. Prilleltensky (2020) emphasized that mattering must include not only having value to others, but also giving value to others (also see Prilleltensky & Prilleltensky, 2021). This notion of giving value to others reflects the therapeutic value of boosting a sense of self by doing meaningful things for other people. Mattering derived from rewarding efforts to give value to others and make a difference in their lives can build a sense of agency and efficacy along with a sense of mastery and self-determination that further adds to positive feelings.

The mattering construct has been expanded further and made more clinically relevant through a focus on feelings of not mattering and their destructiveness. Flett (2018b) introduced the feeling of anti-mattering, which arises when people are marginalized and made to feel unimportant and insignificant to others. Anti-mattering is qualitatively distinct from the positive feelings of mattering and research has established that anti-mattering and mattering are not simply endpoints of the same

continuous dimension (see Flett et al., 2022). People who unseen, unheard, and unvalued are likely high in feelings of not mattering to others.

Flett and associates (2022) showed with the development of the Anti-Mattering Scale that there are clear individual differences in levels of anti-mattering and elevated levels are linked with distress and low well-being. Chronic and intense feelings of not mattering are presumed to evoke psychological pain (see Flett, 2018a, b). This theme is revisited in a subsequent segment of this chapter.

Flett (2018b) also proposed that there are related individual differences in the fear of not mattering to others. The person who has fear of not mattering likely suffers from insecurity and if they have achieved a sense of mattering, they may be preoccupied with losing a sense of mattering or needing reassurance of still mattering to others (for discussions, see Casale & Flett, 2020, 2023). Research in various contexts has shown that the fear of not mattering can be reliably measured and it I am a unique predictor of distress and related outcomes when pitted against other mattering measures (see Besser et al., 2022; Chen et al., 2022; McComb et al., 2020).

Mattering as it is usually conceptualized is typically assessed with the five-item General Mattering Scale with its positively worded scale items (see Marcus & Rosenberg, 1987), and there is now growing use of the five-item Anti-Mattering Scale (Flett et al., 2022) and the negatively worded items that tap feelings of being invisible and insignificant. But one reason why mattering has tremendous scope and applicability is that it is also possible to assess meaningful individual differences in specific domains. That is, mattering can be assessed in terms of mattering the family; indeed, in their original work, Rosenberg and McCullough (1981) utilized rudimentary measures assessing the extent to which adolescents felt like they mattered to their parents. Mattering can also be assessed in terms of perceived significance to significant others such as romantic partners. Mattering has also been measured with specific domain-specific measures that assess mattering at school, mattering at work, and mattering in the community (see Flett, 2018a, b). One basic untested possibility is that the level of protection from depression and suicide will escalate as a function of the extent to which mattering is felt across multiple domains (i.e., mattering at home, at work, and in the community) and multiple people in one's live.

The current chapter focuses on relational mattering, but it should be noted that it is also possible to assess individual differences in terms of mattering in society. Fromm (1941) is typically credited with introducing the notion of mattering in society. Clearly, there should be greater risk for the person who feels insignificant in terms of personal relationships but who is also someone who feels small and insignificant in the world.

Some key research investigations of mattering and suicide are reviewed and summarized below. First, however, it is important to be clear about what mattering is not so that it is clearly distinguished from other relevant constructs (for a related discussion, see Flett, 2018b). Mattering is often equated with a sense of belongingness (e.g., Van Orden et al., 2010), but has elements that distinguish it. Belonging is about fitting in and feeling welcome while mattering is about a person's perceived significance and involves reflected appraisals of worth. Regarding their ability to be distinguished, it is possible for instance to feel part of a group (i.e., high belonging)

but also feel unheard and invisible within the group (i.e., low mattering). I have found in research conducted with my school board colleagues that it is possible and meaningful at the person to identify adolescents who feel like they belong at school but they lack a sense of mattering at school.

Mattering is also clearly distinguishable from self-esteem, both in terms of conceptualization and empirical work. Rosenberg and McCullough (1981) discussed this point at length in their original article and demonstrated how measures of mattering to parents predict distress and other tendencies after taking into account individual differences in self-esteem (also see Rosenberg, 1985).

Finally, while mattering has been lumped together with feeling like a burden by some researchers (e.g., Drabenstott, 2019), feelings of not mattering to others and feelings of being a burden to others are quite different in their emphases and associated experiences, as well as their implications for prevention and treatment.

Overview and Summary of Existing Research

When considering the potential role of feelings of not mattering in suicide, it is of course recognized that there is need for a complex approach and there are multiple contributing factors that could be playing a role when someone has become suicidal (for related discussions, see Joiner, 2007; O'Connor & Nock, 2014). The heterogeneity among people who die by suicide must be recognized. However, mattering is clearly a highly pertinent factor, and for some people, it takes on the utmost importance.

How does mattering fit into the broader picture? Shneidman (1984) proposed that there are various sets of factors of developmental importance that represent potential pathways to become suicidal. One set of factors was deemed to reflect trauma. It involved being raised in a rejecting family characterized by providing little to no emotional support. It can be the case in extreme contexts that the child is exposed to various forms of abuse, including emotional abuse and emotional neglect. The overall family environment may be emotionally invalidating for the child, and this can result in feeling minimized and unvalued. Parenthetically, emotional abuse and neglect have been linked with lower levels of mattering (see Flett et al., 2016), but the specific role of an invalidating environment has not been assessed. It should be clear, however, that the conclusion that children in these types of situations would likely reach is that they simply are unimportant or they are very low on the list of who and what matters to their family members. Rosenberg and McCullough (1981) suggested that this type of feeling is especially likely if raised by self-focused and highly narcissistic parents. The original work by Rosenberg and McCullough (1981) showed in four large samples of adolescents that feelings of not mattering to one's parents were linked with depression and the feeling of not mattering to parents (or the feeling of not mattering enough to parents) was correlated with low self-esteem but nevertheless still predicted unique distress beyond self-esteem. This evidence solidified Rosenberg's (1985) contention that the feeling of

matter or not matter represents a unique element of the self-concept. To understand how much impact this could have, I invite individual readers to reflect on how it would feel if you reached the point of feeling insignificant and unimportant to the very people who are especially significant to you. Now imagine that you projected that same feeling into the future and you determined that you would never matter to these people. This thought might be played over and over in your mind to the point that escaping from these types of thoughts and feelings seems imperative.

As noted in Flett (2018b), there are two relevant ways for mattering to matter in vulnerability to suicide. One route is to have a low level of mattering as reflected by continuous measures. This is the focus of the research summarized below. Another way is to have a sense of mattering but then lose this feeling or sense of mattering. Individual difference in the loss of mattering has been shown to be relevant in the experience of depression (see Pearlin & LeBlanc, 2001) but moving from a position of perceived mattering to no longer mattering has yet to be studied in terms of its role in suicide. This element may be especially salient among older adults who become suicidal.

What research evidence supports the proposed role of feelings of not mattering in suicide? All relevant studies conducted thus far have yielded evidence in keeping with the themes found in this chapter. At present, about 15 studies have been reported. A complete summary is beyond the scope of this chapter, so six representative examples are outlined below.

The most widely cited study is also one of the first investigations to appear in the literature. Elliott et al. (2005) examined the data from over 2000 adolescents between the ages of 11 and 18 years old who took part in the Youth at Risk Survey. Mattering was assessed with 36-items adapted from the Mattering Index (Elliott et al., 2004) so that they measured mattering to friends and mattering to parents. Suicide ideation was measured by just two questions (i.e., “During the past 12 months, did you ever seriously consider attempting suicide?” and “During the past 12 months, did you ever seriously consider attempting some action you hoped would cause your death by someone else?”). Participants were considered to have suicide ideation if they answered yes to either question. Finally, adolescents also completed a version of the Rosenberg (1965) Self-Esteem Scale. Additional details are available in Elliott (2009).

Elliott et al. (2005) reported a strong effect of mattering on suicide association such that levels of suicide ideation levels rose as mattering scores fell below the mean. Because the impact of mattering seemed to disappear when self-esteem was added in to the equation, Elliott and associates (2005) proposed that self-esteem acts as a mediator of the link between mattering and levels of depression and suicide ideation.

Joiner et al. (2009) conducted the next comprehensive study with sample of 815 emerging adults with a mean age of about 20 years old who were born around 1980. Participants were prescreened and reported experiencing anhedonia or sadness, or both. Participants were from a longitudinal study in Miami Dade country. These participants were then followed up and they completed the General Mattering Scale (Marcus & Rosenberg, 1987), as well as a measure of family support and composite

suicide index comprised of thoughts about death (i.e., death ideation), suicide, and suicide plans. It was found that about 37.5% of the sample reported at least some suicide ideation. Analyses indicated the presence of a small but significant association between lower levels of mattering and suicide ideation. It was also found that mattering was associated with elevated levels of family support and that mattering and family support interacted to predict suicide ideation; that is, higher suicide ideation was reported by participants characterized jointly by low levels of mattering and family support. These results illustrate the need to regard low mattering as a risk factor that can combine interactively with other predictors of suicide ideation.

Milner et al. (2016) assessed mattering and suicide ideation in a sample of 932 Australian adults. Mattering was measured with the five item General Mattering Scale (Marcus & Rosenberg, 1987). Phone interviews deemed that most people (i.e., 809 participants) had no thoughts of suicide, but 123 participants did report thoughts of suicide. Analyses confirmed that the proposed negative association between mattering to others and suicide was evident. Moreover, this association was still apparent when other key predictors were taken into consideration including levels of psychological distress and key demographic factors. Milner et al. (2016) concluded based on their analyses that there was a linear negative association between mattering and suicide ideation.

Holden et al. (2018) examined mattering and various suicide indices in a sample of 244 adults from the United States. They took a very different approach by having participants complete a five-item measure developed by the authors that combined feelings of mattering and feelings of being loved along with measures tapping the need to belong, suicide motivation, suicide preparation, and suicide behaviors. Correlational analyses that the combined measure of feelings of mattering and love was linked negatively with suicide motivation ($r = -.47$), suicide preparation ($r = -.25$), and suicide behaviors ($r = -.35$). The need to belong had no significant associations with any of these measures.

It is my contention that the link between mattering and suicidality has often been underestimated because mattering has been narrowly measured in most studies. That is, some key facets of the construct have not been assessed. One key limitation is failing to go beyond positive measures of mattering to others and there is no attempt to include measures that tap the negative orientation captured by the concept of anti-mattering and not feeling valued by others. The relevance of anti-mattering has been illustrated in two recent studies of suicidal tendencies.

Etherson et al. (2022) examined perfectionism, mattering, depression, and suicide ideation. A sample of 181 undergraduate students complete a multidimensional measure of trait perfectionism, the General Mattering Scale, the Anti-Mattering Scale, and measures of depression and suicide ideation. This study is particularly unique in that it was longitudinal; participants completed the measures at Time 1 and again at 3 weeks later and 6 weeks later. Analyses of the data revealed that anti-mattering mediated the link between socially prescribed perfectionism (i.e., others demanding perfect from the self) and distress. Most notably, it was found at each timepoint that anti-mattering was significantly correlated linked with suicide ideation. Importantly, analyses across timepoints indicate that anti-mattering at Time 1

is correlated significantly with suicide ideation at Time 3. Scores on the General Mattering Scale at Time 1 also predicted Time 3 suicide ideation, though the obtained association was considerably weaker than the link that was evident between anti-mattering and suicide ideation.

The final study strongly attests to the salience and validity of anti-mattering among people who are suicidal. This research by Deas et al. (2023) had it in title the phrase “I just want to matter” and this was clearly supported by the evidence they reported. Deas, Kowalski, and their colleagues described an innovative study that utilized a unique approach by examining the online posts of people who shared their thoughts, feeling, and concerns as part of an online suicide community. It was found from analyzing over half a millions online posts that anti-mattering themes were quite abundant. Overall, anti-mattering was in 70% of the posts! Other results examined the themes that anti-mattering co-occurred with, and it was found that the presence of significant associations suggested anti-mattering themes were linked with such themes as psychache and loneliness.

The research conducted thus far has yielded results entirely in keeping with the role of feelings of not mattering in suicidality but as noted above, this research is clearly limited in some key respects. Most studies have been cross-sectional rather than longitudinal, with one exception being the Etherson et al. (2022) investigation. However, there are other limitations. For instance, despite evidence that feelings of not mattering in specific domains such as the community are linked with suicidality (see Flett, 2018a, b), no study has considered within the same investigation whether people who lack a sense of mattering across multiple contexts (e.g., at school, at home, and in the community) are especially at risk.

Other key possibilities have yet to be tested whatsoever. All existing studies have focused on levels of mattering as assessed by measures such as the General Mattering Scale. The potential role of loss of mattering has not been considered. People who have experienced significant and potentially sudden life changes may be prone to suicidal thoughts and suicide attempts following a significant decline in perceived mattering (e.g., relationship loss, job loss through loss of employment or retirement). It is possible for these people that they have lost not only a sense of mattering but also a sense of meaning to the extent that they do not see a positive future.

Why Are Feelings of Not Mattering Linked with Suicide?

Without question, the largest void when considering the role of mattering in suicide is at the explanatory level. Why and how do feelings of not mattering come to play a role in suicide? These questions are considered in the next segment of this chapter in an attempt to address the current void in the published literature when it comes to conceptualizing the link between feelings of not mattering and suicidal tendencies.

The vulnerability for people who are suicidal can reflect several influences and numerous developmental pathways. For instance, for some people, they may have had the misfortune of being raised in a harsh or chaotic environment and they have

been exposed regularly to mistreatment that seems to be sending them the message that they don't matter to other people. This could be the case for those who have been emotionally abused or emotionally neglected. These forms of maltreatment are linked with feelings of not mattering (see Flett et al., 2016).

Another possibility is that the vulnerable person does not seem to know her or his own worth (Do I matter?) or they suspect they have low worth (I don't matter) but there is some uncertainty involving the self and identity, so they come to rely on external feedback from other people to determine whether they are valued and if so, how much they are valued. A similar process is involved in social comparison as young people who are uncertain about their merit come to rely on social comparison cues in making judgments of the self (see Festinger, 1954). The person who is uncertain about the self can read social cues in a way that results in forming a highly negative self-view. A negative self-view linked with feelings of not mattering would result if they have daily lives where no one seems to really notice them or listen to them, or worse yet, engaged in negative behavior that sent a message of little social worth.

When someone feels like they don't matter, what specific elements can transform distress into suicidal tendencies? Three key elements are considered below. But one overarching premise to first consider is that some people are vulnerable, in part, because they have a temperament and life experiences that have resulted in them placing exceptional importance on the mattering to other people. It is suggested here that some people have an acute need to matter and for them, mattering to others has become immensely important. This possibility is being explored in new collaboration with Silvia Casale and her colleagues. This importance includes a hypersensitivity centered around this acute need to matter that can be seen as an extreme form of the interpersonal sensitivity described by Boyce and Parker (1989). Their interpersonal sensitivity construct has elements such as interpersonal awareness, a need for approval, and a fragile inner self. Consider the interpersonally sensitive person who needs to matter too much. This person will be highly attuned and reactive to mattering-related events and experiences and their hypersensitivity to mattering and cues of not mattering can set the stage for the three elements now considered below that I propose as being central to understanding the link between feelings of not mattering and suicide.

Mattering and Unbearable Psychache

It is useful when considering the association between feelings of not mattering and unbearable psychache to continue taking a person-focused perspective. Case examples of suicidal people who feel like they don't matter are exceptionally helpful in this regard and, sadly, there is no shortage of them. Countless case examples reflecting themes of not mattering can be identified after exhaustive searches of the literature (e.g., Benson et al., 2013; Cooper, 1994; Mohammadi, 2018; Rehder et al., 2021; Schechter et al., 2022). As one example, Schechter et al. (2022) described a

48-year-old suicidal father of three children who was in such distress that he reported that he was unable to feel any sense of mattering to his wife and children nor did they seem to matter to him. He described himself as devoid of warmth and feeling exceptionally lonely and disconnected. What becomes clear when reading these accounts is that many people in the depths of despair have feelings of not mattering and ways of expressing it that are simply not being captured by existing descriptions or represented in existing conceptual models and approaches to treatment. These people seem to have an unbearable form of not mattering that is often linked inextricably with psychache. There is also an extreme form of thinking that seems to accompany these unbearable feelings. These themes are expressed in the case accounts of people who have been suicidal, including those people who survived a suicide attempt.

Some representative thoughts people have expressed as part of their extreme feelings of not mattering are listed in Box 4.1. The themes found here could form the basis for an automatic thoughts measure of unbearable social insignificance.

The thoughts expressed by people in clinical case accounts represent vital clues and insights into what circumstances can amplify feelings of not mattering so that they are experienced as unbearable. The thoughts shown in Box 4.1 reflecting overgeneralization of feelings of not mattering both to other people (i.e., not mattering to anyone) and overgeneralization as a broad and sweeping denigration or negation of the self (i.e., I don't matter). Thus, there is an amplified sense of worthlessness and not having value to others that seemingly has been internalized into an abject view of the self. In many instances, extreme feelings of not mattering and unbearable insignificance will be kept hidden due to the sense of shame that arises from having failed to be someone of value to others and to oneself.

Box 4.1 Cognitive Themes of Not Mattering That Reflect Unbearable Social Insignificance

I don't matter to anyone
I feel small and insignificant
No one cares about me
My life doesn't matter to anyone
I am never going to matter to others
My feelings don't matter to anyone
I don't even matter to myself
I would not be missed by anyone if I was gone
I am totally alone
Do I even exist for anyone?
Nobody sees me as necessary
Why don't I matter to them?
I feel like a number to them/him/her
No one wants to help me

Note. Most of the specific statements above are adapted from actual statements of suicidal people.

The notion that feelings of not mattering are closely linked with psychache is very much in keeping with Shneidman's views of psychache. He is credited with placing importance on psychological pain as the key component in susceptibility to suicide. Shneidman (1996) noted in his seminal book *The Suicidal Mind* that psychological pain is experienced with important psychological needs are frustrated. Shneidman was a proponent of the psychological needs theory of his mentor Henry Murray (see Murray, 1938). Shneidman did not explicitly mention the need to matter, but Shneidman did list several themes similar to mattering such as the need to affiliate and be loved along with other needs such as the need to achieve, the need to avoid harm, and the need to be autonomous.

Mattering becomes relevant once it is recognized that the need to matter is a universal psychological need (for discussions, see Flett, 2018b; Rosenberg & McCullough, 1981). Moreover, for some people, especially those who are psychological insecure, the need to matter should be among their most important psychological needs, if not their most important need.

What does the psychological pain of not mattering to others feel like? When it is combined with unbearable pain, as suggested earlier, life and living can then seem unbearable. Elliott (2009) concluded that, "People cannot bear the realization that they make a difference to no one; the emotional pain and anxiety are literally intolerable" (p. 41). Elliott went on to suggest when psychological pain is fuelled by feelings of not mattering, people may engage in behaviors they would otherwise not engage in as they try to distract themselves from this psychological pain.

The escalation of feelings of not mattering into unbearable feelings of not mattering has clear implications for the distinction between parasuicide and suicide. It may be the case that suicidal gestures are designed to gain the attention that the vulnerable person has been lacking in her or his life, and such acts are deemed to be a form of getting noticed and better understood by someone with a high level of anti-mattering or a low level of mattering to others. However, the person with unbearable feelings of psychological pain and unbearable feelings of not mattering along with unbearable feelings of loneliness is not someone who is seeking attention. This person's ultimate goal is escape and putting an end to the suffering being experienced. Thus, when there are strong and potentially unbearable feelings of not mattering being experienced, it would be ill-advised to minimize intent by seeing it as just trying to get attention.

Not surprisingly, there has been no published research thus far on mattering and unbearable psychache. However, as part of her dissertation on loneliness, my daughter and research colleague Alison Rose provided some key evidence and associated insights. One of her dissertation studies included the Anti-Mattering Scale (Flett et al., 2022) and the brief measure of unbearable psychache derived from the 13-item Psychache Scale created by Ronald Holden and colleagues (see Holden et al., 2001). Programmatic research with this measure has shown that is strongly linked with suicide ideation and often is more predictive than hopelessness (e.g., Montemarano et al., 2018). Research also shows that scores on the Psychache Scale longitudinally predicts changes in suicide attempt status among university students (Lambert et al., 2020). This three-item subscale tapping unbearable psychache proposed by

Pachkowski et al. (2019) is comprised of the most extreme psychache items (e.g., I can't take my pain any more. My pain is making me fall apart). It was found in a sample of 289 York University students that there was a strong positive association ($r = .56$) between scores on the Anti-Mattering Scale and the three-item measure of unbearable psychache (see Rose, 2024). This fits well with the previous contention that it is very psychologically painful to feel unimportant and insignificant to others. Clearly, the sense of being made to feel invisible and irrelevant can involve a deep sense of hurt and the association between anti-mattering and unbearable psychological pain signifies that much of the pain in life for many people is a form of social pain rooted in unmet needs and perhaps treatment that might involve significant shame and humiliation.

Feelings of Not Mattering in Emotional and Social Disconnection

The frustrated needs linked with feelings of not mattering include the need for connection with other people (see Flett et al., 2022). The link between feelings of not mattering and loneliness has documented in several studies (e.g., Flett et al., 2022; McComb et al., 2020), and we have emphasized the double jeopardy that exists when a person feels alone and also feels insignificant. However, the problems and core themes run deeper when it comes to how feelings of not mattering contribute to suicide. Bostik and Everall (2006) documented key aspects of the process in their study of suicidal adolescents. They emphasized a pervasive sense of having failed to establish not only a social connection but also an emotional connection with significant others. Bostik and Everall (2006) described suicidal adolescents who felt unloved and unwanted, and this was rooted in feeling that their parents did not understand them and willfully ignored their feelings because they simply did not care.

The sense of being isolated and being alone are quite salient among suicidal people experiencing psychological pain. A qualitative study of cognitive warning signs for suicide led by a team of researchers that included Aaron Beck and Gregory Brown yielded some evidence from client reports that shows the link between a sense of aloneness and insignificance (see Adler et al., 2016). Categories were identified based on cognitive therapy sessions of 35 patients who had attempted suicide. Five cognitive sign categories emerged: (1) state hopelessness; (2) focus on escape; (3) suicide as a solution; (4) fixation on suicide; and (5) aloneness. The aloneness category included specific examples that fused isolation with not mattering (e.g., "That I don't matter to anybody." "I felt nobody is there for me") (see p. 538). Given these descriptions, it is not too difficult to imagine just how horrible some people can feel when they feel totally alone and important to no one.

Feelings of emotional and social disconnection can add to the cognitive salience of thoughts of not mattering to other people. When someone is in this state of mind,

they will be strongly impacted by negative social interactions and exchanges. Such experiences will be interpreted as reflected appraisals of the self that are “taken to heart” by people who already feel likely they don’t matter to others. These negative social experiences will maintain and exacerbate the felt experience of emotional and social disconnection and result in people saying things like “... if nobody cared, why bother trying to live? In my mind, I was alone. There was nobody” (Bostik & Overall, 2006, p. 277). This mindset likely precludes seeking help in many instances.

Hopelessness About Not Mattering to Others

Research and theory on mattering has thus far focused on current levels of mattering, but it is proposed here that the mattering construct has a salient temporal focus that is reflected in expectancies about the anticipated actions and tendencies of other people in relation to the self. At present, research has not systematically explored the mattering construct in terms of future expectancies; for instance, overall, there is limited published research on how mattering relates to optimism and hope even though Rayle (2006) observed that many people enter counseling with profound feelings of hopelessness that seem rooted in a strong sense of being invisible and not mattering to anyone.

If we revisit the themes shown in Box 4.1, it is evident that there is also an element of helplessness and hopelessness about not mattering that is clearly on display (i.e., I am never going to matter to them). It is as if the person at risk of suicide has developed the depressive predictive certainty described by Anderson (1990), but in this instance, the bleak certainty about the future is built on the theme of never mattering to anyone.

One very salient difference between people who feel like they do matter and people who feel like they don’t matter is that those with a sense of mattering are infused with hope while those without it tend to feel hopelessness. Recent research in our laboratory has built on studies showing strong links between mattering and hope; also, feelings of not mattering are associated robustly with hopelessness. Rose et al. (2024) have shown in a sample of university students assessed during the COVID-19 pandemic that scores on the AMS are correlated with score on the Beck Hopelessness Scale ($r = .50$). In addition, there is a strong link between anti-mattering and scores on the Social Hopelessness Questionnaire ($r = .70$). Thus, people with strong feelings of not mattering to other envision a bleak interpersonal future that is dreaded.

The person with a feeling of not mattering accompanied by psychological pain will likely have a highly negative future orientation. This future orientation will have a general component in terms of pessimism and hopelessness, but it is likely that it also involves beliefs about not mattering in the future. The tendency to become suicidal seems almost inevitable when the person who is experiencing severe psychological pain (i.e., psychache) has had experiences that prime a future life events schema that makes him or her feel certain that she or he will never matter

to significant others. If this person feels like a failure from a social comparison perspective, this orientation can also entail thoughts such as, “I will never matter as much as other people seem to matter.”

Recommendations for Assessment, Prevention, and Treatment

By now, it should be the case that most readers will be eager for a reminder that mattering is double edged and mattering is an exceptional positive resource. While much of the focus in this chapter has been on feelings of not mattering and how they relate to the will to die, positive feelings of mattering can be fundamental to the will to live. I noted in a recent review that mattering is “an essential way of life” (Flett, 2022, p. 3). The healing and protective power of mattering is reflected in the conclusions that were reached about mattering are listed in Box 4.2. Given these attributes, we need to proactively put mattering to work to protect people and improve their lives.

I will preface the final segment of the chapter by proposing that the best way to recognize the potential, power, and potency of mattering in terms of its role in key applications is to place mattering right at the center of initiatives. An explicit focus on mattering is very much in keeping with the realization that for many people, their feelings of not mattering and their core need to matter is the most salient psychological theme in terms of their sense of self and identity, and it is indeed central to how they define themselves. Accordingly, I discuss below the approaches I have labeled “mattering-centered prevention” and “mattering-centered care.” This specific emphasis on mattering implies that making mattering the focal point can benefit anyone in terms of resilience and recovery.

Some specific observations about the utility of a mattering-centered approach to prevention and treatment are presented below. This segment of the chapter briefly touches on these issues. A considerably more extensive discussion can be found in Flett (2018b). A key point to reiterate is that when it comes to prevention and

Box 4.2 Attributes of Mattering as Outlined in Flett (2022)

Mattering is powerful and predicts consequential outcomes

Mattering is a vital source of resilience and adaptability

Mattering is modifiable

Mattering is broadly resonant because it is central to how people define themselves

Mattering is pertinent across the lifespan

Mattering is relevant to our current times

Mattering is universal.

Note. Adapted from Flett (2022, pp. 4–5).

intervention, mattering should not be equated with belongingness. There are many things that can be done to enhance someone's sense of being important to others, and this involves making them feel heard, seen, understood, and accepted. Belongingness is not as easy to implement and relative to mattering, it may be rooted in broader social and societal influence.

One of the most remarkable things about the mattering construct is that not only is it implicated in vulnerability to suicide, it is also highly relevant to prevention and intervention. The prevention role has already been emphasized above with focus on the "You Matter" slogan and related campaigns.

Although he did not mention the need to matter, Shneidman (1996) was quite clear about how the treatment approach for someone who is suicidal must have a primary focus on the unmet psychological need or psychological needs that are central to their experience of psychological pain. If the core vulnerability and source of pain for someone is their failure to matter to other people or to society as a whole, then this need must be the main target. It is vital to for therapists and counselors to gain an understanding of what has contributed to feelings of not mattering, including whether a previous sense of being significant to others has been lost and why it has been lost.

Regarding its role in prevention, Flett (2018a) has discussed at length how a focus on mattering promotion should be at the center of any initiative designed to build mentally healthy schools. It was noted previously that, "... a key element of interpersonal resilience and a foundational aspect of the mentally healthy school is the feeling of being important, valued, and seen positively by other people ..." (p. 383). But prevention also needs to consider older people. Indeed, we have incorporated an emphasis on mattering into a research program dedicated to safeguarding potentially vulnerable men making the transition to retirement (see Flett & Heisel, 2021; Heisel et al., 2018, 2020). Because mattering in the community is a feeling that is linked with better mental health (see Flett, 2018b), there is much that communities can do to let its members know they are valued. What is needed is an approach patterned after the proactive initiatives taken by organizations such the Maine Resilience Building Network. This organization has the goal of improving feelings of mattering among every child and adolescent in Maine. This approach recognizes that even small acts and gestures can make a difference. Communities can go even further and adopt the same approach and apply it to people of all ages.

Why should the emphasis be on mattering-centered prevention? There must be an explicit focus on the promotion of mattering because more general programs will not address the specific vulnerability that was described earlier. For instance, when it comes to school-based initiatives, Flett (2018a) noted that programs that focus on themes such as mindfulness and self-regulation can be beneficial, but only to a limited extent when the main vulnerability for a unique person is the feeling of not mattering to other people and not mattering at school.

A key element of the "You Matter" focus is that it important to send that message to those who are in a position to intervene and boost a vulnerable person's sense of mattering. There is a role for people of all ages, but especially young people, in

terms of finding ways to make other people feel like they matter. Thoughtful gestures and timely encouragement can make the difference. This key point cannot be overstated. It also needs to be recognized that when it comes to prevention efforts aimed at young people, there needs to be components that are youth-led in keeping with the notion that mattering involves a feeling of being seen, heard, and taken seriously, especially about matters that pertain to young people.

As noted above, although he did not refer specifically to mattering, Shneidman (1984) reached a similar conclusion based on his analysis of the gifted young people in the famous Terman study who did or who did not take their own lives. Shneidman (1984) observed that in some instance, significant others play a vital role. He mentioned this within the context of a vulnerable man who had been in the Terman study who definitely would have attempted suicide if not for the intervention of his loving wife. The other element that this example underscores is that many people have feelings of mattering or not mattering that are veridical because they have been sent clear and unequivocal messages from the people in their lives.

The role of mattering in clinical assessment and intervention is also very important. I have discussed this at length in a clinically focused chapter in my book on the psychology of mattering (see Flett, 2018b). Given the brevity and apparent reliability and validity of measures such as the General Mattering Scale and the Anti-Mattering Scale, their inclusion in assessment batteries seems warranted. These measures can be used in initial assessments, but these measures are also sensitive to change and can be used to determine whether there has been meaningful improvement. Mattering can also be injected as a focus in clinical interviews. Probes that ask people to name who makes them feel like they matter can be exceptionally revealing in terms of getting people to talk about themselves and their lives.

A complete analysis of the role of mattering in treatment and recovery is beyond the scope of this chapter. However, in previous work (see Flett, 2018b), it was noted that mattering is highly relevant to the therapeutic relationship between the client and the therapist. If an approach is truly to become mattering-centered care, then it is essential to put in place conditions that will build a sense of mattering. This will include making the vulnerable person in pain feel truly listened to and understood at a level that may be a rare experience for this person. It will also include making it clear that there is an atmosphere of acceptance without conditions such that there will be no undermining or negating of emotional experiences; the message needs to be sent that if a person truly matters, her or his emotions also matter.

The overarching goal of any mattering-centered care is how it feels to be cared about. When someone realizes that someone cares about them, they can no longer hold on to the view that no one cares about them; this alone should lessen unbearable feelings of pain and unbearable feelings of not mattering to others. The realization that someone truly cares and values them will mean that overgeneralized views of the self (i.e., I matter to no one) no longer apply and this should be one very significant step that places the vulnerable person on the road to recovery.

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Chapter 5

Suicide: Epidemiology, Prevention, Assessment, Treatment, and Outcomes



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Introduction to Links Between Public Mental Health and Suicide

Mental health is defined by the World Health Organization (WHO) as not the mere absence of a mental health condition, but a state of well-being that allows individuals to realize their full potential, demonstrate resilience in the face of adversity, be productive, make meaningful relationships, and contribute to their communities (World Health Organization, 2004). Of note, a component of mental health promotion is implicit in this definition. The huge burden of mental health issues on the individual, family, and the society necessitates steps to prevent mental health issues and promote positive mental health using approaches that are rooted in a public health framework. Public mental health, therefore, comprises of population-level approaches to mental health, encompassing treatment, prevention, and promotion of mental health in the community.

Recent data from the Global Burden of Disease (GBD) study 2019 show a significant rise in proportion of disability-adjusted life-years (DALY) due to mental health disorders from 3.1% in 1990 to 4.9% in 2019. During this period, mental disorders rose from the 13th leading cause of DALYs lost worldwide to seventh leading cause of DALYs lost. Of these, depressive and anxiety disorders were the leading contributors to disease burden (GBD 2019 Mental Disorders Collaborators, 2022). This is important because apart from compromising mental health, they increase the risk of outcomes such as suicide and self-harm.

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Concurrent with these developments, annual global deaths by suicide have increased by 6.7% over the last three decades (1990–2016), culminating in over 8 lakh people taking their own life in 2016 worldwide, albeit with regional variations in suicide burden (Naghavi, 2019). Suicide and self-harm, which in GBD 2019 was ranked at 18 among the leading causes of global mortality, can increase the negative impact of mental disorders on population health. In recognition of their detrimental impact on public health, suicide is identified as a key public health issue in the Comprehensive Mental Health Action Plan by the World Health Organization. Further, suicide-related mortality is an indicator (section 3.4.2) under target 3.4 of the Sustainable Development Goals 2030, which target a one-third global reduction in premature mortality due to noncommunicable diseases through treatment and promotion of mental health (World Health Organization, 2018).

Adding to the complexity are suicide burden in specific subpopulations such as elderly, adolescents, and marginalized groups (e.g., ethnic and sexual minorities). Finally, over the last five decades, there have been signs of a regional shift in the global hotbed of suicide from Western Europe to Eastern Europe to Asia; currently, half of global suicides occur in India and China with suicide rates in South Korea being the highest among developed nations.

Epidemiology of Suicide in South Asia

South Asia represents a suicide- dense region of the world with higher average suicide rates compared to global rates. This region comprises the following nations: India, Pakistan, Bangladesh, Afghanistan, Bhutan, Maldives, Nepal, and Sri Lanka. Most of these nations are low- and middle-income countries with inefficient civil registration systems and dearth of reliable suicide data. A review in 2014 estimated that the average suicide rate across South Asian nations with national suicide data was 25.2 per 100,000 population; this figure is 2.5 times the global average rate of 10.5 per 100,000 population in 2019 (Jordans et al., 2014).

Another important finding is that the well-known gender paradox in suicide (more males die by suicide than females) is less pronounced in this region of the world; indeed, there is evidence from Bangladesh (Mashreky et al., 2013) for higher female than male suicide rates.

Young, reproductive age women appear to be at the highest risk of suicide among females in South Asia. In fact, this is the only female age strata which equals or exceeds rates in males. Further, suicide is the leading cause of death in the 15–29-year age group in many countries in South Asia while globally it ranks fourth after road traffic accidents, tuberculosis, and interpersonal violence (World Health Organization, 2019). The rates in this age cohort range from 3.4 per 100,000 in Bhutan to 15.7 per 100,000 in India.

It has been suggested that higher educational attainment may render greater risk of suicide due to mismatch between achievements and expectations, and public

shame (Pompili et al., 2013). However, findings from the latest National Crime Records Bureau (NCRB) data from India suggest that those educated till high school contributed the largest percentage share of total suicides (24%) (National Crime Records Bureau, 2021). Though few countries provide disaggregated data for suicide methods, hanging followed by poisoning are the two favored modes of suicide. A steady decline in suicide by poisoning has been noted over the last two decades in many South Asian countries though in Sri Lanka, suicides by poisoning outnumbered deaths by hanging (Arafat et al., 2021).

No reliable national data for suicide attempts/ideation are available in South Asia. A recent meta-analysis focused on women and girls of any age in the eight South Asian countries. Authors estimated a pooled prevalence rate of 5% for suicide attempt. The corresponding figure for suicide ideation was 17%, while among university students, the figure was even higher (22%) (Mazumder et al., 2022).

Determinants of Suicide and Mental Health

Suicide is best understood as a phenomenon with complex, interacting biopsychosocial and individual-level determinants. Key sociodemographic determinants of suicide include age, gender, ethnicity, marital status, domicile (rural/urban), employment status, and poverty. In general, suicide rates are higher among older adults and males though the gender gap is less pronounced and nearly equal in Asian settings. Rural–urban inequities in suicide rates, specifically higher rural suicide rates, have been consistently reported from both Western and Asian settings. Intriguingly, being married is not necessarily a protective factor against suicide in Asia as much as it is elsewhere (Chen et al., 2012). Other important social determinants of suicide, particularly in Southeast Asia, are stressful life events, interpersonal conflicts, and indebtedness (Arafat et al., 2022). Apart from these, macroeconomic factors such as decrease in gross domestic product and rising unemployment negatively impact suicide rates.

On a similar note, unemployment, poor working conditions, low income, and financial strife have been linked to poor mental health. Further, it has been suggested the moderating effect of unemployment on mental health may be gendered with a greater effect in men than women. Other determinants of mental health include societal stigma and discrimination, perceived social support, quality of familial relationships, a sense of community belonging, and safety and quality of living conditions. Finally, a host of static social determinants such as nationality and migration status, ethnic minority status, gender, and sexual orientation have also been linked to mental health. A caveat here is that the relationship between mental health and social determinants is bidirectional: poor mental health can lead to poor personal decisions and negatively impact living conditions and familial relationships while the stress of poor working and living conditions can take a toll on one's mental health (Alegría et al., 2018).

Mental Health Prevention and Promotion Activities

Prevention of mental disorders implies preventing their occurrence in non-affected individuals or reducing relapse frequency, symptom burden, and overall impact in affected patients and their families. This popular concept had its early moorings in the mental hygiene movement, called so because of its similarities with other hygienic practices that seek to establish a set of conditions or practices for good health. Specifically, it invokes the use of positive psychological interventions and cognitive training activities, such as meditation (Tremblay et al., 2021).

Subsequently, the movement lost momentum till around 1980s when development and testing of evidence-based mental health prevention strategies regained researcher attention. These approaches work on a broad range of risk and protective factors that have been shown to influence morbidity measures of mental illness. Examples of these are interventions focusing on reducing social, health, and economic inequities, improving access to health care and job market, reducing stigma and discrimination, and reducing violent conflicts in the community (Singh et al., 2022).

Based on the nature of interventions and target group, prevention activities can be organized into primary, secondary, and tertiary prevention. Primary prevention may target the general population to prevent mental illness or morbidity (universal prevention), or those who are deemed to be vulnerable to develop mental disorders or representing a “high-risk” subgroup for the same (selective prevention), or individuals showing attenuated early clinical signs and symptoms thought to herald a mental illness (indicated prevention). Secondary prevention involves early diagnosis and treatment of mental disorders, while tertiary prevention is aimed at reducing relapses and improving clinical and functional outcomes in those with mental illness.

Mental health promotion, on the other hand, is an approach that aims to improve population wellness, in terms of mental health, by promoting mental well-being, improving psychological resilience, and leveraging intersectoral collaboration to foster supportive environments. At its heart, it aims to promote positive mental health and well-being; in contrast, mental health prevention is illness-based with a focus on strategies aimed at preventing mental illness. As can be easily discerned, the scope of mental health promotion is likely to be broader and span various settings, life stages, and population subgroups. The focus of most of these interventions has been to strengthen protective factors through individual or group cognitive behavior therapy or improving self-efficacy.

Examples of mental health promotion interventions include home-based interventions aimed at supporting positive parenting practices, improving family support, and preventing child abuse. Promotion of healthy caregiver–child interaction can have beneficial spinoffs on psychological resilience of the child, which will improve their ability to withstand later life adversities and promote lifelong mental well-being.

School or educational institution-based interventions, rooted in ecological systems theory, aim to provide an environment that promotes socioemotional development among children. Specific activities are intended to improve a broad range of outcomes such as mental health, emotional and moral literacy, emotional intelligence, interpersonal awareness, self-efficacy, resilience, life skills, and character development. The beneficial impact of these interventions has extended beyond reduction of anxiety, depression, and delinquency at schools to improvement in scholastic record and social and emotional competence.

Other types of mental health promotion interventions include workplace interventions that have mainly focused on providing supportive workplace environments to reduce harassment and improve employee participation and job satisfaction. Finally, community-based interventions that seek to strengthen local resources for self-care and social support and improve capacity for delivering mental health first aid have seen renewed interest. Salient features of these interventions include a community-based participatory approach, use of self-help guides to empower people to offer support till professional help is available, and capacity building by partnering with the community to enhance local capacity for self-help (Sharma et al., 2017).

Risk Assessment in Suicide: An Evidence-Informed Approach

Suicide risk assessment is an important procedure employed by mental health professionals to evaluate an individual's degree of suicide risk. Despite risk assessment being a core competency, many mental health professionals feel inadequate when performing it. The main goal of risk assessment is to provide sufficient information on risk and protective factors to feed into a risk formulation that guides clinical triaging, management, and prevention efforts (Menon, 2013).

Major domains of risk assessment involve evidence-based risk factors, protective factors, specific suicide inquiry, and suicide warning signs (Table 5.1). Risk factors include both static (e.g., age, gender, marital status, and past history of suicide) and dynamic risk factors (e.g., depression, hopelessness, guilt, anger, anxiety, and panic). In this context, readers may note that a past history of suicide attempt remains the most robust and well-replicated predictor of eventual suicide. Protective factors are those which, when present, decrease the risk of suicide. These include robust coping skills, good social support, a sense of overall life satisfaction, strong therapeutic relationship, and being pregnant or having children (for women).

Specific suicide inquiry refers to assessment of suicidal ideation, plans, behavior, and intent. For instance, if a patient endorses the lead-in question about suicide ideation, he/she would be asked for their frequency, intensity, duration, and specificity. Specificity, in this context, refers to the degree to which the suicidal ideas have crystallized into a specific plan and method. For those endorsing a plan, its time frame, lethality, means, and availability of means are assessed. History of past suicide attempts, including aborted or interrupted attempts, rehearsal behaviors, and

Table 5.1 Major domains of suicide risk assessment and areas to be covered

Domain	Areas to be covered
Risk factors	Static/stable: age/gender/marital status/past and family history of suicide Dynamic: mental status changes such as depression/hopelessness/active psychotic symptoms such as command hallucinations/substance use/psychosocial stress Future/anticipated: expected stressful life events/discharge from inpatient unit/access to suicide methods
Protective factors	Social support Coping skills Robust therapeutic relationship Overall life satisfaction Reasons for living Pregnancy/having children
Specific suicide inquiry	Suicide ideation: frequency/intensity/duration Suicide plans: time frame/means/lethality/availability Suicide behavior: past attempts, aborted attempts, rehearsals, NSSI behavior Suicide intent: subjective or objective
Warning signs	I Ideation (threatened/communicated) S Substance use (excessive) P Purposelessness (no reason for living) A Anxiety/agitation/insomnia T Trapped (feeling no way out) H Hopelessness W Withdrawal (from friends/family/Families/society) A Anger (rage) R Recklessness (excessively risky acts) M Mood changes (dramatic)

NSSI non-suicidal self-injury

non-suicidal self-injurious behaviors, is important as all of them have been found to increase risk of subsequent suicidal behavior.

Suicide intent, perhaps the most important suicide construct, refers to the extent to which the suicidal person expects to carry out his/her plan and believes the plan or act to be self-injurious or lethal. A high degree of suicide intent in attempted suicide has been linked to suicide recidivism. Intent may be subjectively expressed or objectively inferred (e.g., preparing a will, giving away belongings, etc.). A range of validated measures are available to quantify intent and assist clinicians in management of suicide risk.

Finally, evidence-based warning signs, a collection of signs and symptoms that indicate near-term suicide risk, are an important cog in the suicide risk assessment wheel. These are summarized by the mnemonic IS PATH WARM (Table 5.1) (available on American association of suicidology website). Presence of any of these warning signs should heighten risk perceptions and increase the intensity of management. Most contemporary suicide risk formulation models, such as recognizing and responding to suicide risk, emphasize the distinction between chronic and acute risk; the latter is mainly judged by the presence or absence of these warning signs which indicate imminent, foreseeable risk of suicide.

Management Strategies in Suicide

A lifetime history of suicide attempt predisposes the individual to future suicide attempts and, eventually, death by suicide. Consequently, there has been a growing interest in the development and implementation of various effective interventions in populations with a recent suicide attempt. Evidence-based interventions in attempted suicide can be grouped under pharmacological treatments, psychosocial interventions, brief interventions and outreach approaches, somatic treatments, and digital interventions (Menon & Vijayakumar, 2022). The key types and modes of interventions studied are tabulated in Table 5.2.

Pharmacological Management of Suicide

Various psychopharmacological options have been tried to attenuate suicidal tendencies in people who presented with suicide attempts or recurrent suicide ideations. Among adults, antipsychotics have demonstrated beneficial effects in

Table 5.2 Evidence for various management strategies for suicidal behavior

Type of intervention	Agents or modes of intervention (adults)	Agents or modes of intervention (children and adolescents)
Psycho-pharmacological	Antidepressants (SSRIs) [#] Antipsychotics* Lithium Ketamine*	Lack of robust evidence
Psychosocial	Cognitive behavioral therapy (CBT)* Dialectical behavioral therapy (DBT) Acceptance and commitment therapy (ACT)*	DBT-A (DBT for adolescents)* CBT Mentalization-based therapy Family therapy* Gatekeeper training of teachers and students *
Brief intervention, contact, and outreach approaches	Acceptance and Commitment Therapy (ACT)* Attempted Suicide Short Intervention Program (ASSIP)* Adjunctive periodic text messages with “caring” content Safety planning interventions*	–
Digital interventions	Online CBT modules with components of problem identification, emotion recognition, and problem-solving approaches* “Digital hope kit” (as part of multicomponent intervention) with recall guidance for positive memories*	–

[#]Inconsistent evidence among the elderly; SSRI Selective Serotonin Reuptake Inhibitors

*Strong evidence for positive effects on suicidal behavior

reducing self-harm tendencies compared to placebo. Even the oft-quoted anti-suicidal properties of mood stabilizer agents such as lithium were not replicated in well-designed clinical trials. A couple of randomized, double-blind, placebo-controlled clinical trials supported short-term anti-suicidal effects of ketamine (lasting a few days to a few weeks), especially in controlling new-onset suicidal ideations (Abbar et al., 2022; Domany et al., 2020).

Psychosocial Management of Suicide

A recent Cochrane review revealed that among adults, cognitive behavioral therapy (CBT) showed an effective reduction of repeat self-harm behaviors. The effects resulting from CBT lasted for more than 6–12 months during the follow-up period (Witt et al., 2021a). The same authors conclude that dialectical behavior therapy (DBT) also had beneficial effects in terms of reduction in the frequency of suicidal ideations. DBT has been shown to reduce the frequency of suicidal attempts and the number of visits to crisis intervention centers. Insufficient, inconclusive evidence exists for acceptance and commitment therapy (ACT), mentalization-based therapies, and group-based emotion regulation therapy in control of suicidal thoughts.

Brief Intervention, Contact, and Outreach Approaches

One clinical trial evaluated the effect of a brief Attempted Suicide Short Intervention Program (ASSIP), comprising 3-weekly therapy sessions conducted in person based on the person-centered model of suicide (Gysin-Maillart et al., 2016). The sessions were supplemented by sending personalized letters to the study participants for a period of 2 years. ASSIP was noted to diminish the risk of repeat suicide attempts by 83%, even after adjusting for a history of multiple past attempts.

Another trial has demonstrated that adjunctive periodic text messages with “caring” content (expressing unconditional care and concern) were effective in reducing prospective suicide attempts over a period of 12 months (Comtois et al., 2019). However, the messages were not effective in controlling the frequency of suicidal ideations. Collaborative “safety planning interventions,” comprising a personalized list of warning signs for suicidal behavior along with a list of coping strategies, combined with regular telephonic follow-up, were shown to be effective in the reduction of recurrent suicidal tendencies (Stanley et al., 2018).

Digital Interventions

Online CBT modules that covered areas such as problem identification, emotion recognition, and problem-solving approaches, coupled with suicide risk assessment, and providing evidence-based recommendations for suicide mitigation have

been found to be beneficial in the reduction of suicide risk (Simon et al., 2022). The LifeApp'tite trial incorporated a multicomponent intervention packed with psycho-educational materials, self-rating scales for suicidal ideations and depression, safety planning, along with a “digital hope kit” comprising positive memories to be recollected and places to be visited during crisis times. When this package was integrated with routine in-person therapy sessions, there was a significant reduction in repeat suicide attempt rates (O'Toole et al., 2019).

Management of Suicidal Ideation and Behavior in Special Populations

Children and Adolescents (CAP)

After the suicide attempt, medical stabilization of the child or adolescent is the most important step in the management of suicidal behavior in the CAP population. After medical stabilization, the following steps are important:

- Involvement of the family member to monitor patient safety until stabilization
- Restricting access to lethal means of suicide
- Identifying and managing the warning signs and triggers for repeat suicidal ideation
- Educating patients and caregivers about the disinhibiting effects of drugs and addictive substances
- Providing coping strategies to manage suicidal ideations
- Instructing family members to avail emergency care in case of any decompensation

A recent Cochrane review revealed no robust anti-suicidal effects for the various psychopharmacological agents tested (Witt et al., 2021b). In contrast to adults, adolescents with suicidal ideations responded better to DBT (commonly referred to as DBT-A) (Witt et al., 2021a). Standard therapies such as CBT, mentalization-based therapy, and family therapy had minimal to significant effects in reducing suicidal ideations among adolescents presenting with suicidal tendencies. Positive effects have been noted for family-focused interventions on the frequency of suicide ideations in adolescents with suicidal behavior. These interventions primarily focused upon educating parents and family about self-injurious behavior, adolescent development, ways to promote adolescent self-esteem, strategies to manage psychological stress, addressing family conflicts, and ensuring family harmony.

The Saving and Empowering Young Lives in Europe (SEYLE) study, a multicenter, cluster-randomized controlled trial that compared the effects of gatekeeper training of teachers and students found that such approaches effectively reduced the frequency of suicide attempts and severe suicidal ideation among school-going adolescents (Wasserman et al., 2015).

Elderly

The most commonly employed interventions to reduce the risk of suicide among the elderly were antidepressants, physical activity, and collaborative care (Laflamme et al., 2022). A systematic review noted that long-term intake of selective serotonin reuptake inhibitors (SSRIs) was associated with an increased risk of suicide attempts when compared to those not on antidepressant treatment (KoKoAung et al., 2015).

Public Mental Health Approaches to Suicide Prevention

Universal Prevention

These approaches are directed toward entire population regardless of the suicide risk and is aimed at decreasing risk factors and increasing protective factors. The advantage of these approaches is that they reach many people and may prevent suicide risk at its root. Examples include universal mental health promotion in schools, restricting access to means of suicide, responsible media reporting of suicide, and limiting access to psychoactive drugs with abuse potential (Fig. 5.1) (Menon et al., 2018).

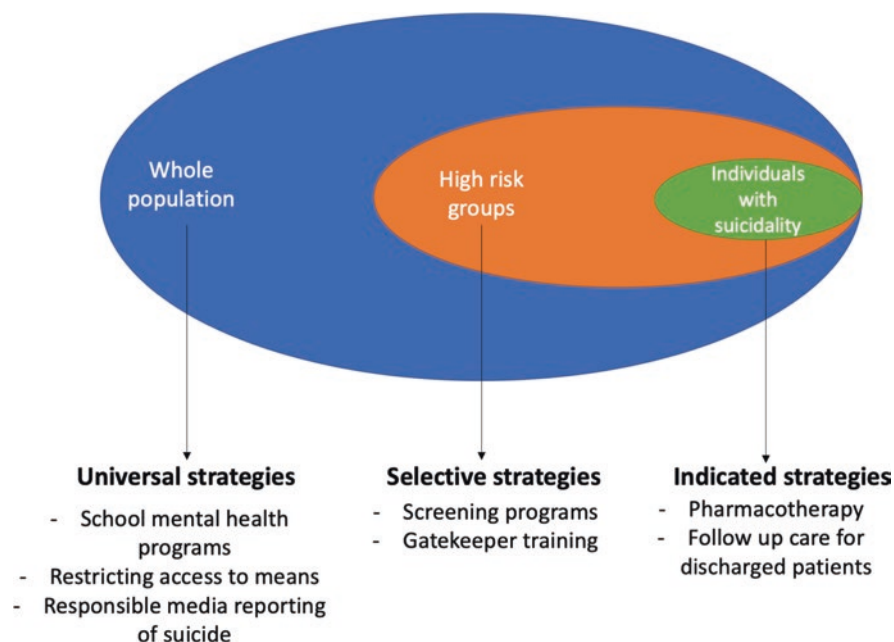


Fig. 5.1 Levels of suicide prevention approaches with examples

Selective Prevention

Selective prevention is targeted at subgroups with an increased risk of suicide. Subgroups may be based on known biological, societal, and environmental risk factors for suicide, such as unemployment, marital dissolution, age, low income, or sexual abuse. There are two reasons why targeting at-risk populations will enhance the impact of preventive efforts. A higher proportion of potential suicides occurs in these groups (although not all members of the groups are at risk). In addition, more effective target-oriented measures can minimize or eliminate specific risk factors for that subgroup. Examples include treatment of people with mental disorders and substance use disorders, screening programs, and gatekeeper training.

Indicated Prevention

The purpose of indicated prevention is to identify and treat individuals who exhibit signs of suicidal behavior or conditions often associated with suicidality. Strategies in this category may include care management for individuals discharged from inpatient facilities, psychiatric treatment, and cognitive-behavioral skills groups. The advantage is that these strategies are tailored to individuals' needs.

The treatment-only approach reaches a small part of the population who are identified to have risk factors and treatment barriers, such as stigma and difficulties in access to services. Therefore, treatment-only prevention of suicide and suicidal behavior may have a limited impact. In contrast, the public health approach adds a broader, and prevention-oriented focus to address the multitude of factors across the lifespan which contribute to suicidal thoughts and suicide attempts. In this way, protective factors can be nurtured throughout a person's life, supporting continuous prevention long before the possibility of suicide arises. Various parties involved in suicide prevention in the territory need to collaborate closely to maximize their effectiveness, and public-health approaches promote this kind of collaboration.

Addressing Stigma and Public Attitudes to Suicide Prevention

Suicidal behavior is a condition which attracts considerable stigma, and along with mental illnesses, are also risk factors for subsequent suicide (Link & Phelan, 2006). In general, people who are suicidal are viewed as weak, incapable of handling their problems, or even selfish. Insurance policies often include exclusions against death by suicide in most countries.

Suicide among the mentally ill is influenced by perceived stigma, with suicide sometimes seen as a way to escape this stigma. The stigmatization of suicide may therefore influence suicidal behavior. Pertinently, there is evidence that stigma also

interferes with implementing suicide prevention measures (Monteith et al., 2020). This suggests that reducing the stigma of suicide might decrease social isolation and thus help prevent suicidal behavior. The reduction of stigma may also increase help-seeking behaviors among suicidal individuals.

Approaches to reducing stigma should result in change of attitudes and beliefs that contribute to labeling and discrimination. To decrease the widespread stigma surrounding suicide, as well as to prevent suicide, public health and education campaigns have taken root (Witte et al., 2010). But the literature on stigma-reducing strategies for suicide is limited. Educational approaches to reducing stigma focus on replacing inaccurate stereotypes with factual information. Other anti-stigma efforts include updating the suicide lexicon to remove connotations of sinfulness or wrongdoing. For example, suicide researchers and survivors are encouraged to use the term “died by suicide” as opposed to “committed suicide” (Ball, 2005).

There is positive evidence that such efforts increase knowledge and reduce stigmatizing attitudes with respect to mental illnesses in general. Moreover, a greater degree of help-seeking attitudes was linked to better suicide literacy and lower stigmatizing attitudes toward suicide (Calear et al., 2014).

Given the complex, multidimensional nature of suicide, an integrated multi-modal approach embedded in a public health framework, involving intersectoral collaboration as outlined in the recent National Suicide Prevention Strategy of India (Menon et al., 2022), may provide better results. The strategy envisages a multisectoral collaborative action plan with focus on augmenting health services capacity to provide suicide prevention services, building partnerships, developing community resilience and suicide support resources, and strengthening surveillance and data gathering about suicide. Such policies that align with the World Health Organization’s regional strategy, that are contextualized to local challenges and resources, and that provide specific action targets, are needed for every country to attain desired results.

Conclusion

Public mental health approaches involve mental health treatment, prevention, and promotion strategies at a population level. Suicide is an important indicator of public mental health and the effectiveness of public health approaches to improve population mental health. Risk assessment and management approaches for suicide must be holistic and individualized while also being anchored in theoretical and empirical evidence. Public health approaches to suicide prevention need to integrate knowledge about regional epidemiological trends, sociocultural perspectives, and known medical and psychological risk factors to prevent suicide effectively. Given the resource constraints in South Asia, a multisectoral approach embedded in a public health framework, targeting high-risk groups and reducing access to means, may be the way forward to prevent suicides in an effective and measurable way.

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Chapter 6

Acceptance and Commitment Therapy (ACT): A Powerful Contextual Approach to Promoting Youth Mental Health in Schools



Gökmen Arslan, Ahmet Tanhan, and K. Fatih Yavuz

Young people spend much of their lives at school, and school has many significant impacts on their well-being and mental health. Schools are educational institutions with the primary aim of providing a formal learning environment and space to students under the supervision of teachers. As such, schools offer a special environment for fostering students' healthy growth, and it is important to draw attention to the deeper goals of education, which revolve not only around students' academic performance but also their physical and emotional health (Arslan & Yıldırım, 2022). Additionally, psychological disorders increase in childhood and adolescence (Arslan, 2019, 2020), and psychological symptoms during these years predict future mental health issues (Copeland et al., 2009; Keenan et al., 2009). Hence, it is crucial to present mental health interventions in school settings in order to reduce mental health symptoms and to improve student well-being.

Acceptance and commitment therapy (ACT) is a form of cognitive-behavioral therapy that aims to help individuals increase psychological flexibility and improve their quality of life. The goal of ACT is to assist people in developing a greater

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awareness of their unwanted thoughts, emotions, and sensations and accepting them as they are, rather than attempting to suppress or avoid them (Hayes et al., 1999). This approach enables individuals to take a step back from their thoughts and emotions and focus on what truly matters to them. It then guides individuals in clarifying their values and setting goals that align with those values, which act as guiding principles for their behavior and life choices. The purpose of this approach is to help individuals learn to acknowledge and accept their internal experiences, rather than avoiding them (Hayes et al., 2006). By doing so, individuals can cultivate resilience and gain a flexible and wider behavioral repertoire.

ACT has demonstrated effectiveness in treating a wide range of mental health conditions, including depression, anxiety, and posttraumatic stress disorder. Research studies have shown that ACT is equally, if not more, effective than other forms of cognitive-behavioral therapy for treating these conditions (Shabani et al., 2019; Tanhan et al., 2020). Furthermore, ACT has also shown promise in addressing chronic pain and improving the overall physical and mental health outcomes of individuals with chronic medical conditions. In conclusion, the evidence suggests that ACT may be particularly suitable for school-based interventions aimed at enhancing youth mental health and well-being. Thus, the present chapter aims to provide an overview of the theoretical foundations and practical applications of ACT within the context of school settings.

A Few Words on Human Nature from ACT Perspective

Human beings are complex organisms with biological, psychological, social, spiritual, and economic dimensions. Throughout their lives, individuals encounter bodily sensations, feelings, emotions, memories, urges and thoughts, which range from pleasant experiences such as happiness, joy, and peace, to unpleasant ones like sadness, anger, shame, and pain. Regardless of how we label them, it is undeniable that every individual, by virtue of being human, undergoes these experiences, both pleasurable and unpleasant, as an inherent aspect of their nature and constitution.

Sometimes, as human beings, we have the ability to derive deep meaning and richness from both pleasant and unpleasant situations. Reflecting on the history of humanity or our own culture, certain individuals come to mind, such as artists, poets, philosophers, prophets, or revered figures for believers. We may also encounter such individuals within our own communities or even find instances in our own lives where we exemplify this capacity. As we navigate these experiences, we have the potential to gradually cultivate a more meaningful and fulfilling life for ourselves, our families, loved ones, the people around us, our neighborhoods, cities, countries, and ultimately, all of humanity. This process of enrichment and meaning extends beyond humans and begins to influence plants, other living beings, the Earth, and the universe within our environment. However, there are times when we fail to utilize these pleasant (e.g., joy) or unpleasant (e.g., sadness) situations to create a richer and more meaningful life for ourselves and those around us. In fact, it is possible to gradually construct a more painful, superficial, empty, and purposeless

existence for ourselves, others, and the world as a result of these circumstances. This raises the fundamental question of why there are instances when we can enhance life's meaning and richness, regardless of whether the situations are pleasant or unpleasant, and why there are times when we make life unbearable, devoid of meaning, and filled with suffering. Numerous functional answers exist for this fundamental question, and there is a growing interest in positive psychology within the fields of mental health and education (Tanhan, 2019). In this context, psychological flexibility has gained increasing significance in theory and practice across various disciplines, including education, psychology, mental health, and the business world (Arslan, 2023). In essence, our psychological flexibility can be considered strong when we can construct a more meaningful and fulfilling life, navigating both bitter and sweet situations with the support of current, scientific, and effective research. Conversely, when we struggle with our disturbing inner experiences and can not find meaning and depth to our lives, our psychological inflexibility or rigidity becomes apparent, resulting in shallow and purposeless way of life.

Acceptance and Commitment Therapy (ACT)

ACT is regarded as one of the most effective empirically supported therapy approaches within the third wave of cognitive-behavioral psychotherapies (Hayes et al., 1999). ACT is built upon three significant sub-foundations: functional contextualism, which offers a philosophical framework; relational frame theory, which elucidates the relationship between behavior, language, and cognition; and the psychological flexibility and inflexibility models, which refer to processes of behavioral change. For our current topic, the psychological flexibility model serves as the central basis of ACT interventions, emphasizing their utmost importance. Psychological flexibility refers to the ability to create space for our subjective internal experiences, such as our own feelings, bodily sensations, thoughts, and personal experiences, whether pleasant or unpleasant (Hayes et al., 1999). The psychological flexibility model encompasses six fundamental processes, albeit with slight variations in naming across different sources. Together, these six processes form the core of the psychological flexibility model (Hayes et al., 1999; Strosahl et al., 2004). A brief description of each process was provided.

Flexible Attention to the Present Moment Flexible attention to the present moment involves purposefully and non-judgmentally contacting the present moment, regardless of whether the experiences are pleasant or unpleasant. It entails being aware of bodily sensations, feelings, thoughts, and experiences and allowing them to come and go without attachment or avoidance.

Defusion or Cognitive Defusion Defusion commonly refers to creating distance between ourselves and our memories, beliefs, and thoughts. This enable us observing cognitive experiences without getting caught up in their content regardless of they are true or not. By allowing to see thoughts not as the only reality, but only as

the productions or actions of mind, defusion skills decrease the controlling function of cognitive processes over one's own actions.

Acceptance Avoidance of inner experiences is a process commonly implicated in psychopathology and behavioral problems. Thus, acceptance skills of ACT, involve adopting an open, non-judgmental, and flexible attitude toward our internal experiences, whether they are desirable or undesirable. It means making room for these experiences in our lives without attempting to change or control them. Acceptance allows us to engage fully with our present moment and reduce unnecessary struggle.

Self-as-Context When we are caught up in difficult inner experiences, we sometimes feel and behave as if our existence is just made up of these things. Self-as-context refers to the unchanging sense of self that remains constant amidst the changes in our age, physical characteristics, emotions, thoughts, and bodily sensations. Self-as-context or Observing Self is the unique skill for human beings which allow us to witness and observe these changes. While we often focus on our thinking (called as self-as-content in ACT terminology), this sense of self is often overlooked, but it is always there to be used.

Values Values are principles, qualities, or directions that guide our actions, are a source of motivation and contribute to a meaningful and fulfilling life. Unlike goals, which have an end point, values are ongoing and provide a compass for our behavior. Clarifying and living according to our values helps us lead a purposeful and rich life.

Committed Action Committed action involves taking ongoing, value-driven actions that align with our values. These actions, no matter how small, contribute to a more meaningful and fulfilling life for ourselves, our loved ones, and humanity. Committed action supports value-oriented behaviors and is facilitated by developing the skills of the other five processes mentioned above.

Overall, the processes of ACT aim to cultivate psychological flexibility and enhance well-being by promoting a present-moment focus, defusion from thoughts and emotions, acceptance of experiences, connection with the unchanging sense of self, alignment with values, and committed action. Together, these six processes help the individual to lead a meaningful life by creating a flexible and broad behavioral repertoire.

ACT for Fostering Youth Mental Health in Schools

Young people are at high risk for mental health disorders (Kessler et al., 2007), and it is estimated that around 20% of youths globally experience a mental health issue (Kieling et al., 2011; World Health Organization, 2003). Mental health disorders

can have a lasting impact on youth's functioning and increase the risk of developing additional mental health issues in adulthood. For example, young people with a psychological disorder are at risk for poor academic performance or other school functioning (e.g., leaving school early). Furthermore, they have an increased risk of developing depression, anxiety, substance use, and another disorder in adulthood (Arslan, 2020; Copeland et al., 2009; Costello et al., 2003; Kessler et al., 2007). Despite clinical frameworks emphasizing the diagnosis and treatment of individuals' mental health problems, it has been highlighted that the importance of developing prevention-based approaches (e.g., public health) to reduce the prevalence and impact of youth mental health problems (Arslan & Coşkun, 2023; Renshaw et al., 2023). Especially, schools play an essential role in offering mental health programs for young people in non-clinical settings, as they provide safe, cost-effective, and adaptable environments where a wide variety of interventions can be implemented (Knight & Samuel, 2022). Therefore, by employing the principles and methodologies of ACT theory across different levels, namely universal, small-group, and individual, within the multi-tiered system of supports (MTSS) framework, mental health providers have the opportunity to integrate novel strength-based and developmental approaches (Arora et al., 2019; Beck et al., 2021). These approaches can effectively promote youth mental health and well-being.

Although the body of literature on ACT in school settings is relatively new and expanding, the existing literature provides clear documentation and endorsement of ACT as a powerful approach for implementation in schools and with children and adolescents. For example, in a study by Hancock et al. (2018), the effectiveness of ACT, cognitive-behavioral therapy (CBT), and a waitlist control (WLC) for anxiety in children and adolescents was compared. The study found no significant differences between the ACT and CBT conditions, but both treatments were more effective than the waitlist (Hancock et al., 2018). In relation to depression, a study investigated the effectiveness of ACT as a treatment for depression in adolescents. The study indicated that after treatment, 58% of participants in the ACT condition reported clinically significant reductions in their depressive symptoms compared to treatment as usual (TAU). Furthermore, the 3-month follow-up suggested that the magnitude of improvement increased, although the number of participants was small (Hayes et al., 2011). Similarly, Livheim et al. (2015) examined the effect of a brief intervention based on the principles of ACT on depressive symptoms and stress among adolescents. The study found that adolescents in the ACT-intervention group, when compared to the control group, reported lower levels of depressive symptoms and stress with a large effect size, and marginally significant decrease of anxiety, and marginally significant increased mindfulness skills (Livheim et al., 2015). In another randomized controlled trial comparing ACT + a stable selective serotonin reuptake inhibitor (SSRI), group CBT + SSRIs, and SSRIs-only in adolescents with obsessive-compulsive disorder (OCD), there was a 29.4% reduction in obsessive-compulsive symptoms at post-treatment and a 21.8% reduction at follow-up in the ACT + SSRIs condition, but no divergences between ACT and CBT conditions. Moreover, the ACT + SSRI condition indicated significant improvement in

mindfulness, psychological flexibility, and valued living that were maintained at follow-up compared to the CBT+SSRI and continued SSRIs (Shabani et al., 2019). Although there are encouraging findings supporting the utilization of ACT as an intervention in school settings, there is a need for more robust studies with larger and diverse sample sizes that directly compare ACT to other active treatments.

Approximately 75% of the studies published on the use of ACT-based approaches with young people focus on interventions conducted in clinical settings, predominantly in one-on-one formats (Petersen et al., 2023; Swain et al., 2015). However, the applications of ACT extend well beyond clinical settings and should be implemented in the natural environments where children develop, such as schools settings (Petersen et al., 2023). With this goal in mind, Burckhardt et al. (2016) sought to improve the current body of research by evaluating the additional advantages of integrating an ACT component into a school-based mental health program that combines positive psychology with ACT, known as *Strong Minds*. *Strong Minds* comprised of a series of 16 half-hour sessions conducted in the school auditorium (Burckhardt et al., 2016). The program commenced with sessions focusing on the six fundamental aspects of psychological flexibility: present moment awareness, defusion, acceptance, self-as-context, values, and committed action (Hayes et al., 1999). A randomized controlled trial involving 267 high school students in grades 10–11 revealed that, when compared to the control group receiving education as usual, tenth-grade adolescents who participated in the *Strong Minds* program exhibited statistically significant reductions in depression, anxiety, and stress, along with improvements in subjective well-being. However, interestingly, the eleventh-grade students who took part in the intervention did not experience these same benefits in comparison to the control group (Burckhardt et al., 2016).

Like Burckhardt et al. (2016) and Pahnke et al. (2014) evaluated the effectiveness of a 6-week group-based ACT in improving internalizing problems, externalizing problems, prosocial behaviors, anger, stress, and peer relationship problems in high-functioning students with autism spectrum disorder (aged 13–21 years). In this pilot study, a quasi-experimental design was utilized to compare the ACT group participants with a control group receiving education as usual. Specifically, 28 high-functioning adolescent students with ASD from six classrooms across two schools were assigned to either the treatment or control group based on their current class grouping. The intervention consisted of a structured 6-week program, with sessions held twice weekly for 40 min each. Overall, the ACT intervention demonstrated statistically significant improvements in self- and teacher-reported levels of stress compared to the education-as-usual control group. Teacher-reported hyperactivity and prosocial behaviors also displayed meaningful improvements in the treatment group relative to the control, although self-reported outcomes in these areas did not differ significantly between the groups. Self-reported levels of anxiety, depression, and anger significantly improved in the ACT group compared to the control group.

A school-based study by Dixon et al. (2022) evaluated the effectiveness of the ACT-based curriculum when implemented in a public school setting. The intervention involved the implementation of the AIM curriculum (Paliliunas et al., 2018).

The curriculum consisted of a total of 175 ACT lessons, organized into 5-day modules centered around specific themes. Each of these lessons was designed to be implemented at different levels of intensity. Tier 1 provided a brief general overview statement and introduced a themed message related to one of ACT's six psychological flexibility processes. This was typically conveyed through a few sentences containing metaphors or concepts for the students to reflect on throughout the school day. Tier 2 built upon the previous narrative by providing additional content to foster discussion among students or between the teacher and student. Tier 3 delved even deeper into the concepts, often including directives for writing, engaging in artwork, facilitating further discussions, or expanding on the metaphorical theme in various ways. The overarching approach of the AIM program was to deliver Tier 1 to all students as a preventative mindfulness-based approach. Tiers 2 and 3, on the other hand, were specifically targeted for students identified as needing additional support due to a history of aggressive behavior, social and emotional challenges, or related developmental disabilities. The findings indicated that by the end of the school year, students demonstrated improvements in psychological flexibility and mindfulness. Additionally, state standardized testing scores showed overall increases compared to the previous 2 years within the entire school (Dixon et al., 2022). In another study, Yapan et al. (2021) aimed to examine the effect of the ACT-based intervention on test anxiety and compare its effectiveness with traditional CBT. The study was conducted in a pre-experimental design with high school students receiving ACT, CBT, and a control group. While the control group received no intervention, participants in the ACT group received seven sessions and the CBT group received eight sessions. Sessions included creative hopelessness, acceptance, cognitive defusion, flexible contact with the present moment, values, and value-focused behavioral interventions. The CBT program included traditional interventions such as cognitive restructuring and relaxation techniques. Results indicated that both ACT and CBT intervention effects on reducing test anxiety for 1 and 3 months follow-up. Overall, considering the existing literature supporting the applications of ACT-based interventions in schools, it is evident that these interventions hold significant promise for promoting positive outcomes in various areas of students' lives, including mental health, well-being, academic performance, and social-emotional development.

Conclusions and Future Directions

This chapter reviewed the utilization of ACT as a school-based intervention for fostering student mental health. While ACT has been implemented in diverse school settings to assist students in enhancing their mental health and well-being, further research is required to enhance the implementation of ACT-related processes in schools. In schools, ACT is often delivered through group sessions, where students are taught to understand their thoughts and emotions and to accept them as they are,

rather than trying to avoid or control them. ACT has been shown to be effective in reducing symptoms of anxiety, depression, and stress in students, as well as in improving their academic performance and behavior in the school settings. However, it is crucial to conduct additional research to gain a deeper understanding of the efficacy of ACT for young people facing mental health challenges in schools (Arslan, 2024). Furthermore, investing in further research on preventative programs based on ACT models could be advantageous for youth populations. Implementing ACT in schools can help to promote a positive school culture and support the overall mental health and well-being of students and staff.

As another potential future direction, this chapter suggests the expansion of ACT in schools to enhance its ability to promote mental health and well-being by extending its reach to include teachers and other educators. This review on ACT in schools focused exclusively on studies with youths yet ACT may provide a consistent approach that can support the well-being of both teachers and parents in school settings (e.g., Paliliunas et al., 2023; Whittingham & Coyne, 2019). ACT, with its focus on psychological flexibility and values-based action, offers a unique approach to address the challenges faced by educators. Some studies have demonstrated the efficacy of ACT-based interventions in reducing stress, burnout, and psychological distress among teachers (Biglan et al., 2013; Jeffcoat & Hayes, 2012; Paliliunas et al., 2023). Moreover, ACT-based interventions have shown promising results in improving mindful awareness, sense of efficacy, valued living, and overall well-being of teachers (Biglan et al., 2013; Ghasemi et al., 2023). Given the demanding nature of the teaching profession, ACT interventions tailored for educators may play a crucial role in supporting their mental health and enhancing their professional fulfillment. Further research is needed to explore the long-term effects and sustainability of ACT interventions for teachers and to identify specific strategies that can effectively integrate ACT principles into the school context.

Similar to the notion suggesting the application of ACT to teachers and other educators, ACT-based interventions in school settings can prove effective in reducing parental stress, improving parenting skills, and enhancing overall parental well-being (Byrne et al., 2021; Whittingham & Coyne, 2019). These interventions often incorporate mindfulness practices, acceptance of difficult thoughts and emotions, and the identification and clarification of personal values related to parenting (Byrne et al., 2021). By fostering psychological flexibility, parents can develop more adaptive ways of responding to the challenges of parenting, reduce parental burnout, and enhance the quality of parent–child relationships. Further research is necessary to explore the effectiveness of school-based ACT interventions for parents, determine the most optimal methods of delivering ACT-based parenting programs, and assess the long-term impacts on parental well-being and child outcomes. Overall, ACT holds promise as an approach to support and enhance the well-being of both teachers and parents, thereby benefiting students. However, it would be beneficial to focus on specifically examining the unique contributions of ACT compared to other existing evidence-based practices (e.g., CBT) in promoting teacher functioning, mental health, and well-being.

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Chapter 7

Refugee Youth: Early Mental Health Intervention and Support



Hellen Gateri and Fiona Edwards

The refugee crisis is a global phenomenon that continues to affect people regardless of age, race, sex, gender, and economic status. Furthermore, the COVID-19 pandemic and political unrest have brought to the forefront the ongoing challenges refugees experience on a continuing basis. A refugee is defined by the United Nations High Commission for Refugees (UNHCR) as “someone who is unable or unwilling to return to his or her country of origin because of a well-founded fear of persecution for reasons of race, religion, nationality, membership in a particular social group, or political opinion” (2010, as cited in Gateri, 2018, p. 18). In Canada, there are different categories under which a refugee can be classified upon arrival. For example, a refugee claimant is defined as a temporary resident who requests protection upon or after arrival by making a refugee claim (Canadian Council for Refugees, 2010), whereas a resettled refugee is someone who holds permanent status and is sponsored either privately or by the government.

Over the past few years, Western countries including the United States, Canada, and those in Europe have experienced an influx in the number of refugees seeking residency. Among those refugees are children and youth. Of the 27.1 million refugees worldwide, 41% are counted as persons under the age of 18 (UNHCR, n.d.). Refugee youth make up a large proportion of those arriving in Canada by themselves or with family members (Marshall et al., 2016).

Upon arrival in their host country, refugee youth need resettlement services, including learning a new language, transitioning into a new culture and educational environment, and (in some instances) mental health support services (Marshall et al., 2016). The loss of loved ones and community due to displacement can have negative impact on the mental health of refugee youth (Marshall et al., 2016).

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Refugee youth are vulnerable to poor mental health as a result of exposure to trauma and disruptions to their psychological, emotional, and physical development (Beiser & Hou, 2016; d'Abreu et al., 2019; Im & Swan, 2022; Vasic et al., 2021). A study conducted within the Canadian context reveals that pre- and post-migration trauma among refugee youth in Canada can manifest in the form of aggressive behaviours and emotional problems (Beiser & Hou, 2016). However, within the Canadian context, research that focuses on the mental health experiences of refugee youth is sparse, leading scholars to draw from other countries (e.g., France and the United States), where the approach to addressing the needs of these youth is similar in nature to Canada (Marshall et al., 2016).

Public Mental Health Theoretical Framework

This chapter explores the need for early mental health intervention and support for refugee youth during and after resettlement in host communities using the public mental health theoretical framework. Dykxhoorn et al. (2022) assert that public mental health is the science and art of promoting mental health and well-being and preventing mental health problems through organized efforts in society. In practice, this theoretical framework takes a population-level approach to the prevention of mental health problems and the improvement of well-being (Gibbons, 2021). This approach is integrated by acknowledging a wide range of determinants across individual, family, community, and structural levels that contribute positively or negatively to mental health and well-being. These determinants are connected in complex ways and effective in addressing refugee youth mental health simultaneously and across multiple levels. In this chapter, we discuss the mental health challenges refugee youth experience during immigration and post migration. We also provide a critical discussion on interventions to address refugee youth mental health at various levels, including individual, family, school, and community.

Mental Health Challenges of Refugee Youth

There is a common consensus in the literature that refugee youth experience several unfavourable conditions before, during, and post migration (Im & Swan, 2022). While this experience is substantiated by many scholars (Beiser & Hou, 2016; d'Abreu et al., 2019; Im & Swan, 2022; Marshall et al., 2016; Vasic et al., 2021), it is significant to acknowledge the unique challenges refugee youth encounter. Understanding the mental health of refugee youth is complex and there are several factors to consider. These factors include the challenges associated with pre-migration, forced migration, post-migration, and the various traumas these youth may experience as they travel to the host country (Im & Swan, 2022; Marshall et al., 2016). For instance, during the pre-migration stages, youth can be separated from

their loved ones, which can create safety concerns (Vasic et al., 2021). Furthermore, the migration stage may result in exposure to violence, harsh living conditions, language barriers, and social exclusion (Im & Swan, 2022; Marshall et al., 2016). Following migration into their host country, youth are met with several challenges, including adjustment difficulties following prolonged exposure to the stress of insecurity, fear, and loss; they also face wait times to receive proper documentation to access medical help and adequate housing (Abou-Saleh & Hughes, 2015). Consequently, the post-migration experience can lead to emotional, physical, spiritual, and psychological harms that increase the risk of developing a psychotic disorder, risks which can increase even more after encountering racism and discrimination in their resettled communities (Kirmayer et al., 2011). Refugee youth may also struggle with feelings of loneliness and the stress of acculturation, which have been shown to have a negative impact on emotional well-being (d'Abreu et al., 2019). A mental health framework that addresses the effects of acculturative stress can help safeguard the psychological well-being of refugee youth.

Vasic et al. (2021) explored mental health problems among refugee youth in the Republic of Serbia; they found that youth who lived in different refugee camps were more likely to experience emotional and behavioural challenges and were also at a higher risk of being physically abused. These authors further postulate that because alcohol and substance use are prevalent among refugee youth, mental health preventive services should target these issues (Vasic et al., 2021). In addition to precarious living conditions, Marshall et al. (2016) identified individual, family, community, and societal factors that contribute to mental health outcomes of refugee youth. Individual factors include a person's exposure to conflict and trauma and their inherent ability to cope. Family factors include the breakdown in family relationships when parents are separated from their children, a factor which is reported as making youth more vulnerable to mental health problems such as anxiety. Community factors include experiences of discrimination that erode the self-esteem of refugee youth and affect their ability to form healthy connections in their new environment.

Scholars have identified trauma exposure as a risk factor to mental health in refugee youth (Im & Swan, 2022; Vasic et al., 2021). Trauma exposure is linked to substance use, social functioning, aggression, and other mental health symptoms in refugee youth (Im & Swan, 2022; Vasic et al., 2021). Despite the role trauma plays in influencing the mental health outcomes of refugee youth, there is a lack of research exploring this phenomenon (Gadeberg & Norredam, 2016). A deeper understanding of how trauma shapes emotional and psychological outcomes can help foster appropriate approaches to addressing the mental health of refugee youth. Marshall et al. (2016) assert, "Despite difficulties, young refugees demonstrate adaptability, perseverance, and resilience; having mental health professionals acknowledge their strengths and abilities will help them on their healing path and support them to adapt positively to a new home" (p. 308). Therefore, the strengths that refugee youth present should be treated as a protective factor and valued in the delivery of mental health service.

Gadeberg et al. (2017) conducted a systemic review to explore the screening and measurement tools use to assess the mental health of refugee youth. The authors

concluded that “there is a lack of trauma and mental health screening and measurement tools developed directly for refugee youth” (Gadeberg et al., 2017, p. 445). Gadeberg and Norredam (2016) question the validity of screening tools used for assessing trauma in refugee children and youth. These scholars argue that “the use of non-validated screening tools may result in pathologization of healthy individuals or in overlooking of refugee children and youth with mental health problems and consequently preventing further follow-up and treatment” (Gadeberg & Norredam, 2016, p. 929). There is an urgent need for trauma screening tools that are reliable and valid to assess the mental health needs of refugee youth (Gadeberg & Norredam, 2016). Keeping in line with the public health framework, interventions must be targeted at the individual and family level, as well as within the youth’s school setting and community, to address their varied and presenting needs.

Mental Health Interventions for Refugee Youth

Individual Interventions

Several studies and literature reviews have examined different strategies for addressing individual early mental health interventions for refugee youth. A study by Grasser et al. (2021) suggests integrating mental health screening into the initial physical health screening protocols for newly arriving refugee youth, as early diagnosis and treatment might reduce future disability and enhance rehabilitation. After screening, refugee youth with mental health issues should be treated at primary care settings, as they are considered the best place to conduct individual interventions (Ellis et al., 2010). Furthermore, receiving mental health services as part of routine care could also reduce the stigma associated with accessing services that exclusively treat psychological problems (Shim & Rust, 2013).

Several authors (Forrest-Bank et al., 2019; Hettich et al., 2020; Marshall et al., 2016) have found that building trust and relationships between youth and service providers during the early stages of therapy could be helpful in overcoming the stigma around mental health conditions and services; in particular, it could promote the feeling that youth have a safe space to talk about their lives. Ehntholt and Yule (2006) postulate that appropriate therapeutic interventions during this early stage could include providing psychoeducation regarding symptoms and treatment models, normalizing trauma reactions, and supporting youth as they manage symptoms and develop coping strategies. However, these approaches need to consider cultural competency, with respect and awareness of cultural norms and attention to trauma-informed approaches, to ensure supportive post-migration environments that minimize re-traumatization (Forrest-Bank et al., 2019; Hettich et al., 2020; Marshall et al., 2016). Marshall et al. (2016) also recommend considering new and innovative online or mobile approaches to engage youth in their mental health support. Given

that mobile approaches are often more anonymous, these could be helpful if youth have a history of mistrust of social services, government, or authorities.

Forrest-Bank et al. (2019) found that providers in the United States working with refugee children, youth, and families felt that certain early therapeutic interventions were helpful, such as cognitive behavioural therapy (CBT), play therapy, and eye movement desensitization and reprocessing therapy. Furthermore, Frounfelker et al. (2020) reported that individual psychotherapy with refugee youth using CBT was effective in reducing post-traumatic stress disorder (PTSD) symptoms: the study participants demonstrated significant improvements in their psychosocial functioning and remained stable for 12 months for follow-up. Kankaanpää et al. (2022) advocate for the use of CBT with a trauma-focused lens with refugee youth since it involves several therapeutic elements, such as learning to process past-traumatic events verbally, expressing painful emotions, and constructing a new narrative in a new and safe environment. However, Forrest-Bank et al. (2019) noted that these interventions might not be culturally relevant, and more research is needed to assess whether cultural adaptations are necessary for the therapeutic interventions to be effective. Additionally, von Werthern et al. (2019) examined the effects of trauma-focused therapeutic treatments (e.g., narrative exposure therapy; community-implemented trauma therapy; and culturally modified, trauma-focused CBT) and found them to be effective in reducing PTSD, depression, anxiety, suicidal ideation, and feelings of guilt, as well as increasing functioning and social behaviour among refugee youth. Integrating these therapeutic treatments also requires understanding of each youth's region and the social context from which they have sought refugee status. For this reason, it is important to incorporate family interventions when caring for the mental health of refugee youth. The discussion that follows explores family interventions that engage parents and youth in treatment and examines how the family context contributes to the mental health and well-being of refugee youth.

Family Interventions

Family interventions are defined as social or psychological interventions with the goal of improving the mental health or psychosocial well-being of family members and their overall family functioning (Bunn et al., 2022). Frounfelker et al. (2020) assert that given the relationship between family functioning and youth mental health, interventions situated in families that target the well-being of the entire refugee family are needed. In their study with Bosnian refugee families in Chicago, Weine et al. (2008) focused on multiple family interventions known as Coffee and Family Education Support (CAFES). Interventions involved families of early and middle adolescents (age 11–15) with the goal of preventing high-risk behaviours and school dropout. Refugee families were provided with information on parenting, trauma, mental health, and available services. Support groups were also facilitated by refugees who were trained and supervised to conduct these groups in community settings. Further, these interventions included the development of a

strength-oriented family narrative focusing on identifying and activating family strengths to increase family functioning and promote access to mental health services and resource navigation. The study findings indicated that multiple family group interventions were effective in increasing access to mental health services and family comfort when discussing trauma and mental health issues.

Other studies by Weine et al. (2003) and El-Khani et al. (2018) used multiple family groups to support refugee youth mental health. The interventions included family members from multiple families who were experiencing similar culturally mediated family stressors, such as trauma, displacement, and resettlement. The interventions were delivered in community and school settings and focused on interfamilial discussions of stressors affecting family relationships, development of coping strategies to improve family functioning, and identification of family strengths. These studies also incorporated psychoeducation interventions to help families understand and work on the impact of trauma and family communication skills, family goal setting, and social skills training (including rebuilding social support during resettlement). In a study with Somali and Bhutanese refugees, Betancourt et al. (2020) used home visit interventions to promote youth mental health and relationships within their families. The study interventions included psychoeducation on diverse resettlement stressors, navigating the American education system, parenting skills, and communication skills. These interventions were delivered by lay workers from refugee communities who were trained and supervised to deliver mental health interventions to peers. The study outcomes demonstrated improvement in relationships between caregivers and their children, parenting skills, and children's functioning and mental health.

School-Based Interventions

While individual and family interventions are ideal for responding to the mental health needs of refugee youth, the public health framework calls for an examination of a person's environment as their social and cultural milieus do influence their trajectory in life. Schools play an integral role in the lives of children and youth as they spend a considerably amount of time in this setting. Their visibility as refugees at school can lead to the identification of their presenting mental health challenges and struggles. Hence, school-based intervention is a necessary step to meet the youth where they are at.

Burbage and Walker (2018) posited that addressing the mental health concerns of refugee youth in school settings increased opportunities for early interventions in this group. Schools are often the first places refugee youth begin socializing and building relationships with peers and adults. Further, refugee youth take their initial steps navigating a new culture in the school systems where they are settled. Therefore, school-based mental health programs could provide an outlet for youth to address adverse childhood experiences and overcome barriers they might encounter during and after resettlement. Ellis et al. (2010) suggested that schools tend to be

trusted systems and seen by parents as “helpers” for their children. As a result, refugee parents are receptive to the idea that mental health support can help refugee youth succeed, particularly when services are available through the school.

Refugee youth have also identified school as a natural place to seek support. Ellis et al. (2010) found that most study participants valued school and family as sources of support. In an evaluation of several school-based mental health services in Britain with adolescent refugees from diverse backgrounds, Fazel et al. (2016) found that participants preferred seeking mental health support at school over other options. Many youth reported feeling safe and familiar at school, making it feasible and comfortable to meet with a therapist during scheduled appointments and on an as-needed basis. Beehler et al. (2012) assessed the effectiveness of providing school-based mental health programs for traumatized immigrants youth in the United States; in this study, all students were provided with clinical services, including CBT, supportive therapy, and coordinating services. The study found that CBT and supportive therapy were associated with increased psychosocial functioning; greater service coordination was associated with decreased PTSD symptoms.

Other researchers recommend school-based interventions that integrate creative techniques (e.g., drama, music, and art therapy) within the classroom, as well as interactions with peers. For instance, Rousseau et al. (2005) developed a program which used drama workshops in a school to support immigrants and refugee youth going through multiple transitional and adverse experiences associated with adolescence and migration. The evaluation of this program revealed that the workshops were a safe place for youth to express themselves, supported by the team and the dramatic nature of the play. Youth in the program were able to use stories to explore a wide range of values representing their hybrid world. These stories allowed them to construct meaning and grieve some of the losses associated with migration, a process which ultimately reduced their stress and led to improved academic performance.

Art therapy has also been used to address the mental health of youth who have encountered traumatic experiences. Orr (2007) used content analysis in her review of art therapy with youth who had experienced disaster. She found that art therapy offered youth a way to communicate grief and loss and could be used as a long-term coping resource. Similarly, Eaton et al. (2007) conducted a literature review on the efficacy of 12 peer reviewed art therapy studies with youth who had experienced trauma. Data from these studies indicated that art therapy could be an effective treatment to address the negative psychosocial consequences of childhood trauma. Although the studies by Orr and Eaton et al. were not conducted with refugee youth, they examined the potential application of art therapy with youth who had experienced trauma, grief, and loss—all issues refugees encounter.

A study with Syrian refugee youth demonstrated that art therapy interventions reduced stress and increased coping skills, such as problem solving and social support (Feen-Calligan et al., 2020). Kankaanpää et al. (2022) asserted that interventions with creative writing and drawing were found to be effective for immigrants and refugee youth in decreasing mental health problems and increasing positive resources, such as effective coping and hope. Further, Kankaanpää et al. (2022) and

Burbage and Walker (2018) suggested that training teachers, school counsellors, and administrators to understand and support this group of students in their academic and mental well-being are critical. The training could integrate cultural competence to increase educators' awareness of the impact of trauma on student learning. Furthermore, teachers and school counsellors have a pivotal role in helping refugee students improve their mental health.

Community Interventions

Based on the previous discussion, school-based interventions appear to have many advantages related to access and stigma reduction; however, they might not be sufficient to meet the needs of all refugee families and destigmatize seeking help for mental illness. Therefore, interventions targeted at the community level can foster more support for refugee youth and their families.

Refugee communities can be essential partners and allies in engaging refugee youth and helping them access early mental health interventions. Burbage and Walker (2018) suggest developing a community support system through which community leaders serve as liaison between the refugee population and mental health professionals to provide refugee youth with access to services. Often community leaders hold a deep understanding of the needs of their community's youth, including what would be perceived as helpful services and who (within and beyond the community) should be trusted (Ellis et al., 2010). Integrating community engagement approaches that respect community members—including youth as equal partners—and honour the knowledge and expertise they hold can lead to developing mental health programs that are accessible to refugee youth (Ellis et al., 2020). The approach needs to include a willingness to listen openly and honestly to community members and engage them as partners in developing programs and services that might diminish any fear and stigma associated with mental health services; this can be achieved by building trusting relationships between community members and service providers. Additionally, these programs should be developed in ways that are mindful of the cultural perspectives of community members and consistent with their values and approaches to healing (Ellis et al., 2020). Despite this, community mental health programs that include refugee communities in their development of services are rare.

Community engagement approaches might take a range of forms; for example, Ellis et al. (2011) posited that mental health clinicians could seek partnerships with community-based organizations that specialize in serving refugee communities and create parent advisory boards to ensure a diversity of perspectives are represented in the development and implementation of refugee youth mental health services. Further, Torres et al. (2018) suggested that clinicians could also seek to build trust and engagement individually by clearly communicating their roles and the fact that

they operate separately from child welfare or law enforcement. An example of a community engagement in mental health service is the transcultural psychiatry team developed by Measham et al. (2005) in Montreal, Canada. This program involved psychiatrists, psychologists, anthropologists, and community organizations to provide services to refugee families. The multidisciplinary team is based at Montreal Children's Hospital where they provide pharmacology and culturally specific services and interventions to refugee youth and their families, services which include a collective understanding of individual mental health as well as the inclusion of traditional healing ceremonies and interventions. The team has found this approach to be highly effective in engaging refugee youth and their families. Regardless of the form it takes, successful community engagement means being open to learning and listening, respecting differences, and viewing community partners as equal in their work supporting the mental health of refugee youth.

Conclusion

Given the high degree of trauma experienced by many refugee youth, programs that promote early mental health interventions are essential. Discussion in this chapter indicates that mental health programs that target refugee youth need to integrate a comprehensive approach—individual, family, schools, and communities—to improve the mental health care of this group. Service providers who are interested in making their services accessible, acceptable, and appropriate to meet the needs of this group must also ensure their services integrate culturally competent care to effectively engage refugee youth in services. Working across these levels will make mental health services more accessible and offer more comprehensive support to this group.

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Chapter 8

Promoting and Supporting Well-Being in Schools



Murat Yıldırım  and Gökmen Arslan 

Introduction

Positive psychology emphasises individual strengths such as happiness and well-being as the pillars of personal growth, self-fulfilment, flourishing, thriving, and health. Well-being is an important concept for different domains of life including school settings. Personal well-being at school is a key element to contributes to students' healthy lifestyles and psychosocial and physical health. The development of behaviours, cognitive, emotional, and social skills that students acquire throughout their education life help them not only to cope with the stressors, pressures, and challenges in school but also adapt to new situations and manage their psychological well-being and physical health throughout their lives (Darling-Hammond et al., 2020). Although school life can be challenging, and students may struggle to deal with stressors in the school environment, school is one of the primary settings for well-being promotion among children, adolescents, and youth. In light of positive psychology principles, various strength-based programs have been recently developed to promote well-being and health in schools. However, there is a need to pay more attention to the well-being of children and students at schools. In this chapter, we present conceptual models of well-being in schools and pathways to promote

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and support the well-being of youth by taking into account educators' and students' considerations.

Theoretical Background of Well-Being

Well-being is an area of burgeoning interest by both researchers and practitioners and has been regarded as a key ingredient to build and maintain healthy and productive individuals and societies. Well-being is a term with different definitions in various contexts. Broadly, well-being refers to "the combination of feeling good and functioning well" (Huppert & Johnson, 2010). While some researchers defined well-being as a multidimensional construct that includes emotional, psychological, and social components (Keyes, 2002, 2005), others define it as a psychological construct that refers to positive relationships with others, engagement in daily activities, having the capacity to perform tasks and goals, and a belief that life is purposeful and meaningful (Diener et al., 2009). Typically, people with higher levels of well-being are more successful across many domains of life such as school, work, health, and relationships (Lyubomirsky et al., 2005), and they are better to cope with psychological and physiological stressors (Fredrickson & Levenson, 1998).

In the area of well-being, there are well-established theories of well-being that are supported by a large body of empirical evidence. To explain well-being, here we briefly present some of the well-being theories. Subjective well-being theory is one of the salient well-being theories (Diener, 1984; Diener et al., 1999). In this theory, subjective well-being includes affective and cognitive components of well-being, and these two components are separable yet related. The affective component of subjective well-being refers to the emotional/feeling dimension of subjective well-being, while the cognitive component represents satisfaction with life which is characterised as a subjective evaluation of the quality of one's life overall. The predominance of positive affect over negative affect and positive evaluation of satisfaction with life leads to greater subjective well-being. This form of well-being focuses on emotional and cognitive states that are related to a hedonic view of well-being (Kahneman et al., 1999; Ryan & Deci, 2001). Research suggests that subjective well-being influences not only mental health but also physical health of individuals (Pressman & Cohen, 2005). For example, Yıldırım and Arslan (2020) examined the relationship between subjective well-being and psychological health and found that increasing people's experiences of subjective well-being were associated with greater psychological health, resilience, and hope. A two-wave longitudinal study showed that subjective well-being is reciprocally related to academic engagement (Datu & King, 2018).

Another well-being theory is the Six-Factor Model of Psychological Well-Being (Ryff, 1989), which conceptualizes well-being based on eudaimonic and humanistic perspectives (Waterman, 1993). This model of well-being classifies a wider set of well-being dimensions, including self-acceptance, autonomy, positive relations,

environmental mastery, purpose in life, and personal growth (Ryff, 1989). According to this model, optimal and sustainable psychological functioning can be accomplished through a shift from momentary feelings and thinking to being true to one's inner self and a sense of purpose and meaning in life. In a systematic review study, Lattie et al. (2019) reported that an increment in psychological well-being leads to decrements in mental health problems such as depression and anxiety. Another systematic review study reported a positive link between psychological well-being and educational, learning, and work performance (Lin et al., 2017).

The PERMA theory of well-being (Seligman, 2011; Seligman et al., 2009) proposes that to build flourishing that makes life most worth living, there are five building blocks: positive emotions (P), engagement (E), relationships (R), meaning (M), and accomplishment (A) (abbreviated as the acronym PERMA). This theory suggests that well-being includes not only the absence of diseases but also the presence of psychological resources and strengths and well-being can be attained through the above-mentioned five fundamental pathways. There is various empirical evidence that supports the positive application of the PERMA model in school settings. For example, Wagner and Ruch (2015) reported that school-based well-being programs and activities that foster character strengths help to create a positive classroom and contribute to school achievement because well-being helps students to build their character strengths with perseverance, love for learning, hope, zest, and gratitude.

The School Well-Being Model (Konu et al., 2002; Konu & Lintonen, 2006) has also been introduced to provide a basis for assessing the well-being of students and a school as an entity. This model is a four-dimensional model that includes school conditions (having), means for self-fulfilment (being), social relationships (loving), and health status. School conditions is related to surroundings, services, healthcare, school subjects and organization, schedules and group sizes. Means for self-fulfilment refers to the likelihood for students to study in accordance with their abilities and resources. The social relationship represents group dynamics, school atmosphere, student–teacher relationship, peer relationship, and cooperation with homes (Arslan & Burke, 2021; Waters et al., 2021; Waters & Johnstone, 2022). Health status refers to students' psychosomatic symptoms of diseases and illnesses. As seen, each dimension of school well-being comprises different aspects of a student's life at school and is related to teaching, education, learning, and achievement (Konu et al., 2002; Konu & Lintonen, 2006). Student well-being is positively related to adaptive functioning, striving, feeling, and relating to others (Soutter et al., 2014).

The school environment is an important place for the development and sustainability of protective factors associated with students' well-being. While a positive school environment contributes to protective mechanisms, a negative school environment diminishes risk mechanisms. Well-being at schools focuses on the strengths, resources, and capabilities of individuals helping them to cope with challenges and transmissions (Greenberg & Jennings, 2009; Yıldırım et al., 2021). Burgeoning scientific evidence provides support for the effectiveness of school-based well-being programs to promote students' well-being.

Practice

“Try This” for Educators

Schools provide an environment where students find opportunities to build resilience, acquire the necessary skills to effectively respond to mental health challenges, and improve well-being (Arslan & Yıldırım, 2021). The promotion of well-being at school can be achieved through positive education (Arslan et al., 2021), which refers to the integration of traditional education goals with positive psychology's principles of well-being to support the psychological health of individuals at schools (Seligman et al., 2009; Waters, 2011). Considering that there is a high prevalence of mental health problems including depression, anxiety and stress and a low prevalence of positive emotions, satisfaction with life, and happiness among students (Seligman et al., 2009; Yıldırım & Green, 2023) supporting well-being at school offers a pathway to improve happiness, life satisfaction, flourishing, learning, creativity, and social cohesion.

Programs should be designed and implemented at schools to improve the participation of educators to create a good learning environment. Educators can collaborate with each other to build a lively atmosphere and healthy behaviour cultures at schools. Teachers may differ in the level of knowledge and experiences regarding understanding of students' well-being and mental health. As such, the school authority should encourage teachers to support and promote the positive mental health and well-being of students. It is also vital to note that teachers' mental health and well-being are as important as students' mental health and well-being. Teachers who are aware of how to look after their own mental health and well-being are better at supporting and promoting young people's psychological health. Teachers' well-being is closely related to their behaviours, students' achievement, and school and classroom environments.

Different strategies and activities have been presented to increase teachers' well-being and reduce stress. These activities include but are not limited to mindfulness-based activities, Pilates and yoga, massage, art classes, and reflexology. These strategies treat the momentary effects of psychological distress on an individual basis and fail to address causes of distress and well-being (Manning et al., 2020). The capabilities approach was recommended to use by schools and policymakers who should develop interventions that enhance teachers' freedom to behave in accordance with strategies that mitigate momentary feelings of stress (Sen, 1993). Educators should be provided attainable aims and goals and that one's resources should be matched to the demands of his/her role.

“Try This” for Students

Positive psychology school-based interventions are found to improve the well-being, mental health, problem-solving skills, mindfulness, physical health, and coping strategies of students (Cilar et al., 2020). In school settings, various interventions have been designed and implemented to promote well-being and mental and physical health among children and young people.

Accumulative scientific evidence shows that school-based well-being interventions and programs have significant potential to assist children and young people in developing psychosocial-emotional skills needed for academic success. A meta-analysis study synthesizing 47 studies with a total of 38,946 healthy individuals showed a significant positive relationship between well-being and academic achievement with a small-medium effect size. This relationship was invariable across different demographic factors, various well-being domains, and different measures of well-being and academic achievement (Bücker et al., 2018). Students with higher levels of subjective and psychological have higher levels of academic achievement. However, this may not always be the case. High-achieving students do not have to experience greater well-being, and low-achieving students do not have to report poor well-being (Bücker et al., 2018).

There are very effective positive psychology interventions (e.g., mindfulness, forgiveness, hope, gratitude, mindfulness, happiness, and savouring) applied to educational settings helping to improve the well-being of children and young people. Here we only focused on two interventions/programs: the Well-being Promotion Program (WBPP) and mindfulness. The WBPP is particularly designed to facilitate positive psychosocial education by focusing on positive emotions, character strengths, optimism, gratitude, kindness, and hope (Suldo, 2016). The WBPP is developed in the framework of positive psychology for increasing happiness and promoting students' optimal outcomes via intentional activities that trigger positive feelings and thoughts about the past, present, and future. Students involved in this program are made aware of positive psychological constructs by discussing how these constructs are related to happiness and well-being. They are also instructed to learn particular strategies to improve the given psychological constructs (e.g., happiness and optimism). Students are further required to practice the given activities and strategies independently outside of the classrooms. This program targets not only practices that work best in small group counselling but also the involvement of parents in school mental health interventions. Scientific evidence provided support for the utility of WBPP as an evidence-based approach for improving well-being in adolescents. In a 10-week WBPP group program, Roth et al. (2017) reported that in comparison to randomly assigned peers to wait-list control, grade 7 students demonstrated a significant growth in positive affect and satisfaction with life. Students also reported a decrease in internalizing problems, externalizing problems, and negative affect.

Another particular promotion program for students' well-being can be done through mindfulness. Mindfulness interventions have become a prominent topic in the extant literature and have been shown to be effective in addressing psychosocial

and mental health problems and promoting the well-being of youth (Khoury et al., 2013). Mindfulness intervention is a mind-body-based approach that supports children and young people to experience their feelings, thoughts, and sensations without having predetermined assumptions about them. With those interventions, individuals are encouraged to focus on their present feelings, thoughts, and behaviours so that they become more aware of them and better able to cope with them. Those who experience challenges with negative emotions, thoughts, and behaviours and relaxation and dissociation problems can benefit from mindfulness interventions. Meditation and relaxation techniques (e.g., deep breathing exercises, engagement in prayer, reading and reflecting) can be used to improve well-being, effective coping strategies, confidence, sense of staying in the present moment, and feeling in control of emotions, thoughts, and behaviours. The interventions can be easily administered to a group of students or as a whole class activity to minimize symptoms of social comparison, stigma, and other mental health problems (Kuyken et al., 2013). Huppert and Johnson (2010) reported that the amount of time young people spend practising mindfulness is positively related to increases in mindfulness, resilience, and well-being.

In conclusion, due to the multidimensional and complex nature of well-being, it can be difficult to promote students' well-being at schools. As noted above, there are different forms of well-being which have different measures and theoretical underpinnings. These types of well-being are different from each other, yet related. As such, there is a need to support and promote all types of well-being to some extent to cultivate an overall sense of well-being in school settings. It is hard to integrate all forms of well-being into a single activity or intervention focusing on the improvement of children's and students' well-being. However, effective school-based well-being interventions and activities can be achieved through a comprehensive understanding of well-being with the active involvement of teachers, students, school administrators, and families.

Case Study

Schools have been closed during the COVID-19 pandemic. Students returning to schools after the mandatory closure are more likely to experience various school-based and mental health problems including low engagement, poor motivation, academic stress, and lack of belongingness to the school. Many students visited the counselling service centre at school with those symptoms and the lack of ability to cope with these challenges. Those students were encouraged to participate in a school-based well-being promotion program that focuses on eliciting positive emotions and thoughts about the past, present, and future. They were particularly made aware of the practising positive psychological constructs like happiness, hope, and optimism and how using these constructs helped them to deal with those challenges after school closure. They all reported positive outcomes about improvements in positive emotions, happiness, motivation, belongingness, and academic participation.

Discussion Points

- Does well-being matter in school settings?
- What support, information, and guidance will students and teachers need for improving their well-being?
- Why should schools support and promote the well-being of students?
- How is school authority embedding the promotion of well-being into the school curriculum?
- How can principles of positive psychology be applied to support well-being in school and overall functioning?

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Suggested Resources

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Chapter 9

E-Cigarette and Vaping Use Among High School Students in Colombia: Analyzing Characteristics and Health Concerns



Orlando Scoppetta and Augusto Pérez Gómez

The Origins

E-cigarettes and vaping are two terms that are often used interchangeably, but they are not the same thing. E-cigarettes are battery-powered devices that heat a liquid containing nicotine to produce vapor. Conversely, vaping refers more broadly to inhaling vapor from any device, including e-cigarettes. The use of vaporizers for inhaling substances other than tobacco has existed for many years. For example, hookahs used to inhale flavored tobacco have been known for centuries in parts of the Middle East and India. Similarly, cannabis vaporizers, which heat cannabis flowers or concentrates to produce a vapor that is inhaled, have been around for several decades.

Today's devices are the result of a history of inventions. The principles applicable to this invention could be traced back to Joseph Robinson's electric vaporizer in 1930 (Robinson, 1930). Later, in the early 1960s, Herbert A. Gilbert invented the first "smokeless non-tobacco cigarette" (Gilbert, 1965). Robinson's and Gilbert's devices were never commercialized. In 2003, a Chinese pharmacist (Hon Lik) invented the modern e-cigarette, which used a battery-powered heating element to vaporize a liquid containing nicotine. The invention quickly gained popularity in China and soon spread to other parts of the world (Besaratnia & Tommasi, 2020; Kaisar et al., 2016). From there, the Ruyan® brand appeared, and very soon, others started exporting from China to Europe and North America (Etter, 2010).

Following its expansion, it took little time for concerns about its potential risks to emerging. In 2008, they were banned in Turkey, among other things, because of nicotine and other chemical content, although they were subsequently allowed

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under regulation in 2013 (Nayir et al., 2016). Also in 2008, WHO requested that the devices not be promoted as actual smoking cessation options; however, in the same year, a safety analysis in New Zealand concluded that “The results obtained to date do not mitigate this report’s overall conclusion that the Ruyan® e-cigarette is designed to be a safe alternative to smoking, and appears to be safe in absolute terms on all measurements we have applied” (Laugesen, 2007, p 20).

One of the first investigations in 2009 into the use of electronic cigarettes in Europe revealed that users had learned about and purchased these devices in China and that most of them were purchased online, given the scarcity of physical stores. Based on 81 research participants, they concluded that the most common use was for smoking cessation and that they might be helpful for that purpose, but that users had safety concerns about possible toxicity (Etter, 2010).

The analysis of e-cigarettes published in 2009 by the FDA showed that e-cigarettes contain carcinogens. Also found that cartridges labeled as containing no nicotine did contain (FDA, 2009). During the same years, an enduring feature of these devices was also denounced: the inclusion of designs, flavors, and smells attractive to minors, such as chocolate, cookies, chewing gum, and candies (Wollscheid & Kremzner, 2009). In 2014, the unique flavors offered by 224 brands were counted in 7764 (Zhu et al., 2014).

Although several countries took restrictive measures regarding electronic devices, including Mexico, which recently banned them, one of the most favorable moments for that industry was when in 2015, a review in the United Kingdom concluded that e-cigarettes are 95% less harmful than combustible cigarettes (McNeill et al., 2015). This report has been criticized for flaws in its methodology; however, it has become a flag for those who want to defend that such devices are a good option for those who want to reduce the harm from tobacco use (Green et al., 2016).

The Growth of a Problem

The market exploded as soon as electronic devices were imported into the United States. Without regulations, the industry launched an aggressive campaign that included television commercials, print, the use of celebrities (Duke et al., 2014), and, of course, the internet. Marketers have used the web for device sales in multiple ways. For example, in 2010, Yamin et al. described that with the “affiliate marketing” scheme, a person could, in less than 5 minutes, become a salesperson, armed with an arsenal of marketing materials, personal business cards, and forums to access marketing strategies (Yamin et al., 2010). The advertising of electronic devices is suspected of targeting adolescent audiences who get the message that ENDS have no adverse health effects (Casablanca et al., 2020; McAdam et al., 2019; Viscusi, 2020).

The results of the marketing investment have paid off. Data from the National Youth Tobacco Survey showed that the percentage of high school students who

reported using an e-cigarette in the past 30 days increased from 1.5% in 2011 to 16.0% in 2015 (U.S. Department of Health and Human Services, 2016).

The strategy was multiplied in the countries where the electronic devices business landed, including Latin America, reversing the gains in reducing tobacco use among young people (Herrera & Corvalán, 2017). The Global Youth Tobacco Survey results show that e-cigarette use prevalence among students aged 13–15 years ranged from less than 1% to over 20% across different countries. The most significant increases in e-cigarette use have been observed in high-income countries such as the United States, Canada, and the United Kingdom. However, many low- and middle-income countries have also reported significant increases in e-cigarette use among youth.

A systematic review with meta-analysis in 2022 estimated that the overall lifetime prevalence of device use could be 22% (21–25%), while the current prevalence would be 8% for women (95% CI: 0.07–0.08%) and 12% for men (95% CI: 11–13%). The current prevalence for adolescents and schoolchildren was 11% (95% CI: 10–12%), with a steady upward trend from 2014 to 2019 (Tehrani et al., 2022).

When the advance of e-cigarettes was already a fact, reactions ranging from total prohibition to partial regulations took place in several countries. In January 2022, Massachusetts became the first state in the United States to ban the sale of all flavored e-cigarettes, including Juul pods, except for tobacco-flavored products. Other states, such as New York, New Jersey, and Rhode Island, have also restricted the sale of flavored e-cigarettes, including Juul pods, to varying degrees. In 30 countries, there is already a total ban on electronic cigarettes and vapes (WHO, 2023). However, even so, this industry shows growth in the world, thanks to the known market formulas: taking advantage of the cracks in regulation, diversification in models and prices, and ambiguous messages about their benefits, among others. An analysis in 44 countries showed that measures other than total bans (such as smoke-free spaces, warnings, cessation programs, advertising bans, or taxes) were ineffective in reducing adolescent use (Chan et al., 2022).

Allegations about marketing to teenagers tend to be confirmed after Juul Labs Inc agreed to pay claims for personal injury and marketing to teenagers in December 2022. In July 2022, the FDA denied authorization for the brand to market its products, which is currently under appeal in the courts.

The Situation in Colombia

The entry date of electronic cigarettes into Colombia is still being determined because many new products do not arrive in the country with import registration but as contraband items or for the personal use of people who have traveled abroad. In any case, in February 2009, the Specialized Medicines Chamber of the Review Commission of the National Institute for the Surveillance of Medicines and Food (INVIMA) warned that electronic cigarettes should not be marketed as alternatives

to quit smoking or to alleviate nicotine withdrawal symptoms, this indicates that the commercialization of these devices should have taken place at least since 2008 in the country.

According to Scoppetta et al. (2021), there needs to be more data about electronic e-cigarettes and vapers use in Colombia. Three large national studies on substance use included electronic devices. In 2016, in the third national study on the consumption of psychoactive substances in the university population, it was estimated that 16.6% of electronic cigarettes were consumed at some point in their lives and that among those under 18 years of age, the proportion rose to 19.6% in 2016 (UNODC, 2017). The second source is the 2017 National Youth Tobacco Survey, which found that 51.5% of adolescents between the ages of 11 and 17 were aware of these devices and that 15.4% had used them at least once in their life (Ministerio de Salud y Protección Social & Universidad del Valle, 2020). On the other hand, with the National Study on the Consumption of Psychoactive Substances of 2019, it was estimated that 5.0% of the general population had used the devices at least once and that this proportion was 6.7% among the age group of 12–17 years (Ministerio de Justicia y del Derecho & Observatorio de Drogas de Colombia, 2019).

In a secondary analysis of the latest national data on psychoactive substance use (from 2019), Scoppetta et al. (2021) established that 67.8% of users were male, that the mean age of onset was 23.2 years for the total population, but 14.6 years for the group aged 12–14 years, and that traditional cigarette use was significantly higher among those who used electronic devices.

Beyond national studies, the search engines contain very few studies done in Colombia, and in general, they are essays or review articles. In data production, only one study was found that estimated consumption proportions, specifically among 200 physicians in Bogotá, estimated the prevalence of use of these devices at 31.4% (Becerra et al., 2021).

A group of experts analyzing regulatory options for the country in 2018 recommended considering electronic devices as tobacco substitutes and not as products that aid smoking cessation (Pulido et al., 2018). However, at the time of writing, five bills to regulate have foundered in the Colombian Congress. According to academic groups and anti-tobacco activists, this results from industry lobbying.

In August 2022, the Colombian Superintendency of Industry and Commerce filed charges against four companies marketing electronic devices in the country, for allegedly violating the rights of children and adolescents in electronic commerce, by providing misleading information regarding the liquids used in the devices and containing nicotine, as well as for failing to properly inform about the risks associated with the use of these devices. The process is ongoing and in the event of a ruling against the companies, they will have to pay fines.

Considering the international context, the evidence of the growing use of electronic cigarettes and vapes among minors, and the lack of better data in Colombia, Corporación Nuevos Rumbos designed and implemented a research program to better understand the evolution of the use of these devices in the country, to contribute to the construction of public policies in this regard.

The Research Program

A research program is an approach to a problem or questions through several investigations, which is compatible with science's vision as a progressive activity aimed at solving problems (Laudan, 1978). In the case of interest here, the problem is the growing use of electronic cigarettes and vapes among minors in Colombia. Does this imply several questions: How widespread is the use among high school students in Colombia? How do high school children come into contact with e-cigarettes and vapes? Why do they stop using electronic cigarettes and vapes? What is the role of parents in this? Do electronic devices work to prevent or reduce conventional cigarette smoking?

It is important to define here that we are particularly interested in high school students in our research program because they represent the underage population exposed to substance use to a large extent.

To start the program, we created a mind map to organize each question, the existing data sources, and the methodologies we will deploy. We defined that we would adopt a mixed and flexible research approach that would adapt to the available resources and the information we obtained.

A *mixed methods approach* is a research methodology that integrates both qualitative and quantitative research methods in a single study (Creswell & Plano Clark, 2017). This approach aims to capture a more comprehensive and nuanced understanding of the research problem by collecting and analyzing numerical and non-numerical data (Johnson et al., 2007).

Mixed methods research typically involves using various data collection techniques, such as surveys, interviews, focus groups, observations, and document analysis, to capture different perspectives and data sources (Tashakkori et al., 2020). Researchers then analyze the data using statistical and non-statistical techniques to provide a complete picture of the research topic (Creswell & Plano Clark, 2017). The primary advantage of a mixed methods approach is that it allows researchers to leverage the strengths of both qualitative and quantitative methods while mitigating their respective weaknesses (Creswell & Plano Clark, 2017).

The methodologies and sources of information established for the program were: quantitatively, the secondary analysis of national studies and survey-type investigations of adolescents in school settings. Within the quantitative approach, we also conducted survey-type studies among high school students. In any case, there is little information in national studies since these investigations are oriented to other topics despite being based on large samples.

In qualitative terms, interviews with teachers, parents, adolescents, and experts; focus groups with adolescents; review of social networks, visits to electronic cigarette stores and vapers. For each of the lines of research, we established a protocol with weekly progress monitoring.

The ethical aspects of the research were discussed among the researchers and then presented and approved by the Institutional Review Board of Corporación Nuevos Rumbos.

Moving Towards Answers

The following is a summary of the main findings we have obtained since March 2022. At the time of writing this chapter, we are 1 year into this research program.

How Widespread Is the Use Among High School Students?

As we said before, few studies in Colombia allow us to know the magnitude of the use of electronic cigarettes and vapes, and none allow us to draw a trend. Table 9.1 summarizes the primary data from the results of the three national studies. The only indicator that was included in all three studies was lifetime prevalence, so it is only possible to get a picture of lifetime exposure but not current use. The only study that estimated the prevalence in the last 30 days was the National Household Survey. However, this estimate is below the acceptable error limit. It is presented here for illustrative purposes only, without claiming to be a reliable estimate.

The studies are not comparable since the first is a household survey, the second is a specific survey of schools, and the third is an electronic survey of university students. The differences in the prevalence size are expected as they are regularly highest among university students, followed by high school students' prevalence, and lowest in general population studies. In any case, it is possible to draw preliminary conclusions from the available data. The first conclusion is that using e-cigarettes and vapes is an event of public health relevance, considering that 5% of the country's entire population would have used these devices at some time and that at least 15% of high school students would have used them as well. The second conclusion is that there is more consumption among males and that prevalence increases with socioeconomic status.

The research program includes the application of a survey of high school students. As of the date of this report, there were 2914 participants from 6 high schools in the two main cities of the country: Bogotá DC and Medellín. Although the number of students surveyed is considerable, the data still does not allow us to conclude the national scope. The prevalence obtained is even much higher than that of national studies; however, it should be kept in mind that these data only correspond to two cities in Colombia where the use of psychoactive substances is regularly higher. Moreover, given that the last national survey was conducted in 2019, it is to be expected that prevalence after 4 years will be higher in the absence of regulation and prevention of this behavior (Table 9.2).

An interesting finding is that the prevalence is similar between males and females. The study most comparable to this one, in this case, the National Youth Tobacco Survey, showed a significant (actual) difference, but the gap was not very large. The qualitative approach in our research program shows that the gap between boys and girls tends to close. In focus groups (to date, we have conducted six focus groups in Bogotá, DC.) the response is that there are more boys than girls but that many girls are increasingly using these devices.

Table 9.1 Key data from the national studies

Research	Subsampling ^a	Lifetime prevalence	Past 30-day prevalence ^b
National Household Survey (2019)	12–65 years old	5.0	0.7
Gender	Male	7.1	1.0
	Female	3.1	0.4
High School ^c	12–17 years old	6.7	0.5
Economic stratum ^d	1	3.1	0.2
	2	7.7	0.5
	3	9.6	0.7
	4, 5, and 6	7.7	2.0
National Youth Tobacco Survey (2017)	13–15 years old	15.4	
Gender	Male	16.5	
	Female	14.4	
Funding ^e	Official	13.7	
	Non-official	26.4	
National Survey to University Students (2016)	16–30 years old	16.6	
Gender	Male	19.7	
	Female	13.9	
Youngers ^f	Less than 18 years old	16.6	
Economic stratum	1	6.9	
	2	10.4	
	3	18.2	
	4, 5, and 6	30.5	

Note: The Table presents the main results on the use of e-cigarettes and vapers extracted from three studies with national coverage. In parentheses the year of the study

^aSubsampling refers to the partitioning of the overall sample that is of interest to the Corporación Nuevos Rumbos research program

^bOnly National Household Survey (2019) estimated the prevalence of the past 30 days

^cHigh School Corresponds to data for persons between 12 and 17 years of age included in the household survey

^dEconomic stratum refers to the socioeconomic classification used in Colombia, which serves as a proxy indicator of the degree of household wealth and ranges from 1 to 6, with stratum 1 being low-low and stratum 6 high. Strata 4 to 6 are joined to reduce the estimation error. This partition was not included in the National Youth Tobacco Survey (2017)

^eFunding refers to the source of the school’s resources. In Colombia, official schools are those in which tuition is free because they are paid for with public resources

^fThis is the youngest age group among university students and of interest to the research program

Table 9.2 Prevalence of e-cigarette and vape use by gender (%)

Prevalence	Male	Female	Total
Lifetime	31.8	32.0	32.1
Past-year	25.3	23.3	24.3
30-day	13.7	12.4	13.1

How Do High School Children Come into Contact with e-Cigarettes and Vapes?

The available data and the lack of regulations in Colombia lead to the conclusion that there is a growing trend in the use of e-cigarettes and vapes among minors. But what is driving this growth? The answer lies in a feedback process that starts with marketing. In the case of Colombia, this marketing works especially on the Internet and in physical stores.

The Nuevos Rumbos team searched the social networks to find out how these devices are marketed and found that there are different types of advertising, among which the participation of young influencers who do not directly invite people to use vapes, but are shown in fun activities in which they are simultaneously vaping and producing a considerable amount of smoke, caught our attention. Focus group participants have seen advertising of the devices or their use through networks such as YouTube, Instagram, and Facebook. They reported that the messages they received through the networks had to do with harm reduction from cigarette use, as well as that use was encouraged through fun activities.

With the quantitative component, we found that the way high school students learned about electronic devices was most frequently from friends (43.9%) and the internet (40.2%). The acquisition of the devices was most frequently done directly in physical stores (34.4%), with friends (30.3%) and through the internet (24.2%). Students also said in the focus groups that the first contact with the devices was through the offer of a peer and that it occurred within the school. In focus groups, students reported that they find the devices in many parts of the city, such as shopping malls and shopping areas and places for piercings and tattoos. They also said that the devices are very easy to obtain, and even cheap, in physical stores, through a friend or through virtual means.

Both in the survey and in the focus groups, adolescents indicated that the motivation to use them was given primarily by friends, curiosity, and product characteristics such as flavors, smells, colors and shapes. In the survey, the most frequent reasons for starting to use them were flavors (28.8%), curiosity (27.8%), stress management (18.1%), and fun (17.3%). However, in the focus groups, we also found that one of the motivations for using electronic devices was to reduce the harm caused by traditional smoking. On the other hand, in the survey, 43.4% of the participants answered that electronic devices are less harmful than traditional cigarettes and 29.9% that both are equal in terms of the harm produced.

Marketing in physical stores consists of displaying products with flashy colors and advertising flavors aimed at minors, according to focus group participants. However, in the observation made by the Nuevos Rumbos team to six stores, it was observed that those located in shopping malls did not openly display products with these characteristics. Earlier in this document we had mentioned an ongoing lawsuit against electronic device companies, among other reasons for including nicotine in products that may reach the hands of minors. There are several issues to analyze. In the first place, in observations subsequent to the opening of the process against the companies, the Nuevos Rumbos team was able to verify that in the stores in

shopping malls the products offered had a label that said “contains nicotine”. On the other hand, in the qualitative approach, some participants said that the nicotine content was something they did not like because it made them dizzy. However, others said that they found the sensation of motion sickness appealing and that sharing that experience was encouraged in their groups.

Why Do They Stop Using Electronic Cigarettes and Vapes?

Knowing why minors use e-cigarettes and vapes is vital in preventing this. In the same vein, knowing why they quit offers clues as to what could be reinforced to prevent their use and to increase cessation. The analysis of the data collected by *Nuevos Rumbos* shows that 24% of those who used electronic devices at some time did not do so in the previous year. We can take 24% as an estimation of cessation.

When asked why they stopped using the devices in the survey, students responded that they were convinced that it could cause harm to their health by 70.9%. In addition, 53.8% answered that they were no longer curious about it, 37% did not find the experience pleasant, and 32.2% could not afford to continue paying for it. Only 16.7% said they left because they had problems with their parents, and 15% because of problems at school. That the experience was not pleasant was mentioned in the focus groups. Several participants stated that the first experience was unpleasant, with coughing, dizziness, shortness of breath, and anxiety.

At this point, we can introduce information regarding the role of parents in this. When asking students who used electronic devices if their parents knew about this, 14.5% said yes, and of these, 42.2% said that their parents agreed with them doing so. In the context of the qualitative approach, one group of participants said that their fathers are smokers and have two attitudes concerning electronic devices. On the one hand, some parents validate the use of the devices, arguing that devices are healthier than ordinary cigarettes. Nevertheless, other participants reported that their parents do not support using electronic cigarettes even though they smoke. Another subgroup of participants described that their parents were unaware of e-cigarettes. According to participants, these parents do not smoke ordinary cigarettes nor use e-cigarettes or vapers.

Do Electronic Devices Work to Prevent or Reduce Conventional Cigarette Smoking?

According to national studies, tobacco use among minors has decreased in Colombia. The latest studies in 2016 showed that 14.5% of high school students smoked in the past year. In 2011, the prevalence was 20.2% (Gobierno de Colombia, 2018); this is the result of restrictions imposed by the Colombian government and a notorious change in the social perception of smoking. On the other hand, using electronic devices that include nicotine could be a renewed door for youngsters going again to tobacco use.

We tried several analytic approaches to test the hypothesis that electronic devices could reduce the odds of consuming ordinary cigarettes. The first approach was to analyze the difference in the age of onset. If the hypothesis were true, there would be more chances of starting traditional cigarettes before electronic devices.

The age of onset for ordinary cigarettes was 13.2 years old, while the age at the beginning of the use of devices was 13.6 years old. The onset of both behaviors was simultaneous. Closer inspection reveals that 42.9% of high school students started smoking traditional cigarettes and using electronic devices at the same age. Also, 37.4% used electronic devices before traditional cigarettes, and 19.7% started with traditional cigarettes. This finding does not support the hypothesis that electronic devices could deter smoking because 37.4% of the students initiated with electronic devices and then started with traditional cigarettes.

Our second approach was to estimate the odds of smoking in the past year, having gender, type of school, age, age at onset, and prevalence indicators of the electronic device use (lifetime, past-year, 30 days prevalence) as predictive variables. In the model, the following variables were significant as classification variables: prevalence of electronic device used in the last 12 months, OR = 1.97, 95% CI [1.08, 3.5], the prevalence of device use in the last month OR = 1.7 95% CI [1.1, 2.5], age in years OR = 1.2, 95% CI [1.1, 1.4], and school attendance OR = 2.3, 95% CI [1.5, 3.4].

In conclusion, we analyzed the age of onset of smoking and device use and found that a significant percentage of high school students started using electronic devices before moving on to traditional cigarettes, suggesting that e-cigarettes may not be an effective deterrent for smoking. The study also found that the prevalence of electronic device use was a significant predictor of smoking in the past year among adolescents, indicating that e-cigarette use may be associated with an increased risk of tobacco use among young people.

Conclusions

The e-cigarette and vape industry experienced explosive growth in several countries, aided by aggressive marketing campaigns that targeted adolescents. The lack of regulations in the industry allowed for the proliferation of various marketing strategies, including the use of the internet and celebrities. These tactics successfully increased the percentage of high school students using electronic devices. The marketing tactics employed by the industry have come under scrutiny, with allegations of targeting teenagers and making ambiguous claims about the health benefits of e-cigarettes. While some countries have banned the devices, such measures have yet to reduce adolescent use effectively.

To address this problem, we adopted a mixed and flexible research program, which integrates qualitative and quantitative research methods to provide a comprehensive and nuanced understanding of the research topic. The methodologies and sources of information established for the program included analyzing secondary

information sources (i.e., national studies), survey-type investigations, interviews, focus groups, review of social networks, and visits to electronic cigarette stores and vapers. Overall, this research program aims to provide insights and data to develop effective policies and interventions to address the growing use of electronic cigarettes and vapes among minors in Colombia.

The use of electronic cigarettes and vapes among high school students in Colombia is of public health concern, with at least 15% of students have used these devices at some point. In comparison, we obtained a lifetime prevalence of 32%. Prevalence is higher among males and increases with socioeconomic status, but the gender gap appears to be closing, according to qualitative findings. However, it is essential to note that the data available is limited, and further research is needed to obtain a more comprehensive and accurate understanding of the situation. The research program includes a survey of high school students, which has yielded a higher prevalence than national studies. However, the data are limited to two cities in Colombia and should not be taken as representative of the national situation.

It appears that marketing is a driving force behind the growing trend of e-cigarette and vape use among minors in Colombia. Marketing efforts primarily occur on the internet and in physical stores and often feature young influencers engaging in fun activities while vaping. High school students learn about e-cigarettes and vapes most frequently from friends and the internet and acquire the devices directly from physical stores, friends, or virtual means. Motivations for use include flavors, curiosity, stress management, and fun, with some participants reporting the desire to reduce the harm caused by traditional smoking. Marketing in physical stores often involves displaying products with flashy colors and advertising flavors aimed at minors, although stores in shopping malls tend to be more cautious about such displays. Some participants in the qualitative research disliked the nicotine content, while others found it appealing and encouraged sharing the experience of motion sickness.

Regarding prevention and cessation, it is noteworthy that 24% of those who have used e-cigarettes and vapes have quit using them, and the most common reason cited for quitting was concern about the potential harm to health. Other reasons for quitting included loss of curiosity and unpleasant experiences. The role of parents is also worth considering, as some parents may validate the use of these devices as a healthier alternative to traditional cigarettes. In contrast, others do not support their use. It is essential to educate parents and young people about the potential risks associated with e-cigarette and vape use and to provide resources for quitting.

The findings suggest that using electronic devices among adolescents may not be an effective deterrent to smoking. A significant percentage of high school students started using electronic devices before moving on to traditional cigarettes, indicating that e-cigarettes may not prevent smoking among young people. Moreover, the prevalence of electronic device use was a significant predictor of smoking in the past year among adolescents, suggesting that e-cigarette use may be associated with an increased risk of tobacco use among young people.

Electronic devices, including e-cigarettes and vapes, are being used by many high school students in Colombia. The prevalence of use is higher among males and

students in public schools. Students use electronic devices for various reasons, including curiosity, peer pressure, and the perception that they are less harmful than traditional cigarettes.

While some students have reported quitting electronic devices, concerns about potential health harms and loss of interest are the primary reasons cited for cessation. Parental influence is also a factor, with some parents supporting the use of electronic devices while others are unaware of or against their use.

Despite restrictions on tobacco use and a decline in the prevalence of traditional cigarette smoking among high school students in Colombia, the use of electronic devices may be associated with an increased risk of tobacco use among young people. Many high school students who use electronic devices also use traditional cigarettes, suggesting that electronic devices may not effectively deter smoking.

Overall, the data suggest that further research is needed to understand the relationship between electronic device use and tobacco use among high school students in Colombia and to develop effective strategies for preventing and reducing tobacco use among young people.

There are several limitations in the scope of our conclusions. Our perspective is that this research program is at least a medium-term effort in which we will obtain more information. One of the areas in which we will improve is the size and representativeness of the sample. We are currently applying the survey in more cities, collecting more information through focus groups and interviews, and visiting more sales sites. As more data become available, we will apply more robust analytical procedures. We present our findings as results that will become more powerful over time.

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Chapter 10

Mental Health of Women in Midlife and Beyond



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Study 1: Subjective Well-Being of Women Aged 40–65 Years: Pessimistic Ideas and Asthenia

In women, the age bracket of 40–65 years, which corresponds to the phase of hormonal adjustment, exhibits a consistent pattern of change. This period is marked by the onset or emergence of internal organ-related ailments and heightens women's susceptibility to stressful situations (Stewart et al., 2018; Sievert et al., 2018; Gordon et al., 2019).

According to the literature, women between the ages of 45 and 60 often experience symptoms such as depressed mood, physical and mental fatigue, and discomfort related to muscle and joint pain (Makara-Studzińska et al., 2015). Specifically, Chinese women in the 40–60 age group commonly report physical and mental exhaustion (90.3%), discomfort in their joints and muscles (88.5%), irritability (78.1%), and sleep disturbances (77.1%) (Chou et al., 2014).

The literature contains numerous studies on the prevalence and characteristics of depressive disorders in women during the perimenopausal and postmenopausal periods (de Kruif et al., 2016). The symptoms typical of “climacteric depression” are also described (Bohan et al., 2018).

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Symptoms common to both asthenia and depression, including weakness, fatigue, and sleep disturbances, can often complicate timely diagnosis. This is further complicated when there are concurrent internal organ diseases. Psychoemotional disorders observed in women during the “period of menopausal transition” and postmenopause are often linked to comorbid symptoms related to internal organ diseases and psychopathological issues resulting from coping with psychosocial factors.

The cognitive aspect of internal experiences during this period is closely intertwined with emotional perception and response. This is often manifested behaviorally through significant lifestyle changes, including the breaking of familiar patterns and the establishment of new ones, which are met with mixed reactions from the immediate social environment, such as family and colleagues.

Hormonal changes typically bring about symptoms that are traditionally categorized as “vegetative,” “metabolic,” and “psycho-emotional” changes, all of which are considered in the “menopausal index” (Kupperman H.S., 1953). The proportion of “psycho-emotional manifestations” during both pre- and postmenopausal phases is notably high (Bromberger et al., 2013; Barazzetti et al., 2016). This high prevalence contributes to increased psychiatric consultations and hospital admissions. Even when not accounting for cases where the onset of a mental disorder coincides with the onset of hormonal changes, there is an evident rise in the demand for psychological support, and in some instances, psychiatric care (Dotlic et al., 2021; Szeliga et al., 2021).

The physical sensations that occur during menopause, along with the associated limitations they impose, and the thoughts that accompany them, can be highly unpredictable. These factors collectively increase a woman’s vulnerability to stressful events that may coincide with this period. Moreover, they do not rule out the possibility of self-destructive behaviors stemming from the depletion of personal resources.

The mood instability commonly seen during the peri- and postmenopausal periods can often resemble hypothyria. Individuals may experience newfound self-doubt in their abilities, particularly in conjunction with pronounced vegetative symptoms. This may lead to a change in self-perception, body image, and a heightened awareness of age-related changes. In response, some individuals tend to withdraw, limiting their interactions primarily to family, while others may seek transformation and attempt to conceal signs of aging through cosmetic procedures and other interventions.

Given the heightened vulnerability of women during the peri- and postmenopausal phases, it is crucial to assess the risk of individuals contemplating suicide (Kim et al., 2021). An early indicator of potential danger may manifest as pessimistic thoughts, which are often associated with the period of age-related changes. These distressing thoughts, which may surface intermittently and become obsessive over time, often revolve around the inevitability of changes in appearance, physical attractiveness, and the ability to effectively fulfill societal roles. They can serve as a foundation for the development of unfounded fears, anhedonia (the inability to experience pleasure), a reevaluation of life values, and, in critical situations, a

devaluation of one's own life. Indiscriminate contemplation of the lack of life's worth (antivital experiences) can lay the groundwork for the emergence of suicidal ideation.

The diagnosis of pessimistic thoughts holds particular significance because an individual experiencing a life situation that fosters a pessimistic view of reality may still be receptive to psycho-corrective intervention.

The objective of this study was to examine the clinical manifestations of asthenia, pessimistic thoughts (ideas), and subjective well-being in women aged 40–65 years with nonpsychotic mental disorders.

Materials and Methods: This study was conducted in the city of Tomsk. A comprehensive examination of 204 women aged 40–65 years seeking treatment for nonpsychotic mental disorders at the Mental Health Research Institute of Tomsk National Research Medical Center was conducted. These women had provided written informed consent to participate in the study. The diagnosis of the current mental disorder was verified in accordance with the diagnostic criteria outlined in the ICD-10. The group of patients under examination included individuals with “Neurotic, stress-related, somatoform disorders,” “Organic nonpsychotic disorders,” and “Affective disorders (Dysthymia).” Exclusion criteria encompassed cases with a confirmed diagnosis of schizophrenia, the presence of dementia symptoms, and mood disorders (excluding Dysthymia). Clinical–psychopathological, physical, psychological, clinical laboratory, and statistical methods were used.

Data on the clinical manifestations of asthenia were supplemented by a rank assessment of fatigue and mood by patients, determination of the severity of asthenia using the subjective Asthenia Rating Scale MFI-20 (The Multidimensional Fatigue Inventory; Smets E.M.A., Garssen B.J., Bonke B., De Haes J.C., 1995).

To quantify the severity of the climacteric syndrome, the Kupperman menopausal index was calculated (Kupperman H.S., 1953).

The clinical interview with women involved an assessment of the presence of pessimistic thoughts over the past year. These thoughts encompassed various aspects such as self-perception, health, family and work relationships, and concerns about the future, with varying degrees of frequency and severity. The content of these reflections included worries about signs of age-related changes in appearance and physique, self-doubt, dissatisfaction with partner relationships (spouse), feelings of loneliness, disappointment in their chosen profession, concerns about their physical health, sensations of fatigue and an inability to cope with everyday life and work demands, a sense of life losing its meaning, feelings of lacking support, a sense of uselessness, and a perception of the hopelessness of their life situation as a whole. It is important to note that not all women experienced these issues.

The scale of subjective well-being (Perrudet-Badoux, Mendelssohn, Chiche, 1988) was used to measure the emotional component of subjective well-being. The average value was 5.5 ± 2 . The higher this indicator was, the lower the subjective well-being of the subject was.

Results and Discussion

Of 204 women at the time of the survey, during a clinical interview, 86 (42.2%) noted that they had pessimistic thoughts with varying degrees of frequency and severity over the past year. Pessimistic thoughts were a sign according to which the patients were divided into two groups: with the absence of this sign (group 1, $n = 118$) and its presence (group 2, $n = 86$). Patients of the second group were younger – 50.0 (45.0–56.0) than women from the first group – 54.0 (48.0–57.0), ($p = 0.014012$).

At the same time, 64 women from group 1 (54.2%) and 45 women from group 2 (52.3%) first requested the care of a psychiatrist, 27 (22.9%) and 18 (20.9%), respectively, were admitted for treatment again, 27 (22.9%) and 23 (26.7%) of the groups had three or more hospitalizations in history. Half of the patients in the first group (50%) and 62.8% in the second group said that this hospitalization was preceded by stressful situations related to relationships with spouses, parents, children, or problems at work. According to these indicators, as well as the level of education, employment, marital status, the patients of both groups did not have significant differences.

In the first group, women who entered the menopause period accounted for 65.3%, in the second – 50.0%. There were no differences in age at menopause onset between groups. The number of postmenopausal women in the first group was significantly higher compared to women in the second group, while 25.6% of patients in the second group were in the period of perimenopause more often than 13.6% in the first ($F = 4.667$; $p = 0.001$).

The structure of nonpsychotic mental disorders in groups 1 and 2 is shown in Figs. 10.1 and 10.2. In the first group, “organic nonpsychotic disorders” were found significantly more often ($F = 4.056$; $p1 = 0.001$), while in the second group “other mental disorders” ($F = 6.371$; $p1 = 0.001$) were found significantly more often, in particular, “panic disorder”, and three cases of “somatoform disorders”. According to the specific weight of the diagnosis “adjustment disorder,” there were no differences between the groups.

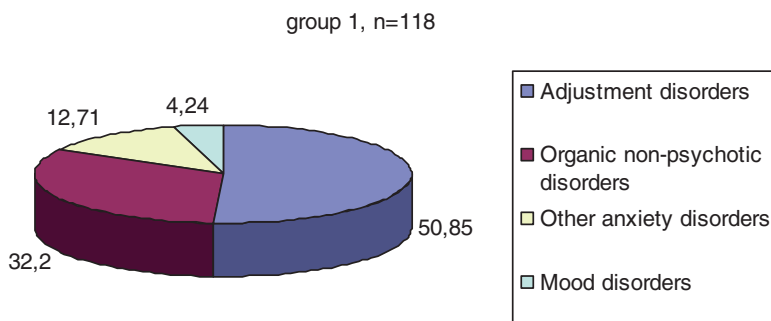


Fig. 10.1 Structure of nonpsychotic mental disorders in group 1 (in %)

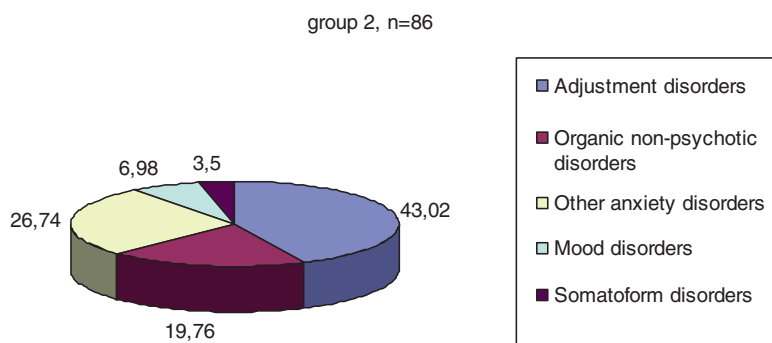


Fig. 10.2 Structure of nonpsychotic mental disorders in group 2 (in %)

Cases of comorbid mental disorders were taken into account: in 32 female patients diagnosed with adjustment disorder, 11 with anxiety disorders in the first group and, respectively, in 17 and 9 women in the second group, the second diagnosis was organic asthenic disorder. The total number of cases of organic disorders was 68.6% (81 out of 118 patients) in group 1 and 50.0% (43 out of 86 women) in group 2. As a result, significant differences were found between the groups in terms of the leading psychopathological syndrome ($\chi^2 = 17.60$; $df = 4$; $p = 0.001476$). One would expect a predominance in the second group, characterized by the presence of pessimistic reflections, a greater frequency of depressive and anxiety-depressive syndromes. However, as the analysis showed, there were no differences between the groups in terms of the proportion of depressive and anxiety-depressive syndromes. The first group significantly differed in the frequency of asthenic syndrome (44.1% vs. 18.6%) ($F = 15.606$; $p = 0.001$), the second group differed in the frequency of anxiety (16.1% in the first group vs. 24.4% in the second; $F = 2.152$; $p = 0.001$) and anxiety-phobic syndromes (3.4% in the first and 11.6% in the second group; $F = 5.276$; $p = 0.001$).

Significant differences between the groups were found for all indicators of the MFI-20 Asthenia Rating Scale: higher indicators (hence, the severity of asthenia) were noted in the second group, in particular, the total indicator of asthenia, according to the subscales “General fatigue,” “Reduced activity,” “Decreased motivation,” “Physical fatigue,” and “Mental fatigue” (Table 10.1).

Significant differences between the groups were found in the proportion of mood complaints of varying severity ($\chi^2 = 30.28$; $df = 3$; $p = 0.000001$). Thus, in the first group, the number of patients who did not present such complaints was higher: 44 (37.3%) out of 118 patients than in the second group – 8 (9.3%) out of 86 ($F = 23.958$; $p = 0.001$). The number of women who noted instability, mood variability during the day, did not differ significantly in the groups. Patients with complaints of low mood in the first group were 26 (22.03%), in the second – 38 (44.2%) ($F = 11.328$; $p = 0.001$), and those who rated their mood as “complete apathy,” respectively, 2 (1.7%) and 9 (10.5%) ($F = 7.891$; $p = 0.001$).

Table 10.1 Indices of the fatigue according to MFI-20 in women of group 1 and group 2 at the moment of the examination (Me ($Q_1 - Q_3$))

Indicators	Group 1 <i>n</i> = 118	Group 2 <i>n</i> = 86	<i>p</i>	<i>U</i>	<i>Z</i>
Total score of fatigue	55.5 (48.0–62.0)	66.0 (58.0–72.0)	0.000000	2912.5	–5.19133
General fatigue	14.0 (11.0–16.0)	16.0 (13.0–18.0)	0.000249	3548.5	–3.66383
Reduced activity	11.0 (8.0–13.0)	13.0 (11.0–16.0)	0.000028	3330.0	–4.18861
Reduced motivation	8.5 (6.0–11.0)	11.0 (8.0–13.0)	0.000038	3360.0	–4.11656
Physical fatigue	12.0 (10.0–14.0)	13.0 (11.0–16.0)	0.000612	3647.5	–3.42606
Mental fatigue	10.0 (7.0–12.0)	12.0 (9.0–14.0)	0.000654	3655.0	–3.40805

Note: *p* – statistical significance of differences between groups according to Mann–Whitney *U*-criterion

Identified complaints of low mood and observed hypothyria in patients of the second group allowed us explaining the presence of pessimistic thoughts. But since the selection conditions excluded all cases of affective disorders, except for dysthyria, an analysis of the factors characterizing the mental and somatic state of patients with the most pronounced complaints of depressed mood was done. In the first group, these were 23.7% of women, in the second – 54.7%. These subgroups differed significantly in the incidence of anxiety disorders (18% vs. 30%) and cases of thyroid disease (32.1% vs. 55.3%), with higher rates in women with pessimistic thoughts compared to patients without them.

In general, groups 1 and 2 did not differ in the frequency of symptoms such as headache, which was observed in 73% of patients in the first group and 76.7% in the second group; dizziness (respectively – 57.6% and 65.1%); sleep disorders (78.8% and 87.2%); drowsiness (44.1% and 54.7%); “hot flashes” (39.8% and 48.8%); asthma attacks (15.3% and 24.4%); and vegetative crises (28% and 38.4%). But there were differences in the frequency of complaints about impaired concentration and memory, which were significantly more common in patients of group 1, in contrast to women in the second group ($\chi^2 = 6.29$; $df = 1$; $p = 0.012138$; $F = 6.351$; $p = 0.001$). At the same time, the second group was significantly more likely to include patients with increased excitability, irritability, and who experienced palpitations at rest.

A comparative analysis of group 1 and group 2 showed no significant differences in the incidence of concomitant diseases such as hypertension (respectively, in groups) – 79.7% (94/118) and 71.0% (61/86); thyroid disease (more often chronic thyroiditis) – 47.5% (56/118) and 50.0% (43/86); diseases of the gallbladder, biliary tract, and pancreas – 39.8% (47) and 39.5% (34); diseases of the esophagus, stomach, and duodenum – 23.0% (27) and 16.3% (14); irritable bowel syndrome – 15.3% (18) and 14.0% (12); type 2 diabetes mellitus – 6.8% (8) and 3.5% (3); impaired glucose tolerance – 14.4% (17) and 9.3% (8); obesity – 39.8% (47) and 33.7% (29); and others. At the same time, group 1 had more cases of dyslipidemia (58.5%) compared to group 2 (44.2%) ($\chi^2 = 4.07$; $df = 1$; $p = 0.043594$; $F = 4.088$; $p = 0.001$), which was probably expected for an older age group. It was noteworthy that the groups differed in the age at which hypertension was diagnosed ($p = 0.032584$;

Table 10.2 Indicators of the menopausal index and subjective well-being in groups 1 and 2 (Me ($Q_1 - Q_3$))

Indicators (in points)	Group 1 <i>n</i> = 118	Group 2 <i>n</i> = 86
Menopausal index	28.0 (23.0–35.0) <i>p</i> = 0.000000; <i>U</i> = 2771.5; <i>Z</i> = –5.52997	37.0 (30.0–43.0)
Subjective well-being	6.0 (4.0–7.0) <i>p</i> = 0.000000; <i>U</i> = 2912.0; <i>Z</i> = –5.19253	7.0 (6.0–8.0)

Note: *p* – statistical significance of differences between groups according to Mann–Whitney U-criterion

U = 2283.5; *Z* = –2.13718), which was 48.0 (43.0–52.0) years – in the first group and 45.0 (41.0–49.0) years in the second group.

Patients with pessimistic thoughts (group 2), in contrast to women without them (group 1), were characterized by higher rates of the menopausal index, as well as subjective well-being, corresponding to a low level of real emotional well-being of women in the second group (Table 10.2).

When assessing subjective well-being in patients with various psychopathological syndromes at the time of the examination, a lower level of subjective well-being was found in patients with depressive, anxiety-depressive, and anxiety-phobic syndromes, which also differed in more pronounced manifestations of asthenia (Belokrylova et al., 2020).

The analysis showed that the symptoms that occurred in the premenopausal period, associated with the onset of hormonal changes, were unexpected for most women and, for quite a long time, lacked diagnostic certainty and unambiguity. Patients in whose condition there were pronounced vegetative symptoms, manifestations of anxiety, fear, along with asthenia, noted an unstable mood with a tendency to hypothyria and “pessimistic reflections,” often reinforced by the dissatisfaction with the immediate environment (family members, work colleagues) with a decrease in activity, efficiency, performance of patients, and their fixation on their health. The absence or lack of understanding, support, given the formed stereotypes of the obligatory performance of both official and household chores (which became difficult to cope with) within the framework of the role functioning of a woman, aggravated her well-being.

At this stage, it was important for a woman to contact a psychotherapist. Timely psychological and/or psychotherapeutic assistance provided prevented the patient from growing self-isolation and fixation on negative events. As a result of the analysis, a number of “indicators of suicidal risk” were identified (Xu et al., 2016) in women with nonpsychotic mental disorders aged 40–65 years who exhibited pessimistic reflections, in particular: situational (in 62.8% of cases of their hospitalization, difficult life situations preceded them – death of relatives, divorce, infidelity, job loss, debts, illness, etc.); emotional; cognitive; less often behavioral (when self-isolation was observed, more often forced due to the loss of relatives, spouse or retirement).

Conclusion

Hence, the most stress-vulnerable patients were those who fixated on any, even minor, age-related changes and were excessively engrossed in pessimistic thoughts concerning lost external attributes, the bleakness of the future, and the futility of efforts to enhance their situation. These individuals tended to be younger (25.6% of them were in the perimenopausal period, while 50% were in the postmenopausal period). They also exhibited a higher frequency of anxiety and anxiety-phobic disorders, elevated scores on the menopausal index, and a low level of genuine subjective well-being.

When conducting a comprehensive examination of women with nonpsychotic mental disorders aged 40–65 years, in cases where pessimistic thoughts were detected (as a mandatory object for diagnosis), psychological and psychotherapeutic assistance should be provided in a timely manner aimed at preventing self-destructive behavior and improving the quality of life of a woman.

Study 2: Clinical Dynamics of Hysterical Disorders in Women in Menopause

The existing literature addressed “climacteric hysteria,” but there was limited information in both Russian and foreign sources regarding the prognosis of hysterical manifestations in menopausal women with nonpsychotic mental disorders. Furthermore, there was a lack of clear guidelines for the use of psychocorrection and social rehabilitation methods for these disorders. This underscored the significance of studying the dynamics of hysterical manifestations concerning age-related ontogenesis, particularly in the context of the aging process in women during menopausal age.

Characteristics of the material – patients being treated at the clinic of Mental Health Research Institute of Tomsk National Research Medical Center. Two groups were formed: the main study group – 93 patients with hysterical manifestations in the structure of nonpsychotic mental disorders, whose mean age was 51.49 ± 4.13 years, and the comparison group – 34 patients without hysterical manifestations, mean age – 51.44 ± 5.0 years. The patients of the main group and the comparison group were matched in age (climacteric), nosological structure of the disease (nonpsychotic mental disorders), and sociodemographic characteristics.

In the main group of patients, adjustment disorder was observed less frequently compared to the comparison group (35.48% and 41.17%, respectively). Similarly, anxiety disorders were less prevalent in the main group (27.96%) than in the comparison group (29.41%). Additionally, organic emotionally labile (asthenic) disorder was found in fewer cases in the main group (11.83%) compared to the comparison group (14.71%). Somatoform disorders were also less common in the main group (10.75%) than in the comparison group (14.71%). Notably, hysterical personality

disorder was detected in 9.68% of patients in the main group, and dissociative disorders were present in 4.3% of cases, with no statistically significant difference ($p > 0.05$) between the two groups.

The main research methods were clinical and psychopathological method, psychometric method with an assessment of the severity of hysterical manifestations, and psychological method.

Results The initial stage of the fixation of hysterical manifestations in patients of the main group was characterized by infantilism, self-centeredness, a desire for personal gain, and a tendency to downplay the interests of others. They often displayed symptoms of the disease in a dramatic manner, mimicking hysterical behavior to gain advantages in their studies or to reduce parental expectations. In the patients' childhood medical history in the main group, there were isolated incidents of deliberately falling to the floor, accompanied by screaming, crying, and kicking, typically in response to parental refusal to immediately fulfill their requests.

Psychotraumatic factors for menopausal women with hysterical manifestations that have statistical significance were the following: chronic stressful situation (80.65%); from family psychogenies – divorce from husband, infidelity of husband (60.22%); from social psychogenies – a low level of material security (60.22%), payment of cash loans (38.71%); from production psychogenies – unwanted retirement, dismissal, demotion, dissatisfaction with wages (73.12%); from psychogenic threats to health – the deterioration of one's own health (56.99%), the health of a spouse and children (40.86%); from psychogenies in connection with the onset of menopause – the coming old age, helplessness, serious illness, disability (59.14%), loss of femininity, attractiveness, sexuality (37.63%). Patients of the main group, accustomed from childhood to dramatize any non-standard situation, hyperbolically translating it into the category of crisis, insoluble one, were characterized by a hysterical response to psychotraumatizations, which increased hysterical manifestations in menopausal age.

The nosological structure and symptoms of nonpsychotic mental disorders in menopausal women with hysterical manifestations were presented as follows:

- *Adjustment disorder* (F43) (47–37.01%) made up the largest group – more than a third of the research sample of menopausal patients with nonpsychotic mental disorders, with a tendency to a lower incidence in patients of the main group (33–35.48% and 14–41.17%; $p > 0.05$). The risk of adjustment disorder increased in menopausal age with simultaneous and prolonged exposure to stress factors.
- *Anxiety disorders* (F41) (36–28.35%) – were observed in more than one forth of cases, with a tendency to approximately the same occurrence in patients of both groups (26–27.96% and 10–29.41%; $p > 0.05$).
- The main components of the anxiety disorder were tension and autonomic hyperactivity. Anxiety-phobic symptoms had a moderate clinical course. Anxious response caused by psychosomatic manifestations and vegetative disorders ended with a decrease in the level of general activity, sadness, dysphoria, anhedonia, and apathy.

- In patients of the main group, a tendency to a lower frequency of *organic emotionally labile (asthenic) disorder* (F06.6) (16–12.6%) was typical than in the comparison group (11–11.83% vs. 5–14.71%; $p = 0.05$), accompanied by a rapid change in the psycho-emotional state – from a pronounced expressive (anxiety, anger, fear, discontent, and distrust towards others) to a hypochondriacal or asthenic orientation with apathy, resentment, demonstrative capriciousness.
- *Somatoform disorders* (F45) (15–11.81%) in patients of the main group tended to be less common than in the comparison group (10–10.75% and 5–14.71%; $p > 0.05$). Increased palpitation, blood pressure, anxiousness, uneasiness of the esophagus, difficulty breathing with coughing, pain and cramps in different parts of the body without apparent causes with negative results of many medical examinations. If the severity of somatic pathology was subjectively overestimated by patients, before the diagnosis of somatoform disorder, the patients of the main group were observed and treated for a long time (sometimes up to 10 years or more) without effect by internists, with resistance to therapy, tolerance to treatment, which in some cases caused social deprivation.
- *Hysterical personality disorder* (F60.4) (9–7.09%) was recorded only in patients of the main group (9–9.68%; $p > 0.05$). It was characterized by personal disintegration with hysterical reactions from childhood and adolescence at the prenosological level. In menopausal age, decompensatory reactivity of hysterical symptoms occurred with complaints of a hysterical hypochondriacal nature, which was the reason for contacting a psychiatrist and making a diagnosis of hysterical personality disorder.
- *Dissociative disorders* (F44) (4–3.14) were observed only in patients of the main group (4–4.30%; $p > 0.05$). In patients with a tendency to increased reflection, dissociative attacks proceeded with a temporary change or loss of one of the functions of the body as a result of a psychological conflict and were expressed as astasia-abasia, a hysterical coma with anxious fixation. Conversion in the form of pain sensations testified to fixation at the physiological level of experience; in conversion asthenia, complaints of “incredible fatigue” predominated. In patients with dissociative disorders, intrapersonal conflicts caused by exposure to psychotraumatic factors transformed into hysterical symptoms, often with a sudden onset and end, with remission.

Three types of responses were identified in crisis (psychogenic) situations in menopausal women with hysterical manifestations in the structure of nonpsychotic mental disorders:

- *Anxious-depressive* type of response in crisis (psychogenic) situations (73–57.48%), according to anamnesis and clinical observation, in the main group was noted significantly more often ($p < 0.05$) than in the comparison group (63.44% and 41.18%, $p < 0.05$).
- *Somato-hypochondriacal* type of response in crisis (psychogenic) situations (45–35.43%), according to anamnesis and clinical observation, was significantly ($p < 0.01$) less common in patients of the main group than in the comparison

group (26.88% and 58.82%) who had diagnoses of organic emotionally labile (asthenic) disorder (11.83% and 14.71%), somatoform (10.75% and 14.71%), and dissociative (4.3% and 0.0%) disorders.

- A *psychopathic* type of reaction in crisis (psychogenic) situations (73-9.68%) was noted only in patients of the main group diagnosed with hysterical personality disorder ($p > 0.05$), expressed in the form of dysphoria, a violent reaction even to minor psychogeny.

The study of the stages of menopausal age revealed a significantly more frequent increase in hysterical manifestations and the formation of nonpsychotic mental disorders in premenopause (72.04% and 50.0%; $p < 0.05$) than in menopause (13.98% and 26.47%) and postmenopause (13.98% and 23.53%). Hormonal changes that began in premenopause were associated with a decrease in psychomotor tone and the ability to control emotions, a tendency to anxiety, hypochondria, fatigue, and excitability.

Evaluating the time course of menopause in female patients with hysterical manifestations in the structure of nonpsychotic mental disorders was based on an informative sign - the level of menopausal disorders, that was the severity of the menopausal syndrome according to the Modified Menopausal Index (MMI) questionnaire (Balan et al., 2021), highlighting the most significant symptoms - neurovegetative, metabolic (metabolic-endocrine), psycho-emotional ones, characterized by moderate and pronounced severity.

Moderately pronounced neurovegetative disorders were characterized by a tendency to occur only in the main group in patients with hysterical personality disorder and dissociative disorders (9.68% and 4.3%); severe neurovegetative disorders were observed in the main group and the comparison group in patients with somatoform disorders (10.75% and 14.71%). Moderately pronounced metabolic disorders at the trend level were noted in the main group and the comparison group in patients with the organic emotionally labile (asthenic) disorder (11.83% and 14.71%). Severe psycho-emotional disorders were characterized by a trend toward occurrence in the main group and the comparison group in patients with adjustment disorder (35.48% and 41.17%) and anxiety disorders (27.96% and 29.41%).

Levels of anxiety and depression in climacteric patients with hysterical manifestations in the structure of non-psychotic mental disorders were determined by the Hospital Anxiety and Depression Scale (HADS) during the period of admission of patients for treatment in a hospital. In the main group of patients, when compared with the comparison group according to HADS with pronounced significance ($p < 0.001$), subclinically expressed levels of anxiety (78.49% and 47.06%) and depression (39.78% and 23.53%) were found more often at the stage of admission to the psychiatric unit. At the same time, there was a trend toward a rarer frequency of standard values of anxiety (11.83% and 23.53%), depression (60.22% and 76.47%), clinically pronounced anxiety (9.68% and 29.41%), and the absence in both groups of the state of clinically pronounced depression.

Levels of personal and situational (reactive) anxiety in climacteric patients with hysterical manifestations in the structure of nonpsychotic mental disorders were studied according to the Spielberger–Khanin Self-Assessment and Anxiety Scale: patients with pronounced significance ($p < 0.05$) were more likely to have moderate personal anxiety (54.84% and 32.35%); moderate (41.94% and 20.59%) and severe (54.84% and 32.35%) situational (reactive) anxiety.

There was a significant increase in active visits to doctors in polyclinics, health-care facilities, ambulances, and medical centers by patients in the main group due to worsening mental and somatic health, including intensified hysterical manifestations and the development of mental disorders ($p < 0.01$). This frequency was notably higher than in the comparison group (50.54% versus 23.53%). Conversely, passive treatment at the insistence of relatives was significantly less common among patients in the main group ($p < 0.01$) compared to the comparison group (49.46% versus 76.47%).

In addition to the increase in psychopathological symptoms (internal tension, anxiety, fear) and the deterioration of the somatic condition, the reason for seeking help was the increase in the manifestations of menopause. A rather high percentage of passive requests in patients of the main group was explained by the hysterical repression of disturbing thoughts and feelings.

Motivation for the treatment of climacteric patients with hysterical manifestations in the structure of nonpsychotic mental disorders. In the main group of patients, when compared with the comparison group with pronounced significance ($p < 0.05$), more often (64.52% and 58.82%) there was inadequate, negative motivation for treatment.

In patients of the main group, when compared to the comparison group with pronounced significance ($p < 0.05$), fear of the upcoming treatment and possible complications (32.26% and 17.65%), an ongoing search for new methods of treatment with a rapidly growing disappointment in them because of a contradiction with their model of quickly expected results (31.18% and 17.65%), disagreement with the treatment proposed by the doctor, since the drugs allegedly have an unusual effect, incomprehensible to doctors (27.96% and 14.71%) were revealed. At the same time, there was a tendency toward a rarer occurrence of such factors of attitude to treatment as the desire to get rid of the disease in any way (4.30% and 29.41%), confidence in the success of the upcoming treatment (4.30% and 20.58%).

The inclination of patients in the main group to seek the attention of a doctor was linked to their need to be at the forefront of others' attention. This also clarified their preference for treatment by authoritative doctors. Their motivation was to boost their own self-esteem and validate the legitimacy of their overt complaints about a "serious condition" or "unrecognized pains." They actively sought consultations from renowned medical experts for this purpose. However, when subjective complaints failed to align with the results of objective examinations and, thus, did not pose a threat to their well-being, such statements were often accompanied by skepticism toward doctors, with accusations of incompetence and expressions of irritability.

Complex therapy in menopausal women with hysterical manifestations in the structure of nonpsychotic mental disorders, in addition to psychopharmacotherapy to eliminate or alleviate psychopathological symptoms, included non-drug therapy, neurometabolic therapy, and correction of menopausal disorders.

Stages of inpatient-outpatient therapy of patients with nonpsychotic mental disorders included: (1) clinical-diagnostic stage (using clinical-psychopathological, clinical-dynamic, psychological methods), (2) therapeutic measures, (3) preventive and rehabilitation measures (outpatient support).

At stage I (clinical-diagnostic), taking into account the available medical documentation, the dynamics of the development of nonpsychotic mental disorders and the increase in hysterical symptoms in patients of the main group were followed up, and an individual treatment plan was developed. The purpose of stage II of the (main) differentiated curation was the leveling or mitigation of the course of the underlying mental disorder and the severity of hysterical manifestations through individually differentiated treatment and rehabilitation measures. In general, psychopharmacotherapy and psychotherapy were carried out based on the principles of continuity, stages, and differentiation in the treatment of menopausal patients.

At the outpatient (final) stage, supportive psychotherapy was aimed at correcting the anxious and suspicious hysteroid stereotype of behavior, stabilizing mental well-being in the personal, interpersonal, and professional spheres with the involvement of reserve-volitional resources in order to restore the essential meaning of life in menopausal age based on self-control and personal responsibility. Compliance of patients with a doctor for a long period reduced the frequency of their request for help by internists.

Efficiency of Therapy According to the Results of Follow-Up of Menopausal Women with Hysterical Manifestations

In order to study the effectiveness of the rehabilitation of menopausal women with hysterical manifestations in the structure of nonpsychotic mental disorders, indicators of satisfaction with social functioning at the beginning and end of therapy were determined. At the time of admission to the Borderline States Department, patients of the main group with pronounced significance were “not satisfied” more often ($p < 0.05$) in comparison with patients of the comparison group (64.52% and 58.82%); however, they were less likely to be “rather not satisfied than satisfied” (35.48% and 41.18%) with parameters such as life in general, physical performance, intellectual productivity, family lifestyle, rest, leisure, relationships with relatives, communication with friends. At the end of therapy, patients of the main group statistically significantly more often ($p < 0.05$) than patients of the comparison group were “rather satisfied than dissatisfied” (68.82% and 47.06%), and also with pronounced significance less often ($p < 0.05$) were “completely satisfied” (31.18% and 52.94%) with these parameters.

The presented results confirmed the positive dynamics of clinical and social indicators according to follow-up data for 3 years, which allowed us to consider the developed and implemented algorithm for managing menopausal patients with hysterical manifestations in the structure of nonpsychotic mental disorders in the form of three complex therapy programs effective.

Study 3: Social Adaptation of Women of Climacteric Age with Bipolar Disorder

The vulnerability of women to stressful events during the period of hormonal adjustment becomes especially pertinent when there is a history of psychopathological disorders or a diagnosed mental disorder, whether it has been treated or not. This vulnerability is particularly notable in women with bipolar disorder, as the hormonal changes occurring during menopause may exacerbate the severity of the illness.

A meta-analysis of nine studies including 273 women diagnosed with bipolar disorder (BD) found an increase in bipolar symptoms during perimenopause and postmenopause (Perich et al., 2017a, b). The results of the study, which included 50,273 women aged 40–60 years, showed association of symptomatic menopause with an increased risk of transition from major depression to bipolar disorder (Marsh et al., 2015; Chen et al., 2017).

Various risk factors for bipolar disorder recurrence and instability during the menopausal transition have been discussed in the literature. Intense hormonal fluctuations during menopause are accompanied by an imbalance of various forms of estrogen. According to the “estrogen withdrawal theory,” the appearance or worsening of mood symptoms in perimenopausal women is due to a significant decrease in the peripheral concentration of estradiol. The question of how neuroregulatory changes during the menopausal transition affect mood is still open.

The selection of psychopharmacological treatment for bipolar disorder in women aged 40–60 years should be carried out by taking into account the various stages of the menopausal transition. It must be remembered that many drugs for the treatment of bipolar disorder affect bone mineral density, causing osteopenia and osteoporosis (Goodman et al., 2007; Zhidkova et al., 2016).

The purpose of this study was to assess the level of social adaptation of menopausal women suffering from BD, with the determination of the frequency of occurrence of cases of BD comorbidity with other mental disorders in this category of patients.

Material and Methods A total of 164 patients with a verified diagnosis of bipolar disorder were examined in the clinic of Mental Health Research Institute of Tomsk National Research Medical Center in accordance with the ICD-10 diagnostic criteria.

Clinical follow-up, clinical–psychopathological, psychometric, and statistical methods were followed. The level of quality of life and social functioning of patients in various spheres of life was determined using the questionnaire “The Social Adaptation Self-evaluation Scale” (M. Bosc, A. Dubini, V. Polin, 1997).

Results Among the examined patients, females predominated – 70.1% ($n = 115$). Of these, 56 women of menopausal age (from 45 to 60 years) were selected, which amounted to 48.7%. The mean age of the studied patients was 53.3 ± 5.2 years. In

52.1% of cases, the family history was aggravated by mental disorders. A significant proportion of patients (57.1%, $n = 32$) were single: never married – 12.5%, divorced – 28.5%, widowed – 16.1%. When assessing the labor status, it turned out that 17.9% did not work due to a mental disorder, half of them had a disability. The current mental state of the patients was determined by the clinical picture of a depressive episode – 66.1% ($n = 37$), hypomanic episode – 1.8% ($n = 1$), and mixed episode – 32.1% ($n = 18$).

Twenty nine patients (51.8%) were diagnosed with BD type I, 27 (48.2%) – BD type II. Clinical and dynamic indicators of bipolar disorder in the group of examined patients are presented in Table 10.3.

In the study sample, in almost half of the cases (44.6%, $n = 25$) bipolar affective disorder occurred in comorbid relationship with other mental disorders. Four individuals were diagnosed with two comorbid disorders. In 25.0% of cases ($n = 14$), along with bipolar disorder, an anxiety disorder was detected, in 16.1% ($n = 9$) a personality disorder, in 8.9% ($n = 5$) alcohol dependence, and in 1.8% ($n = 1$) – obsessive-compulsive disorder.

Depending on the total number of points on the social adaptation self-evaluation scale (SASS), the patients were divided into three subgroups (Fig. 10.3): with poor social adaptation (from 0 to 22 points), with difficult social adaptation (from 22 to 35 points), and with good social adaptation (from 35 to 52 points).

An evaluation of the level of social adaptation of the examined women showed that a large proportion in this sample were patients with poor social adaptation ($p < 0.05$, X2-statistics).

Table 10.3 Clinical-dynamic indicators of BD in the group of examined female patients

Characteristics	
Age at onset of BD, ME [25 and 75 quartiles]	39 [28.5;44.5]
Duration of BD, years, ME [25 and 75 quartiles]	15.5 [11;26.5]
Number of affective episodes, ME [25 and 75 quartiles]	11 [5;18]
Atypical symptoms in the structure of depression, % (n)	69.6 (39)
Seasonal pattern of the course of BD, % (n)	23.2 (13)
Suicidal attempts in the anamnesis, % (n)	21.4 (12)
Psychotic symptoms in the course of BD, % (n)	10.7 (6)

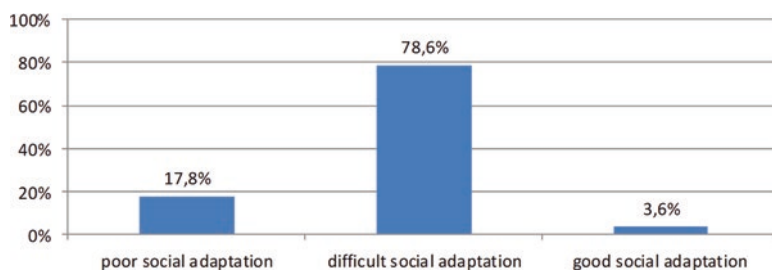


Fig. 10.3 Level of social adaptation of women of climacteric age with BD

Thus, in the group of inpatients suffering from bipolar disorder, women predominated, while about half of them (48.7%) were at menopausal age.

BD in patients of menopausal age, as well as in other age groups, had a high level of comorbidity with other mental disorders and negatively affected the ability to work and the level of social adaptation of patients. A comparative evaluation of the clinical manifestations of bipolar disorder, depending on the presence and severity of symptoms of the menopausal transition, remained relevant.

Study 4: Problems of Treatment of Schizophrenia

Schizophrenia in women tends to begin at an older age than in men, and there are gender differences in responses to antipsychotic therapy and specific neuroendocrine adverse events (Abel et al., 2010). The role of estrogen as an add-on drug in the treatment of schizophrenia is not yet clear due to methodological differences between several randomized-controlled trials, and there is no convincing advantage of it over placebo (Chua et al., 2005); however, treatment strategies should be based on taking into account gender differences in order to qualitatively meet the specific needs of patients and the potential improvement in mental state. However, in routine psychiatric practice, women with schizophrenia are traditionally treated in the same way as men, with no emphasis on side effects in different genders (Kelly, 2006).

Metabolic syndrome (MS) in patients with schizophrenia remains an urgent problem that complicates the course of the disorder and is a risk factor for the development of life-threatening cardiovascular diseases and, as a result, early mortality.

One of the leading risk factors for the development of MS in patients with schizophrenia is recognized as psychopharmacotherapy, including therapy with second-generation antipsychotics (Fonseka et al., 2016). In addition, female gender is a risk factor for the development of MS (Pucci et al., 2017; de Caluwe et al., 2019).

The need for personalized management of a patient with schizophrenia, taking into account the physiological, psychological, and social role needs of men and women with schizophrenia, is also indicated by other authors (Seeman, 2021). Thus, the data of existing studies are incomplete, which determines the relevance of this study.

Patients and Methods

The study included persons who were hospitalized in psychiatric clinics in the Siberian region. The inclusion criteria for the study were the age of patients from 18 to 60 years, a verified diagnosis of schizophrenia according to ICD-10. The exclusion criteria were the presence of organic and neurological disorders, severe somatic diseases leading to organ failure, refusal to participate in the study.

The sample included 517 patients with schizophrenia: 248 women (48.0%) and 269 men (52.0%).

Measurement of waist circumference, blood pressure, and evaluation of biochemical parameters were used to verify the metabolic syndrome based on IDF (International Diabetes Association) criteria (2006). Blood serum obtained according to the standard method by separating erythrocytes by centrifugation (2000 g, 20 min at a temperature of +4 °C in a centrifuge with cooling OrtoAlresaDigicen 21R (Spain)) was used as the test material. An objective evaluation of the severity of clinical and psychopathological symptoms was performed using the Positive and Negative Syndrome Scale (PANSS) [Kay et al., 1987].

All patients were divided into two groups depending on the presence of MS: (1) 139 persons with MS and (2) 378 patients without MS.

Statistical data processing was carried out using the Statistica for Windows standard application package.

Results and Discussion

Two groups were compared for a number of clinical-dynamic parameters (Table 10.4).

The groups were also compared according to a number of sociodemographic parameters (Table 10.5).

Group comparisons were made according to the profile of antipsychotic therapy received (Table 10.6).

The present study shows that patients with schizophrenia with MS and without MS are different in a number of clinical-dynamic parameters. So, the mean age of patients with MS was statistically significantly higher than in patients without it.

Since in the group of patients with schizophrenia with MS there were statistically significantly more women than men. We also compared two subgroups – women with MS and men with MS – according to clinical and dynamic characteristics and the profile of antipsychotic therapy received (Table 10.7).

According to the received data, mean age, the average duration of the disease, and the mean age of onset of the disorder in women with MS were statistically significantly higher than in men with MS.

Also, in 476 patients from the total sample of patients, a study of the level of prolactin in the blood serum was carried out. In the female part of the sample of reproductive age, blood was taken in the first phase of the menstrual cycle.

Table 10.4 Clinical-dynamic characteristics of patients with schizophrenia depending on the presence or absence of MS

Characteristics	Patients with MS (<i>n</i> = 139)	Patients without MS (<i>n</i> = 378)	<i>p</i>
Age, years, Me [Q1;Q3]	44 [34;54]	37 [30;47]	0.000025
Sex, m/f, <i>n</i> (%)	56 (40.2%) / 83 (59.8%)	213 (56.3%) / 165 (43.7%)	0.001
Age of debut of schizophrenia, years, Me [Q1;Q3]	26 [21;31]	23 [19;29]	0.002
Duration of the illness, years, Me [Q1;Q3]	17 [9;23]	12 [6;20]	0.0007
Indicators of PANSS, Me [Q1;Q3]			
PANSS positive symptoms	21 [17;25]	22 [18;26]	0.067
PANSS negative symptoms	25 [21;28]	25 [21;28]	0.992
PANSS general psychopathological symptoms	52 [43;57]	52 [45;59]	0.337
PANSS total score	100 [85;109]	100 [88;111]	0.282

Table 10.5 Sociodemographic characteristics of patients with schizophrenia depending on the presence or absence of MS

Indicators	Patients with MS (<i>n</i> = 139)	Patients without MS (<i>n</i> = 378)	<i>p</i>	
Education, <i>n</i> (%)				
Higher	31 (22.3%)	80 (21.2 %)	0.600	
Incomplete higher	13 (9.4 %)	36 (9.4 %)		
Secondary professional	60 (43.2 %)	142 (37.6 %)		
Secondary	23 (16.5%)	86 (22.8%)		
Incomplete secondary	12 (8.6 %)	34 (9.0%)		
Marital status, <i>n</i> (%)				
Married	21 (15.1%)	44 (11.6%)	p=0.292	0.016
Not married	85 (61.1%)	279 (73.8%)	p=0.006	
Divorced	33 (23.8%)	55 (14.6%)	p=0.014	
Social status, <i>n</i> (%)				
Employed	15 (10.7%)	39 (10.3%)	0.776	
Unemployed	23 (16.5%)	68 (17.9%)		
Students/trainees	2 (1.6%)	11 (3.1%)		
Persons with disability	99 (71.2%)	260 (68.7%)		

Hyperprolactinemia was diagnosed when a registered prolactin level was above 25 ng/ml in women and above 20 ng/ml in men. A total of 196 patients agreed to complete the Udvald for Kliniske Undersogelser Scale (UKU).

Statistically significant instances of hyperprolactinemia were more frequently observed in women, which was consistent with the data of previous studies (Anghelescu et al., 2000). In this way, female sex can be considered a risk factor for the development of hyperprolactinemia. The pharmacological profile of the antipsychotics taken, and their doses in terms of the chlorpromazine equivalent did not

Table 10.6 Profile of received antipsychotic therapy in patients with schizophrenia depending on the presence or absence of MS

Indicators	Patients with MS (<i>n</i> = 139)	Patients without MS (<i>n</i> = 378)	<i>p</i>
Duration of antipsychotic therapy, Me [Q1;Q3]	10 [3;17]	9 [3;16]	0.501
Chlorpromazine equivalent, Me [Q1;Q3]	434.8 [225;687.5]	450 [250;750]	0.962
Basic antipsychotic therapy, <i>n</i> (%)			
Conventional antipsychotic	76 (54.7%)	242 (64.0%)	0.052
Atypical antipsychotic	63 (45.3%)	136 (36.0%)	
Combined antipsychotic therapy, <i>n</i> (%)			
Received monotherapy	74 (53.2%)	207 (54.8%)	0.914
Received combined therapy of 2 agents	55 (39.5%)	142 (37.6%)	
Received combined therapy of 3 agents	10 (7.3%)	29 (7.6%)	
Intake of agents in depot-form, <i>n</i> (%)			
Received depot-form	99 (71.2%)	255 (67.4%)	0.414
Did not receive depot-form	40 (28.8 %)	123 (32.6%)	

differ between men and women. Most patients with hyperprolactinemia were treated with haloperidol and risperidone at therapeutic doses. In 72 (31%) of the examined patients, treated with haloperidol, hyperprolactinemia developed among 54 (23.7%) patients, taking risperidone. For comparison of therapeutic dosages, used in the treatment of patients with hyperprolactinemia and without hyperprolactinemia, they were converted to chlorpromazine equivalent. In the group with hyperprolactinemia – 500.0 (253.0; 750.0) mg/day, they were statistically significantly higher than in the group of patients without hyperprolactinemia – 370.5 (200.0; 675.0) mg/day ($p = 0.0043$).

Patient complaints that were recorded under the UKU scale were analyzed. Among women with hyperprolactinemia, “weight gain” was significantly more common than in patients without hyperprolactinemia ($p = 0.044$). There was no statistical difference for the weight loss subitem ($p = 0.275$) revealed, that the spectrum of clinical manifestations of hyperprolactinemia in women with schizophrenia, receiving antipsychotic therapy, was more varied and wide compared to male patients, registered as on the UKU scale, as well as in terms of the arsenal of complaints. So, among women with schizophrenia and antipsychotic-induced hyperprolactinemia, there was a statistically significantly greater number of individuals with complaints of headaches. Besides, according to the UKU scale, they also more often reported weight gain with this adverse event. In men with hyperprolactinemia, higher body mass index values were found in the absence of subjective complaints of weight gain, but differences in any symptoms, registered on the UKU scale, depending on the presence or absence of hyperprolactinemia were not observed.

Taking into account the long-term antipsychotic treatment of patients with schizophrenia, an important component of maintaining adaptation is the prevention

Table 10.7 Clinical-dynamic characteristics and profile of received antipsychotic therapy in patients with MS

Indicators	Women with MS <i>n</i> = 83	Men with MS <i>n</i> = 56	<i>p</i>
Clinical-dynamic characteristics, Me [Q1;Q3]			
Age, years	48 [40;57]	36 [30;48]	0.00002
Age of the debut of schizophrenia, years	29 [22;33]	23 [19;28]	0.0005
Duration of the disease, years	19 [11;25]	15 [5;22]	0.01
PANSS, indices, Me [Q1;Q3]			
PANSS positive symptoms	22 [17;26]	20 [16.5;25]	0.442
PANSS negative symptoms	24 [20;28]	26 [23;29]	0.055
PANSS general psychopathological symptoms	52 [45;57]	51.5 [42.5;57]	0.31
PANSS total score	100 [85;109]	97.5 [85.5;107.5]	0.823
Quantitative characteristics of antipsychotic therapy, Me [Q1;Q3]			
Duration of antipsychotic therapy	10 [3;19]	15 [5;22]	0.423
Chlorpromazine equivalent	450 [225;700]	428.2 [215.7;643.75]	0.384
Basic antipsychotic therapy, <i>n</i> (%)			
Conventional antipsychotic	50 (60.2%)	26 (46.4%)	0.108
Atypical antipsychotic	33 (39.8%)	30 (53.6%)	
Combined antipsychotic therapy, <i>n</i> (%)			
Received monotherapy	43 (51.8%)	31 (55.4%)	0.663
Received combined therapy of 2 agents	35 (42.2%)	20 (35.7%)	
Received combined therapy of 3 agents	5 (6.0%)	5 (8.9%)	
Intake of agents in the depot-form, <i>n</i> (%)			
Received depot-form	61 (73.4%)	38 (67.8%)	0.471
Did not receive	22 (26.6 %)	18 (32.2%)	

of the development of adverse events of neuroleptic therapy, in particular, metabolic syndrome, and hyperprolactinemia, and it is especially important to take into account gender differences in order to develop personalized prevention programs, reduction, or complete reduction of adverse events.

Study 6: Clinical and Psychological Determinants of Antirelapse Behavior in Chronic (Long-term) Schizophrenic Disorders

Introduction

Deviations in mental health, mental and substance use disorders (diseases of dependence), personality and behavioral disorders due to their prevalence in populations and families, and the resulting burden of disease and disability, constitute one of the

most serious problems of health services (Kachaeva et al., 2017; World Health Organization, 2013). The total number of patients with mental disorders in Russia in 2017 was 3,960,732 people, almost 3% of the country's population. According to the report of the Ministry of Health of Russia, since 1996 the number of patients with a diagnosis for the first time in their life taken under dispensary observation by neuropsychiatric organizations has halved: from 137,635 individuals to 59,338 individuals. In 2017, there was a jump again, the number of new patients increased to 367,500 people. 66.5% of the total medical expenses in the Russian Federation in 2012 (0.14% of GDP) accounted for all mental pathology. In 40% of patients with socially significant mental disorders, the course of the disease is possible with frequent exacerbations, repeated hospitalizations, increasing personality changes, and a high level of disability. When analyzing the contribution to the indicator of the general structure of the annual values of the number of persons aged 18 years and older, recognized as disabled for the first time, it was found that the proportion of disabled people due to mental disorders tends to increase. Almost every second patient with a first diagnosed mental or behavioral disorder subsequently becomes disabled. Medical geographic studies confirmed that the highest rates in 2018 were in the Urals and Siberian Federal Districts (per 100,000 people). In 2018, the proportion of people over 18 who were first recognized as disabled due to mental and behavioral disorders was 53%. In 2015, in particular, there were 357,948 people with disabilities due to schizophrenia, or 2.4 per 1000 of the population, which accounted for 34% of all people with mental illness, in 2017 – 33.3%. Also, the number of patients who, after episodes of hospitalization, ignore observation in neuropsychiatric dispensaries and drug therapy is currently increasing, which leads, at least, to repeated exacerbations and hospitalization (Shashkova & Semenova, 2019).

The problem of the phenomenon of relapses, repeated hospitalizations in chronic mental illness, and the formation of anti-relapse behavior are poorly understood and require an interdisciplinary approach (Stoyanova et al., 2009; Scheifler et al., 2003). The concept of relapse (relapse, from lat, *recidivus* – returning) as a deterioration of the condition has been developed much less than the idea of remission or recovery. A relapse or exacerbation refers to a deterioration in the patient's condition, which may resemble the previously existing active stage of the disease or differ to some extent. This can be influenced by both the nature of the disease and the therapy being administered. At the same time, the clinical picture of relapse can be characterized by significant persistence with the severity of symptoms of a nonpsychotic level or, with sufficient brevity, a psychotic level. Thus, DSM-5 proposes a "stage model" that is largely formal in nature, stating the number of attacks (first or repeated), as well as the stage of exacerbation or remission. There are recommendations of the working group on the development of remission criteria for schizophrenia with a psychometric definition of dimensions. Domestic authors have proposed clinical and functional criteria for remission. At the same time, the outcomes of the disease and the results of therapeutic intervention imply an assessment that corresponds to the changes in patients (clinical–psychopathological, social, personal), with the definition of levels of social functioning. There are no generally accepted formalized criteria for recurrence.

Theoretically, this problem can be associated with the participation of not only psychopharmacological and biological factors but also psychological, family, socio-cultural, and environmental factors involved in the regulation of mental processes and forming certain forms of behavior (Gutkevich et al., 2019). The scientific problem is determined by the contradiction between the above social significance of mental health disorders and the lack of targeted studies of psychological characteristics and behavioral patterns in patients with relapses of mental disorders, leading to the possibility of a practical solution to an urgent social problem (Bokhan & Gutkevich, 2019; Gutkevich, 2014; Larimer et al., 1999; Rickwood, 2006). It is important to establish the factors of repeated hospitalizations for mental disorders and the factors of formation of antirelapse behavior in the Siberian region (transit region), where active migration processes are currently observed, which involve various gender, national, and sociocultural groups (students, workers, and population of different ages).

Thus, it is relevant to establish the clinical and psychological characteristics of patients with relapses and repeated hospitalizations, the possibility of forming antirelapse behavior in mental disorders in the Siberian region of the Russian Federation. The aim of this study was to identify a set of clinical and pathopsychological features that lead to repeated hospitalization and to test the patterns of antirelapse behavior underlying its multilevel model for effective personalized psychorehabilitation of patients with schizophrenia based on biological and social capabilities. Research hypothesis was as follows: the main factors influencing the formation of antirelapse behavior can be presented as a clinical–psychological multilevel (individual, family, and society) model based on the interaction of mentally ill individuals, their families, individuals from the general population, and mental health professionals.

Materials and Methods

Methods Clinical-dynamic; questioning with the help of the author's questionnaire on antirelapse behavior; observation; conversation; clinical and biographical; experimental-psychological: MMPI test, AMS (actual mental state), determination of situational anxiety by Spielberger-Khanin (SA), Leonhard-Shmishek's questionnaire, Life Style Index (LSI), subjective evaluation of interpersonal relationships, Szondi Projective Personality Test, Type of the Attitude towards Illness, methods of mathematical statistics. The developed "Questionnaire on anti-relapse behavior" included 10 multiple-choice questions (Gutkevich et al., 2019). Questions one–three dealt with patients' perceptions of the symptoms of deterioration in their mental state, question four – what positive and negative stress patients experienced, questions five–six described personal characteristics and communication capabilities, questions seven–nine asked respondents to determine their daily activities and ways to reduce the risk of exacerbations of the disease (question ten), and at the end

of the questionnaire a number of recommendations are given to prevent deterioration in health status.

A cohort of 112 patients (47 men, 65 women) with schizophrenic disorders (according to ICD-10 F2) with a disease duration of more than 1 year was studied. Of these, in 41 patients aged 22–55 years, with disease duration from 1 year to 40 years and the number of hospitalizations from 1 to 34, a number of sociodemographic, clinical-genealogical, and pathopsychological parameters were also determined. This group of complex research was represented by 27 women, 14 men, with the number of hospitalizations 1 (8 women) and more than 2 (19 women and 14 men, 33 in total). Among men, the duration of the disease (1–5 years, 6–10 years, 11–15 years, 16 years, or more) was represented almost evenly (from 21.43% to 28.57%) while in women, it was 14.81% for 1–5 years, 18.52% for 6–10 years, 14.81% for 11–15 years, and 51.85% for 16 years or more.

Results and Discussion

In the study period (2017–2019), the patients with endogenous mental disorders aged 20–39 years prevailed, about half of all cases with paranoid schizophrenia, with a disease duration of up to 1 year 10%, from 1 year to 5 years – almost one fourth of patients, over 10 years – a half of the patients, disabled people of the 2nd group – one third of the patients, The rehospitalization of patients with schizophrenic disorders, according to the statistical reporting of the Endogenous Disorders Department of the clinic, averaged about 50 persons per year, 10% of the total number of treated patients. Patients' education was mostly above average (secondary specialized education), professional activity (not disabled) was characterized as employees (in a half of the cases), students, and not having a permanent job. In most cases, the family status of patients was defined as single or married for about one fourth of patients; the social circle was more often limited to family members and friends in a small number. The factors provoking the manifestation of the disease to the greatest extent (up to 25% of cases) were psychogenies in the family, less often at work.

A clinical and genealogical study of families of probands (from the words of probands and relatives using photopsychogenealogy, according to medical records) revealed in almost all families a dense burden of relatives of the first (parents, native siblings) and/or second (grandparents, aunts, uncles, and cousin siblings) degrees of relationship with mental illness – schizophrenia, addiction to alcohol and drugs, epilepsy. Male probands in overwhelming cases did not have their own families and children; women were more often married and some had children (Gutkevich, 2018).

The psychological characteristics of patients during repeated hospitalizations were identified as having a formed schizophrenic pathopsychological syndrome, characterized by specific changes in the cognitive sphere and cognitive impairment. Various psychological measures, including MMPI (current state), LSI, subjective

evaluations of interpersonal relationships, the Szondi test, attitudes toward the illness, emotional tension, irritability, rigidity, and the development of strategies to reduce anxiety and stabilize motives, as well as dominance in controlling one's behavior, were conducted within the framework of personal and volitional traits. Key psychological defense mechanisms observed were compensation, denial, and repression.

Patients also exhibited selectivity in their social interactions and tended to limit their circle of contacts due to difficulties in establishing interpersonal relationships. In terms of their attitude toward the illness, patients showed relatively adaptive or mixed responses. This suggests that one potential avenue for transforming the patients' psychopathological and pathopsychological position, and achieving a higher level of socio-psychological adaptation was the shift from an "internal perception of illness" to an "internal perception of health."

Based on the results of comparison of two groups of patients with schizophrenic disorders (one hospitalization in the first group and two or more in the second group) according to the "Anti-Relapse Behavior Questionnaire," a set of answers to 10 questions on the frequency distribution were obtained. Following are the significant answers obtained ($p < 0,05$, Pearson's Chi-square): to question 4 – "Bad treatment by other people" for the second group ($p = 0.04718$); question 5 – "Positive qualities in relation to society, the team" – "Other" for the first group of patients ($p = 0.00245$); in relation to activity – "Responsibility" (for the first group, $p = 0.01531$); question 7 – "In daily activities – "Doing something I like" for the second group ($p = 0.03904$) and "Playing a musical instrument" for the second group ($p = 0.04001$).

Hence, specific responses to the Anti-Relapse Behavior Questionnaire were pinpointed for patient groups with varying numbers of readmissions.

At the next stage of the analysis, the comparison was carried out in two groups of patients with more than one hospitalization – men and women (47 men, 65 women). In general, according to the results of the statistical analysis, in most cases, patients of both sexes described persistent symptoms of deterioration in their mental state, women were more likely to mention "Strange sensations that you experience when you feel worse again" and men – "Changes in behavior that other people notice" – question 2.

Due to the disease, women more often than men experienced "Problems sleeping at night," "I forget more than usual," "I can't think as clearly as usual," whereas men were characterized by answers such as "Ideas began to come faster than usual," "I began to hear voices," "I am afraid of people, places, or things with which I was usually comfortable," and "I get angry and fight" – question 3. To be positive, almost all patients attributed stress to: "Discharge from the hospital" and "Completion of treatment programs," while women singled out "Moving to a new place" (women 26.15% versus 10.64% in men, $p = 0.04139$), and to negative ones – "Quarrel with someone" and "Break of close relations or the loss of a friend," while women more often pointed to "Bad treatment by other people," and men – to "Lack of enough money" – question 4. Among their positive qualities (question 5), patients noted their attitude toward society, to the team – benevolence (men 40.43%, women

66.15%, $p = 0.00687$); in relation to activities – responsibility (men 31.91%, women 56.92%, $p = 0.00882$), conscientiousness; in relation to oneself – honesty, self-criticism (men 38.30%, women 60.00%, $p = 0.02338$); in relation to things – thrift, generosity were more often in women. They indicated that they had friends or family members who supported them (question 6), men answered negatively to this question. In the daily activities, they would participate in (question 7) the following: “Talk to a friend or family member” and “Get help from people who care for them” more likely, with men choosing “Do what I like: watch TV, play on a musical instrument” (31.91% vs. 6.15% among women, $p = 0.00034$), “Relax when I have a cold,” and women – “Walk or jog”, “Take regular showers or baths.” They definitely would “Try not to meet friends who like to drink” (question 8) (men 70.21%, women 50.77%, $p = 0.03900$) more patients chose the answer “Other” (men 25.53 %, women 49.23%, $p = 0.0117$). To question 9, “What can you do to avoid stressful events in the future,” men and women mainly answered “Change something in your life gradually, make changes in your life one at a time in a given period of time,” while men 87.23%, women 69.23% ($p = 0.02594$). Among the ways in which respondents could reduce the risk of an exacerbation (question 10) “Go to bed and wake up at the same time every day,” “Eat at least two or three times a day,” “Make daily walking,” “I met a friend with the same problems as me and we talk to each other every day” (more men than women) were chosen. “Watch for residual symptoms that get worse or new symptoms that may suddenly appear” (less often men than women) was chosen. Only 59.57% of men and 53.85% of women responded positively to “Stay on medication every day” (Table 10.8).

In women, the following characteristics predominated: “I can’t think as clearly as I usually do,” “Moving to a new place,” “Bad treatment from other people,” Kindness, Responsibility, Self-criticism, Generosity, “Watch out for residual symptoms that increase, or new symptoms that may suddenly appear. Predominant in men: “I am afraid of people, places or things with which I was usually comfortable,” “Play a musical instrument,” “Try not to meet friends who like to drink,” “Change something in my life gradually, make changes in my life one at a time in a given time period,” “I met a friend with the same problems as me, and we talk to each other every day.”

When questioning male and female patients, a considerable number of significantly different specific characteristics of a certain search behavior was revealed in a chronic schizophrenic process with repeated admissions to the hospital, a “Profile of anti-relapse behavior” was compiled (Fig. 10.4).

Thus, when questioning male and female patients, different characteristics of behavior were revealed – symptoms and factors that worsened the state of mental health and increased the likelihood of relapse, to control symptoms and delay (or prevent) re-admission to the hospital, that were patterns of a certain search behavior of a patient in a chronically occurring schizophrenic process.

The data obtained made it possible to define antirelapse behavior as “desired behavior of persons with mental disorders using inpatient care that stimulates the need to control symptoms, prevent the recurrence of the disease (relapse) and repeated hospitalizations, by transforming internal resources and various external

Table 10.8 Questionnaire

No.	Question	Significant answer	<i>P</i>
2	What are symptoms of worsening of your health	Strange symptoms which you experience when you feel worse again (women) Changes in behavior which are noticed by other people (men)	
3	Three symptoms which you experience in connection with illness	I can't think as clearly as usually I'm afraid of people, places, or things with which I usually felt comfortable	$p = 0.09395$ $p = 0.07220$
4	Stress (positive or negative) in your today's life	Moving to the new place Bad treatment from the side of other people	$P = 0.04139$ $P = 0.05745$
5	Your positive qualities	Benevolence Responsibility Self-criticism Generosity	$P = 0.00687$ $P = 0.00882$ $P = 0.02338$ $P = 0.08623$
6	Have you friends (members of your family) who support you and whom you can call regularly?	Yes	
7	Everyday activity (leisure, therapy) which you will be engaged:	To do what I like (watch TV, play the musical instrument)	$P = 0.00034$
8	Activity which you will avoid surely:	To try not to meet friends who like to drink Other	$P = 0.00034$ $P = 0.0117$
9	What can you do to avoid stressful events in the future?	Change something in your life gradually, make changes in your life one at a time in a given period of time	$P = 0.02594$
10	Ways you can reduce your risk of exacerbation:	I met a friend with the same problems as me and we talk to each other every day Watch for residual symptoms that get worse or new symptoms that may suddenly appear	$P = 0.07220$ $P = 0.09395$

influences into manageable individual behavioral determinants, in the system of cooperation of persons with mental disorders, their relatives, families, and professionals in the field of mental health.” Based on a set of data, a functional “Clinical and psychological model of anti-relapse behavior based on the interaction of mentally ill people, their families, individuals from the general population and mental health professionals” was developed (Fig. 10.5).

This model takes into account the clinical-dynamic characteristics of the patient's mental disorder, the psychological characteristics of the individual, the micro-environment (family environment) and the macro-environment of the patient and social interactions (using the methodological complex “Family Health Passport”), resources and “Adaptive and preventive potential of the family from several generations” (Gutkevich & Katkova, 2015), offering daily activities designed in the form of developed personalized programs to find ways to reduce the number of

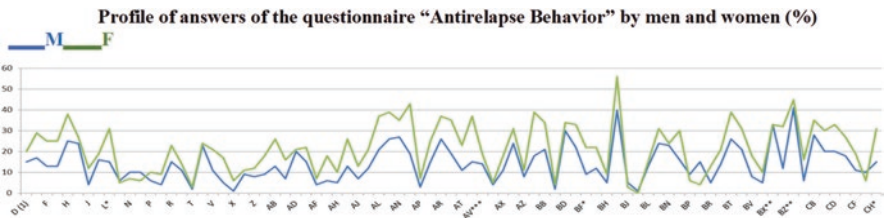


Fig. 10.4 Profile of anti-relapse behavior

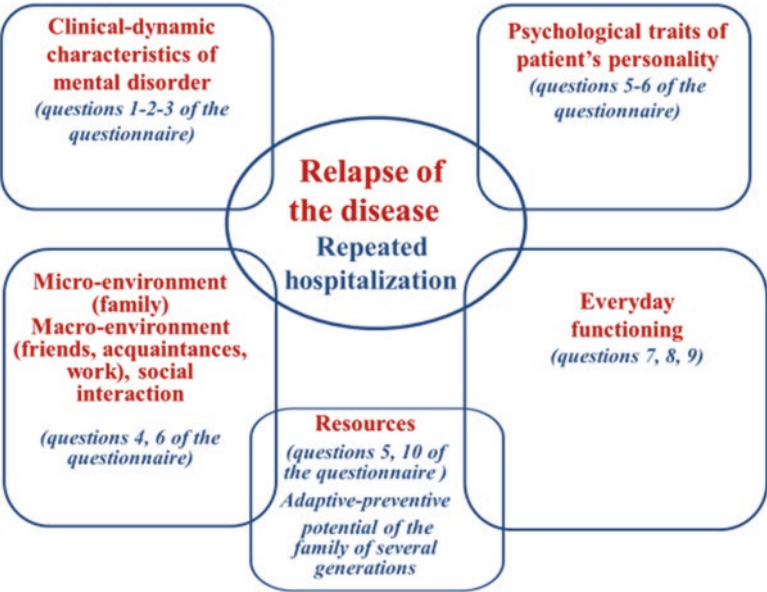


Fig. 10.5 Profile of antirelapse behavior

re-admissions. A program was developed with recommendations on specific activities in the field of physical activity “Pie of physical activity,” nutrition “My food for me,” restructuring of ideas about one’s body and self-control “My diary” for patients of the Endogenous Disorders Department.

The value of the results of the study, designed in the form of personalized programs, for a particular patient in a time perspective is the realization that he/she can feel good, think clearly, work or carry out socially significant activities, perform daily individual work, participate in the life of the family and society on an equal footing, with everyone. Patients learn to track their condition, critically evaluate it, and understand what changes in their condition may be an indication for contacting various specialists.

The investigation into the primary factors influencing the development of antirelapse behavior facilitates the creation of targeted interventions and management

strategies for these factors. It also allows for the development of personalized assistance programs for individuals at risk of developing a mental disorder, such as those with subsyndromal symptoms or with biological, psychological, or social risk factors. By enhancing our understanding and application of knowledge regarding symptoms, psychological traits, and factors that deteriorate mental health while increasing the likelihood of relapse, it is possible to manage various symptoms, including pathopsychological symptoms. This can help delay or prevent hospital re-admissions, ultimately reducing the number of relapses and hospitalizations within the framework of the psycho-rehabilitation clinical model of “mental health – mental pathology.” This model distinguishes between treatment, aimed at minimizing the disease, and rehabilitation, focused on maximizing health.

The study of the phenomenon of repeated hospitalizations of patients suffering from schizophrenic spectrum disorders revealed a number of parameters, namely dense family burden of close relatives with mental illness and the presence of a formed pathopsychological schizophrenic syndrome, features of psychological defenses, building interpersonal communications and attitudes toward the disease. Certain individual and family adaptive resources and determinants of the formation of antirelapse behavior were identified. At the same time, the most vulnerable areas of life of respondents with chronic mental illness and repeated hospitalizations are relationships with people around them. To reduce the number of repeated hospitalizations, personalized programs for the daily activities of patients have been developed.

Further implementation of a clinical and psychological multilevel model of anti-relapse behavior based on the interaction of the mentally ill, their families, individuals from the general population, and mental health professionals will improve psychological literacy, develop new behavioral competencies of patients and their families, reduce the possibility of relapse of mental illness and improve the quality of life of the mentally ill, their families, and reduce the risk of developing mental health problems in the general population.

Public Health

Based on the results of a quick survey involving 66 participants (19 men and 47 women) during the Open Doors Day (World Mental Health Day) at the Clinic of Mental Health Research Institute in 2019, it was discovered that one-third of respondents had participated in this event on multiple occasions. Respondents, along with their relatives, expressed a lack of knowledge regarding mental health and disorders, despite many of them having family members with neuropsychiatric conditions. They expressed a strong desire for more information on relapse onset symptoms, available free medications, and social benefits.

A striking 98% of those who attended the event cited their reason for participation as a desire to receive professional evaluation of their mental health by specialists. An overwhelming 85% of respondents believed it was essential to establish a

local organization catering to individuals with mental health concerns and their families. Such an organization could enhance information accessibility through a modern website.

Analysis of the screening survey emphasized the universal need for psychological and social support among individuals dealing with mental health issues and their families. These services can potentially be provided by user-operated organizations.

Study 5: Formation of Alcohol Dependence in Women of Different Ethnicity

The issue of female alcoholism holds a unique position within the field of narcology. As of now, there is no consensus on the distinctive characteristics of alcoholism in women. There has been a noticeable rise in the number of young women affected by alcoholism (Zdorov'e v Rossii, 2019; Sotsial'no znachimye zabolevaniya naseleleniya Rossii v 2018 godu, 2019). Women dealing with alcohol dependency relatively infrequently seek medical and rehabilitation assistance from treatment facilities. Consequently, accurately assessing the true extent of female alcoholism and the progression of alcoholic disorders in women remains challenging (Gilyazeva, 2018; Bokhan et al., 2014).

A clinical examination of 78 women of Tuvan ethnicity with the second stage of alcohol dependence, addiction syndrome, alcohol-induced (F10.2), withdrawal state (withdrawal syndrome) (F10.3), undergoing treatment in a narcological dispensary was carried out. As a comparison, 66 women of Russian ethnicity were examined (Group 2), who were treated in a clinic in Tomsk for mental and behavioral disorders associated with alcohol consumption or addiction syndrome, alcohol-induced (F10.2) withdrawal state (withdrawal syndrome).

Methods such as clinical and psychopathological, clinical follow-up, mathematical and statistical were used in which clinical and psychopathological methods were mainly used.

The age at the time of examination was as follows: Russian women – 41.7 ± 9.0 years and Tuvanian ones – 41.6 ± 9.9 years. In total, 79.5% of Russians and 60.2% of Tuvinians were brought up in full-fledged families, and 50.0% of Tuvinians and 58.4% of Russians had a secondary specialized education. Occupational status was not currently determined or women were engaged in unskilled labor in 85.9% of cases in the Tuvan group and in 74.1% of cases in the Russian group of women. 33.3% of Tuvanian women and 31.9% of Russian women were officially married ($p > 0.05$).

Results Clinical and anamnestic data regarding the conditions of upbringing of the examined women showed that the relationship between the parents of the examined women of both groups during childhood and adolescence was characterized by conflict statistically significantly ($p < 0.05$), which were more often detected in Russians

than among Tuvinians (42.1% and 24.4%). A large percentage of the occurrence of dysfunctions of the upbringing process in families was associated with the prevalence of alcohol abuse among parents, which was more often paternal. Namely, 39.7% of fathers and 20.5% of mothers in the Tuvinian group and 58.4% of fathers and 10.2% of mothers in the Russian group abused alcohol.

Comparative analysis of hereditary predisposition to the development of mental disorders, especially alcohol addiction in the examined women of both groups, showed that close relatives among Tuvinian women died from opiate with a higher frequency than Russian women: 28.2% versus 7.2%. Alcoholic psychoses in relatives and relatives of the first line of kinship were characterized by a trend of more frequent occurrence in Tuvinian women compared to Russian ones 11.5% and 9.6%.

It can be stated that the formation of the main syndromes of alcohol dependence in Tuvinian women was characterized by an accelerated rate of the course of an alcoholic disease compared to Russian women. Average age of women who were in hospital treatment in the compared groups did not differ significantly and amounted to 41.6 ± 9.0 years for Russians and 41.6 ± 9.9 years for Tuvinians.

The first taste of alcoholic beverages, on average, occurred statistically significantly ($p < 0.05$) later than in Russians: 18.9 ± 3.0 years versus 15.9 ± 1.7 years.

Comparative analysis of the average age of onset of systematic alcohol consumption in the groups under consideration revealed that Russian women began statistically significantly ($p < 0.05$) earlier to systematically take alcoholic beverages than Tuvinian ones: 23.9 ± 3.9 years vs. $26.2 \pm$ years. While the age of loss of quantitative control in intoxication in the groups of Russian and Tuvinian women did not have statistically significant differences ($p > 0.05$): 31.0 ± 6.4 years vs. 29.7 ± 4.5 years.

The age of formation of alcohol withdrawal syndrome in the examined women averaged 34 years (34.4 ± 7.1 years in patients of the Slavic group; 34.1 ± 6.7 years in the Tuvinian group).

Alcoholic psychoses in the anamnesis of alcohol dependence in the surveyed women of the Tuva group occurred statistically significantly ($p < 0.05$) more often (38.6%) than in the Slavic group (6.0%). The age of formation of psychotic forms of alcoholism in the considered groups of women had statistically significant differences ($p < 0.05$) in the Tuva sample, it was lower and averaged 39.9 ± 9.5 years (after 5–6 years of withdrawal syndrome formation) in Slavic – 49.1 ± 4.2 years (after 14–15 years of the formation of the withdrawal syndrome).

In the Tuvan group of women, repeated alcoholic psychoses in history (from 2 to 9 cases) tended to be detected more frequently (16.7%) compared to the group of Russian women (1.2%). Psychotic symptoms in the Tuvan sample in the vast majority (86.7%) of cases were represented by alcoholic hallucinosis with a rarer frequency (13.3%) – alcoholic delirium. In the group of Russian women, alcoholic psychoses occurred only in the form of alcoholic hallucinosis. For the first time, Tuvinian women requested for drug treatment statistically significantly ($p < 0.05$) earlier (on average, 38.3 ± 8.4 years) than Russians (average 40.3 ± 6.9 years).

Usually more than a half of Russian women (57.8%) often motivated themselves to seek drug treatment due to conflicts in the family in the Tuva group, family

disagreements were less common (28.2%). In the Tuva sample, the reason for seeking drug treatment for almost a third of women (32%) was either deterioration in somatic health or emergency treatment in a psychiatric/drug treatment facility for psychotic disorders (29.5%). While among Russian women, there were no such cases.

In women of Tuvinian and Russian ethnicity, dependent on alcohol, no statistically significant ($p > 0.05$) differences were found in the main social characteristics. In connection with alcoholization, in most cases, all of them did not have a permanent job or were engaged in unskilled labor, repeatedly changed jobs, were not officially married or divorced, equally they had spousal alcoholism. Despite these almost identical figures, negative social consequences in the form of deprivation of parental rights were statistically significantly ($p < 0.05$) more common (32%) in women of the Tuvinian group compared to women in the Russian group (2.4%).

Also, it was established, that in women of Tuvinian ethnicity, the formation of alcohol dependence (from the appearance of the first signs to the development of an abstinence syndrome) occurs progressively. Severe forms of alcoholic amnesia and low tolerance to alcohol are more often observed. Besides, they are characterized by a high prevalence of psychotic forms of alcoholism recurrent in 16.7% of Tuvinian women (after 5–6 years of dependent alcohol use compared to Russian women, in whom the first alcoholic psychosis develops later – after 14–15 years of dependent alcohol use). Clinical and psychopathological symptoms and negative destructive social consequences as a result of alcoholization in general indicate the malignant nature of the development of alcohol dependence in women of Tuvinian ethnicity.

Women's Mental Health – Conclusion

The development of modern society is associated with the formation of the spiritual, moral, and mental health of the population. Knowledge and information are becoming the main strategic resources for overcoming a single “crisis syndrome” of society, which is made up of many of its components – social, economic, cultural, environmental, etc.

In today's world, women participate in the workforce and education on equal terms with men. However, their traditional roles as mothers and homemakers have not disappeared. This situation leads to various conflicts, such as women having to choose between advancing their careers and adhering to the idea of staying “two steps behind a man,” or completely abandoning traditional family values in favor of alternatives like cohabitation or the “child-free” lifestyle. Many psychoanalysts, including S. Freud, V. Lipman, and K. Horney, emphasize the vulnerability of women. Despite having the freedom to be autonomous, women often learn and adopt roles based on societal expectations set by men.

Of particular relevance are studies of borderline neuropsychiatric pathology conducted at Mental Health Research Institute (Tomsk, Russia) and showing an increase in the number of this pathology in women by 2.5 times more than in men. Studies

of the mental health of women working in industrial enterprises showed a high proportion of borderline neuropsychiatric pathology among working women, the incidence was 195.5 per 1000 working women. The highest rates were in women in the age group of 41–50 years.

The problem of professional burnout is very significant. When studying the mental health of teachers, it was revealed that the burnout syndrome was identified in 24% of teachers, and 72% of teachers have symptoms of emotional burnout.

A woman, in addition to the production load, bears a huge responsibility for the new generation. Pregnancy, even physiologically proceeding, has a significant burden on the body. With the pathology of pregnancy, somatic problems are exacerbated, the previously existing mental pathology exacerbates and a psychopathological process develops. A scientific project conducted by researchers from Tomsk, Moscow, Novosibirsk, Krasnoyarsk showed that in the pathology of pregnancy (chronic miscarriage, polyhydramnios, placenta previa, and preeclampsia), there are many psychopathological problems that complicate the course of pregnancy. The presence of viral infections during pregnancy significantly reduces the quality of life and psychological adaptation of women.

Modern mass media show a large number of materials about violence. Bullying and domestic violence has become part of everyday life. The victim is usually a woman. Society encourages male dominance in religion, politics, and the family.

An important position in the mental maladjustment of women is female alcoholism. Unrestrained growth, veil, malignancy, and difficulty in carrying out socio-therapeutic influences are the main characteristics of this disease. This problem leads to a chain of other negative consequences associated with the transformation of the instinct of motherhood – fetal alcohol syndrome, the phenomenon of “street children,” antisocial forms of behavior.

Thus, the study of women’s mental health shows the need for further comprehensive research on this problem, and not only at the stages of mental health disorders but also at the early stages. Inter-agency specialist care strategies should be developed. The task of every society is to create optimal conditions for solving life problems and self-realization of women.

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Chapter 11

Womens' Mental Health and War Catastrophes in Palestine



Dana Bdier and Fayez Mahamid

Introduction

Mental Health Issues in Palestine

Throughout the history, Palestinians have witnessed several catastrophic events, starting with the 1948 Israeli-Arabian war (Al-Nakba), that as a result of it more than 700,000 Palestinians expelled from their land and became refugees (Manna', 2013). Refugee refers to those who face a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinion (Fullerton, 1993). As the Israeli-Palestinian conflict does not end, there are approximately five million Palestinian refugees distributed in many countries around the world such as Jordan, Syria, and Lebanon (Atallah, 2017).

Through this conflict, Palestinians experienced many stressful and traumatic events such as losing their child as a result of the Israeli violence, surviving bomb attack, losing their homes as a result of home demolitions, and being humiliated and tortured in the Israeli prisons (Giacaman et al., 2007; Punamäki et al., 2001; Qouta et al., 1998; Sarraj et al., 1996; Thabet et al., 2008).

Living in an occupied country such as Palestine, exposed people and forced them to face several and different hard living conditions on a daily base, form poverty and

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unemployment, economic dependence, violation of justice and equality, territorial fragmentation, building restrictions, home invasions and demolitions, cultural pressures, future insecurity, fewer positive social outlets, lack of recreational facilities, lack of health and mental health care services, to destruction of social networks (Barber et al., 2016; Berte et al., 2019; Mahamid & Bdier, 2020; Mahamid & Veronese, 2021; Veronese et al., 2021b; Sousa et al., 2014).

Experiencing such a hard living conditions found to affect Palestinian's mental health, psychological well-being, and quality of life, in which one-third of Palestinian adults reported low levels of well-being (Harsha et al., 2016; Mataria et al., 2009). While feeling of insecurity, low economic status, and prolonged exposure to political violence were positively associated with depressive symptoms, high depression, and suicidal ideation levels among Palestinian adults (Hamdan & Hallaq, 2021; McNeely et al., 2014; Wagner et al., 2020). Threat perception of future violence, poor general health, exposure to media, and loss of social resources are considered as a predictive of incident cases of PTSD among Palestinians (Hall et al., 2015).

Low levels of well-being resulted from the challenging life conditions made Palestinians feel hopeless toward the future, and they started to show depressive symptoms (Veronese et al., 2022a). On the other hand, all these struggles and hardness are expected to be associated with addictive behaviors among Palestinians, such as cigarettes smoking and drinking energy drinks which in turn are found to be correlated with depression, insomnia, and stress (Mahamid et al., 2022a).

Women's Mental Health, IPV, and GBV in Palestine

Collective violence, such as war, state repression, torture, and violent political conflicts, increases risk of various forms of gender-based violence (GBV) and poor mental health outcomes (Ward, 2002). In the Palestinian context, the ongoing political violence was found to be correlated with gender-based violence or domestic violence (Giacaman, 2010). And it was found to be significantly related to higher odds of intimate-partner violence (IPV), in which the odds ratio of IPV was higher among women whose husbands were directly exposed to political violence than women whose husbands were indirectly exposed to political violence (Clark et al., 2010).

From the feminist perspective, as a result of the occupation's policies and practices, men start to have feelings of humiliation, and the inability to protect their families mainly the women and children, as a result of these feelings men are expected to be frustrated and aggressive toward others specifically who are less empowered such as women (Institute for Women's Studies, 2008; Shalhoub-Kevorkian, 2009).

According to different psychological perspectives, feelings of frustration, insecurity, and being controlled by the Israeli occupation could result in aggressive behaviors intermediated by other negative effects such as poverty and

unemployment, negative mental health consequences, feelings of humiliations, as these factors found to be correlated with high odds of IPV, and are expected to increase household stress and interpersonal conflict that could be reflected in a violent behaviors against women (Clark et al., 2010). Moreover, the separation barriers that led to the destruction of social networks in the Palestinian context prevented women from having access and reach their social networks for seeking help when it is needed (Institute for Women's Studies, 2008; Shalhoub-Kevorkian, 2009).

In a sample that consisted of 4372 Palestinian women from West Bank and the Gaza Strip, only 33% had never faced any type of violence from any source, 34.8% of them suffered from psychological violence, 17.6% suffered from physical violence, and 14.6% suffered from sexual violence (Okasha & Abu-Saada, 2014). In addition, according to the Palestinian Centre Bureau of Statistics (PCBS), it was found that 27% of currently married or ever married Palestinian women had at least one experience of some form of violence (Palestinian Central Bureau of Statistics, 2019). Moreover, Palestinian women who live in the West Bank camps are found to experience GBV more than their counterparts in cities and villages (Bdier & Mahamid, 2021). As well as, women who reside in the Palestinian refugee camps of Jordan are found to experience two or more types of partner violence at the same time (Al-Modallal et al., 2015).

In addition to the political factor, there are other factors that contribute to GBV toward Palestinian women such as the social factor that characterized by the patriarchy system, and the economical factor, in which women depend on men economically (Rubenberg, 2001).

GBV found to be associated with several psychological impairments among Palestinian women. For example, battered and abused women in the West Bank showed high levels of anxiety and depression and low levels of self-esteem (Haj-Yahia, 2000). As well as, Veronese et al. (2022b) found that GBV was associated with stress, anxiety, and depression among Palestinian women in the West Bank. In addition, anxiety, depression, and posttraumatic stress disorder (PTSD) were found to be positively associated with domestic violence among women in the Gaza Strip (Thabet et al., 2015).

Women' Mental Health and War Catastrophes in Palestine

As the Palestinian society lives under occupation, Palestinian women as other Palestinian groups were found to be exposed to a high levels of violence and absence of human security, and they have to live with the violence and humiliations on their dignity imposed by the Israeli occupation (Rought-Brooks et al., 2010; Tamimi, 2017). Moreover, as men were deported, imprisoned, or killed, Palestinian women had to play many roles and to take the responsibility of many things such as raising the children and being the economic provider of the family (Khamis, 1998). Also, over the last decade, more than 10,000 Palestinian women were imprisoned by the Israeli army (United Nations for Women, 2017).

Studies from Palestine have found that in the face of political violence and ongoing traumatic events, women are more at risk than men for somatic disorders and symptoms of poor physical health (Qouta & Odeh, 2005) and mental health problems (Mahamid et al., 2022b).

As a result of the ongoing political violence, unstoppable bomb attacks, shooting, home invasions, and home demolition, Palestinian women perceive their environment as risky and threatening as nothing is predictable, and the attacks could happen at any time, which make them anxious, fearful, and to suffer from somatization (Veronese et al., 2021a, b). As well as surveillance, home invasions, and actual or threatened home demolitions provoked fear, anxiety, grief, humiliation, and helplessness among Palestinian women particularly as they struggled to protect their children (Sousa et al., 2014). Moreover, traumatic events experienced by Palestinian women were positively correlated with posttraumatic stress disorder (PTSD), (Sousa et al., 2018).

Moreover, Palestinian women were found to lose their interpersonal and intrapersonal resources which correlated with PTSD and major depression among Palestinian women as a result of being exposed to political violence (Canetti et al., 2010). While nurses in Gaza hospitals suffered from severe posttraumatic symptoms after the exposure to prolonged war stress due to the Israeli war on Gaza (Alhajjar, 2013).

On the other hand, mothers of Palestinian prisoners who live psychological, social, and economic traumatic experiences due to the continuation of their sons' detention in Israeli prisons found to experience interpersonal trauma at higher frequencies than other individuals in the family (Najib et al., 2015).

Women's Coping Strategies to Deal with Mental Health Deteriorations in Palestine

Although previous literature indicated that prolonged trauma has a negative effect on mental health, Palestinian women tend to cope effectively according to these stressors. Different resources of agency and empowerment were found to be protective factors during stressors among Palestinian women, in which these resources seek to help individuals realize themselves and their abilities and skills to improve their quality of life and to make strategic decisions related to their lives (Kamal, 2011).

Problem solving, support from family and religious sources, and political or civic engagement were found to help women in the West Bank cope with political violence in which these resources demonstrate resilience of these women (Sousa, 2013). In addition, life events' calendars reflect a constant attempt in balancing and compensating traumatic events with sources of well-being related to social support and family among women in the Gaza Strip (Veronese et al., 2020).

Also, human security, family ties, psychosocial resources (i.e., friendship and support from others), individual resources (i.e. spirituality, activism and civic

engagement, education, work, play, and humor), and motherhood were found to be key factors contributing to the maintenance of positive psychological functioning and the ability to adjust to traumatic war events in the aftermath of acute armed conflict among Palestinian women (Veronese et al., 2021a). Furthermore, acceptance, positive reframing, self-distraction, humor, religion, and use of instrumental support were found to enhance the mental health of Palestinian women (Shehadeh, 2022).

Conclusion

Women exposed to psychologically traumatic experience are more likely to develop posttraumatic stress disorder (PTSD). The lives of Palestinian women in the West Bank (WB), the Gaza Strip (GS), and East Jerusalem (EJ) in particular are complex. Although they share challenges women face globally, yet they are also hindered by the harsh realities of living under occupation. They are victims of violence perpetrated by an occupier and by random and or institutionalized violence by their own society. The intertwined social and political oppression of Palestinians in general, and women in particular go hand in hand, create new forms of oppression (Aghabekian, 2017).

Even though the price of joining the anticolonial struggle is high for women in the Palestinian patriarchal society, they still have led the way in resistance in unparalleled and effective ways. Palestinian women's use of their bodies as sites of protest is part of a broader dynamic of Palestinian struggle for justice and freedom. Historically, they have played an integral role in resistance: on the streets, among peers in classrooms, and in grassroots organizing, transcending borders and barriers created by the colonial state and the Palestinian society. Notably, they often face a lower risk of detention and have used this "privilege" to protect males from detention and to substitute for many "male roles" when men are detained (Shwaikh, 2020).

Research in the Occupied Palestinian Territory (oPT) reflects the global evidence base, with studies showing a strong association between experience of occupation-related events and poorer mental health among Palestinian women, and increased IPV. For instance, studies have shown that exposure to occupation-related events is associated with increases in major depression and posttraumatic stress disorders (Thabet et al., 2008; Veronese et al., 2022a). While Clark et al. (2010) drawing on population-based data from the oPT found that women's experience of IPV was associated with their husbands having directly or indirectly experienced occupation-related violence or the household having experienced the negative economic impacts of occupation.

Although war-related traumatic events, extreme violence, and political oppression are linked to serious psychological burden and mental illness, they can also lead to the discovery of unexpected resources and personal growth (Veronese et al., 2021b). Palestinian women living in contexts of war tend to cope with everyday traumatic experiences, with some even reporting positive outcomes following

exposure to war-related events (Mahamid et al., 2022b). The ability to adapt and maintain positive functioning in the face of hardship is typically described as resilience increasingly, resilience is conceptualized as neither the exception nor a static trait or outcome that people possess or lack. A growing body of scholarship on the topic highlights that even within extreme situations like war, people regularly emerge much better than might be expected, and cope through a variety of means within ongoing dynamic processes (Mahamid, 2020; Mahamid et al., 2022c).

Palestinian women use different coping strategies to deal with political and prolonged trauma, coping can be described as “the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them” (Bdier & Mahamid, 2021). The core coping domains include support seeking, positive cognitive restructuring, problem-solving, distraction, and escape avoidance (Mahamid & Bdier, 2021). Seeking social support includes turning to family, friends, professionals, and religious figures for emotional and/or material support (Skinner et al., 2003). Positive cognitive restructuring involves attempting to change one’s perspective of a stressful situation in order to see it in a more positive light. Specific instances of problem-solving include instrumental action and/or coming up with a strategy regarding a problem. Problem-solving features planning, logical analysis of a problem, effort, persistence, and determination. Coping through distraction refers to attempting to deal with a stressful situation by engaging in an alternative pleasurable activity, for instance, hobbies, exercising, and watching TV. Escape avoidance includes efforts to stay away (physically and/or mentally) from a stressful situation (Seguin & Roberts, 2015).

Given the extremes of war and deprivation experienced in Palestine over the past 74 years or so, there is an immediate need to develop capability among mental health professionals and capacity within the service. In particular, there is a significant need to develop mental health interventions targeting Palestinian women victims of political trauma, IBV and GBV to strengthening and empowering them and increase their resilience (Mahamid & Veronese, 2021). In addition, awareness needs to be raised about the need of mental health services, and greater integration of mental health within primary care services is required. Efforts need to be made to improve clinical supervision systems and the capacity of mental health providers and to increase the availability and quality of care (Marie et al., 2016; Veronese et al., 2022c).

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Chapter 12

Participation and Engagement Barriers Faced by Young Black Women Within Health Promotion Youth Programming and Community Drop-In Spaces



Rahma Togane, Krystle Skeete, and Vasthi Seide

Introduction

Community drop-in spaces for young adults serve as important spaces for building positive mental health and support the healthy psychosocial development of young people. Youth are able to connect to safe and caring adults, avoid risky behaviour (drug/alcohol use, unprotected sex, and youth violence), and benefit from health promotion programming (nutritional snacks, physical activities, and peer mentorship) and positive youth development workshops (employment readiness, educational attainment supports). Rather than intervene in mental health disorders, youth programming focuses on health promotion and positive mental health and well-being—an important aspect of Public Mental Health; “public mental health is not just about the occurrence and prevention of mental disorders in the population, but also includes the promotion of mental health and wellbeing” (Wahlbeck, 2015, p. 36). Local community organizations play a crucial role in the interdisciplinary work of health promotion at the population level. Public mental health interventions need not come from the top down—that is from public health institutions—but also from the community and with the inclusion of the targeted population group.

Through a community based Participatory Action Research (PAR) project, we conducted research to understand the barriers faced by young black women in accessing youth programming in a low-income community in Toronto, Canada (Jane Finch). Despite the socio-economic challenges and lack of important services and resources, Jane and Finch is a vibrant and culturally rich community with many grassroots non-profit organizations and resident-led initiatives. Safe community spaces build protective factors, i.e. meaningful connections with peers, access to resources to support educational attainment, access to nutritional food and snacks,

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and physical exercise through Dance, Zumba, and Yoga. However, despite the many youth serving agencies in the community, our findings reveal the isolation and vulnerability of young Black women in the community. The nature of conducting a PAR study showed the benefits of including targeted population groups in research from onset to evaluation. By having young women of colour participate in every facet of the research study, we were able to build better engagement and implementation strategies to increase the participation and access of health promotional youth programming in the community. Further, young women were empowered through the process and saw themselves as active agents in their own health and well-being.

Literature Review

Identifying the unique needs of specific population groups is integral to developing interventions that will support building protective and resilient factors. However, many challenges remain in the field of Public Mental Health in both identifying current needs of diverse population groups as well as the implementation of evidence-based interventions. Current research on public mental health identifies the need for more training and support for needs assessments (Campion, 2018) and “identification of risk, protective and resilience factors for mental health across the lifespan” (Wahlbeck, 2015, p. 40). Further, implementation of health promotional programmes and services must be evidence based; “[m]any challenges remain in the field of public mental health research, both in the identification of risk, protective and resilience factors for mental health across the lifespan and in the development and implementation of effective and evidence-based public mental health interventions” (Wahlbeck, 2015, p. 40).

The aim for this community-based Participatory Action Research (PAR) project was to implement necessary changes to increase the participation of young black women and to respond to the barriers they face in their engagement. Further, the methodology of Participatory Action Research (PAR) proved supportive as young women in leadership positions (college and university placement students) led the research process: developing questions, engagement tools, conducting outreach, facilitating focus groups, analysing findings and writing our final report. As such, current public mental health challenges around needs assessments and implementation can do well to incorporate specific target populations into the process of both assessing and responding to public mental health needs of specific service users. This is even more important for vulnerable groups; “[m]ajor individual socioeconomic risk factors for mental health problems and suicide are poverty, poor education, unemployment, high debt, social isolation and major life events” (Wahlbeck, 2015, p. 36). In Jane and Finch, 25.7% of residents in Jane and Finch are considered low-income, with 44.4% spending more than 30% of their income on housing (City of Toronto, 2018). The community is diverse with 74% identifying as a visible minority, 58% considered immigrants, of which 60% are first generation (City of Toronto, 2018). In working with vulnerable communities, promoting public mental

health is crucial, “actions to promote mental health within disadvantaged groups and hence reduce mental health inequalities are important constituents of public mental health actions.” (Wahlbeck, 2015, p. 36). This is even more important for communities like Jane and Finch where children and youth make up approximately 35% of the population (City of Toronto, 2018). Building protective factors and reducing risk for young people in the community is an important endeavour for many institutions in the community.

Various disciplines explore the high needs of low-income communities including public health, education, youth development, and preventative medicine. However, research tends to examine population groups as a whole based on socio-economic background, or when exploring intersections of class and race, examinations assess the needs of black males in disadvantaged communities often overlooking the experiences of black females (Phillips et al., 2018). Nevertheless, the important contributions that do assess the intersections of race and class in the case of inner-city youth is important to our work; “ample research has identified the social and economic challenges that affect the mental health of Black children and youth” (Fante-Coleman & Jackson-Best, 2020, p. 116). To circumvent these challenges, youth and community programming support many challenges that youth living in low-income communities face. For young black women in particular, connecting to services and resources that support positive mental health and well-being, address risk factors (social isolation, poverty, and drug/alcohol use), and promote protective factors (educational attainment supports, meaningful connections and physical exercise, i.e. Zumba and Yoga) are all crucial to supporting this population group.

However, despite having programmes and services that could support the healthy psychosocial development of young women in the community, our programmes faced low participation. Although we connected with many young black women throughout the year, built great connections with many, and were a well-known youth space engagement remained low. What we found in our research, both in the process of conducting the work and in the results that followed, were unique barriers to engagement. Ultimately, by implementing what we learned in our Participatory Action Research project we were able to identify key strategies that support developing better programming and interventions for young black women in the community.

Methods

This research was conducted utilizing a qualitative research design which is useful for developing an in-depth understanding of the participants’ experiences of barriers to engagement. In addition, utilizing triangulation, multiple data sources were used. Engaging in quality inquiry allows for the trusting relationship between participants and researcher necessary to allow them to feel comfortable engaging in the research process and sharing their experiences. Each of the two focus groups were transcribed and coded to later identify emergent themes. Open-ended question was used to allow participants to share their narratives.

Participants

The research took place within the context of understanding the youth engagement with a youth access and inclusion focus. The research study sought to engage young women of Afro-Caribbean, Afro-Canadian, Afro-Latino, and Mixed Race backgrounds who identify as Black between the ages of 13 and 18 years to better understand the reasons behind their lack of engagement in youth spaces. The research team used a relationship-strategy approach with other local young women's groups to engage young women in the research project.

Through this project, 32 young women participated in two separate focus groups which were conducted at two local community spaces. These locations were selected to support accessibility to the research project and met young women in locations that were walkable. These young women answered 6 main research questions examining issues faced by young women, services in the community, participation in programming, and best practices in outreach, programme development, facilitation and overall programming for young women in the Jane and Finch community.

Objectives

Research questions in this study responded to 3 main objectives:

1. Understand issues, concerns, and hesitations young women face in accessing youth spaces and youth programming.
2. Develop an understanding of ways to increase the overall participation of young women to youth spaces in the Jane and Finch community, with a particular focus on The Spot.
3. In partnership with young women, create strategies of inclusion and engagement of young women in community programmes/services and drop-in spaces. Support young women to envision and articulate their desires for drop-in community spaces.

Questionnaire and Focus Group

The research team facilitated eight research sessions with local groups across the Black Creek-Jane and Finch Corridor to socialize the research project to potential participants, in which ($n = 150$) questionnaires were disseminated to young women who are currently connected after- school.

Procedure

A snowball sample of the participants that completed the questionnaire were recruited to participate in 2 focus groups to further unpack the findings from the questionnaire, to share openly of their experiences and decisions around accessing programmes and services. Thirty-two young women participated in two separate focus groups which were conducted at The Spot Youth Centre and The Jane Finch Boys and Girls group. These young women answered 6 main research questions examining issues faced by young women, services in the community, participation in programming, and best practices in outreach, programme development, facilitation, and overall programming for young women in the Jane and Finch community.

The purpose of our research was to examine the experiences of adolescent black girls accessing engagement and to ascertain the types of barriers associated with accessing community drop-in centres. Based on our framework, we were able to identify 3 broad types of barriers encountered by self-identifying young women that are interested in accessing social-, economic-, and health-related services and programmes that focus on asset and community health development.

Nesting the Research Methodology Within a Public Health Analysis and Framework

Participatory action research (PAR) differs from most approaches to public health research, as it has a strong reliance on reflection, data collection, and actions aimed at building protective factors and reducing risk factors by engaging participants in opportunities to improve the life cycle of their adolescent experiences. PAR “seeks to understand and improve the world by changing it” (Baum et al., 2006, p. 854). The process of PAR is to empower and lead people to have increased control over their lives. In addition, “Youth voice” has been identified as an essential element in quality youth service programmes. Adopting the PAR approach to capture Youth Voice supported the intent and outcome of the study, which prioritizes the efforts of these adolescent girls to become active agents in their communities, and a voice for adolescent girls seeking to take ownership of their lives. The findings from this research shows the growing evidence linking proximal determinants of young women’s health. However, for many of these young women, this research was the first time they were engaged in a decision-making process for issues that concerned their development and well-being. Many dominant narratives and interventions in their community are based on socio-economic challenges and incidences of neighbourhood violence. This was an opportunity for young women to shape the language used in the research and ask questions that were pertinent to them. This research encourages participant involvement as it is directly linked to action.

Barriers to Engagement: Deterrents for Adolescent Girls in Accessing Public Spaces

The need to create welcoming, appropriate, safe, and inclusive environments for urban and racialized youth has been well documented (Soule, 2017; Walker, 2011; Brady, 2005). Inclusive programming and safe spaces refer to the necessity for health promotion practitioners to be aware of the specific needs of the population group they are serving, including creating dedicated spaces for adolescent girls to participate and engage in activities that foster healthy choices and promote positive adult and peer relationships. It is important for gender-specific programming and initiatives for adolescent girls to take into account their unique developmental needs, inclusive of their biological, psychological, and social changes that take place in adolescence (LeCroy, 2005). The findings from the focus group revealed that feeling “safe” in dedicated youth spaces is most important for young Black women. More than any other barrier, these women expressed that spaces with a strong overt male presence deterred them from participating, accessing, and engaging in prevention-based engagement spaces and programming. As one participant states, “I don’t enter the Spot because it’s unfamiliar to—seen as a guy spot; a guy’s chill spot.” Participants from this research shared that local and dedicated youth spaces, like The Spot, a dedicated youth space in the Jane Finch Community, are often associated with and perceived as being male only environments. They would like a space for just women or simply have 1 day a week where the centre is only open to women identifying individuals. These young women feel that having more of a female presence would help them to feel safer entering on their own or with friends; “Say you were going to the spot, if I’m the only one going, I won’t want to go. I want to have someone to talk to there. It’s a sense of comfort.”

Even when there have been dedicated girl-specific times, participants shared that the boys still maintained a sense of ownership over the space, which made it difficult for them to be comfortable and share openly amongst each other with the fear of the boys being able to hear their conversations. The feelings shared by many participants stemmed from adolescent boys’ attitudes and behaviours towards them in other public spaces, including school, local malls, and other public spaces, including the uncomfortable glaring, comments, and to some extent immature behaviour. A participant shared that the overwhelming male presence in public community spaces exacerbates feelings of anxiety, lower-self-esteem, and safety, she states: “Might not feel comfortable because you don’t feel comfortable walking in.”

The feelings expressed by participants demonstrate several things. One, safety is a significant concern for many adolescent girls engaging in spaces and programmes that aim to empower and be subjective. Youth practitioners and staff should consider all elements of safety as it relates to interpersonal safety and wider community safety. Offering safe spaces and tailored programming which appeal to adolescent girls is critical for sustaining engagement of participants and engaging new participants.

Seeking Empowerment: What Racialized Girls Really Want and Need

Adolescent girls from urban settings rarely receive the social and psychological prevention and intervention support they seek and need to thrive due to the attention directed towards male counterparts. Adolescent racialized boys, and more specifically Black boys from marginalized neighborhoods, have shown to be at “high” risk as a result of the increased exposure to interpersonal and community violence, negative educational experiences, and disproportionate rates of policing and incarceration among other social factors. As a result, adolescent health promotion programming and resources have historically dedicated resourcing towards adolescent boys and have been limited towards girls. This has contributed towards adolescent girls feeling invisible in comparison to their male counterparts and having inadequate psychosocial services, recreational, and health promotion programming. An equitable balance of gender-specific programmes and spaces allows adolescent girls to feel both safe and empowered.

Gender-based programming plays a critical role in fostering healthy relationships and healthy life choices, skill building, and grounding feelings of empowerment and connectedness in the overall outcomes for adolescent girls. Popular views of empowerment have often been limited to the individual level. However, youth empowerment literature suggests that empowerment goes beyond self-perceived strength to include knowledge, skills, and behaviour. Behavioural awareness at times comes from the connectedness to programmes and adult allies. Many participants shared that feelings of empowerment stemmed from many characteristics, including connections to activities that support life skills, programming that support skilled building, healthy non-parental adult relationships, and guidance that helps with navigating pressures of their adolescence. Participants also shared that feelings of empowerment also stems from being pushed out of their comfort zones and being exposed to non-traditional gender specific programmes like competitive sports and financial literacy. Whilst many participants shared that they still enjoyed programmes that focused on the psychological and social development of their needs, they also shared the need for programmes that can foster skill development that can translate into economic development in terms of income-generating activities for themselves and their families: “... cosmetology class, soaps, bracelets, sewing class, hair classes.”

Feelings of empowerment also translated into feelings of self-efficacy and increased personal control. Health promotion-based intervention and prevention initiatives that contribute to self-efficacy create opportunities for young people to spring them into action while also learning and discussing the social and environmental risk factors that can influence the outcome of their lives. Building awareness of the intersecting factors that can influence their adolescent lifecycle and participate in decisions that can contribute to or hinder their development is key to feeling empowered, especially for young adolescent girls. Interventions and prevention-based programming should promote a strong sense of self through opportunities for

personal control and action, but emphasis should be placed on awareness, engagement, and connectedness to empower adolescent girls to successfully navigate the factors that may impact the overall lifecycle of their lives.

Youth Connectedness: Fostering Healthy Youth-Adult and Peer Relationships

An emerging factor for young women over the course of their adolescence is the importance of connectedness and positive relationships with adults. Fostering youth and adult relationships is a foundation for adolescent health and well-being and key to effective prevention and intervention initiatives (Sieving et al., 2017). The concept of youth connectedness was introduced in the health research literature in the late 1980s (Sieving et al., 2017), and the positive and healthy connectedness to adults extends beyond traditional adult–youth relationships such as schools and churches, but also includes adult allies including counsellors, librarians, employment counsellors, and youth workers, which is consistent with the current qualitative and quantitative youth research.

The protective effects of youth–adult connectedness for well-being amongst racialized and vulnerable youth focuses on the prevention efforts and intervention opportunities presented through the relationship building process with adults. Marginalized young women seek positive adult and peer relationships during their adolescence due to the transformative physical, emotional, cognitive, and social development changes in that time period. Current research shows that early adolescent girls have reported being unhappy with the physical changes with their bodies, and finding difficulty in being comfortable with the changes during puberty (Brooks-Gunn & Reiter, 1990). Youth–adult relationships during the adolescent life cycle are key to creating a comfortable environment for adolescent girls to express themselves and seek guidance without fear of judgement. Youth with access to supportive relationships and with some level of connectedness to adults over the course of their adolescence lifecycle have better holistic outcomes including academic success, social and emotional well-being, connection to social capital, and lesser chance of risk behaviour (Grossman & Bulle, 2006).

For many racialized adolescent girls, being connected to adult allies allows for them to engage with someone they trust in times when they are unable to participate in prevention and intervention activities and programmes. Many of these young women are tasked with dual roles and are oftentimes also caregivers for younger siblings or have additional responsibilities in their home life. To participate and engage in activities that will build social capital while also caring for younger siblings does not always work in favour of their social and capital growth. The lack of frequency can in fact increase the potential of risky behaviour. Many participants shared that being connected to an adult, especially one that is connected to a gender specific programme or activity, allows them to stay connected to the programme,

even when they are unable to attend the programme due to their responsibilities at home to care for their siblings. They also expressed the need for flexible programming and accommodations that can allow for young women with additional responsibilities, part-time work, and younger siblings who must be in the space with them. It is important when developing programmes, to consider a hybrid model of the programme to allow for the continued and consistent engagement of these young women to participate and engage in programmes aimed to build their self-esteem, support healthy life choices, and enhance the lifecycle of their adolescence.

Relationships that adolescent girls have fostered through their connections in youth spaces and programmes allows them to be more vulnerable during a time where they are going through significant life changes and are not always comfortable speaking with their parents. Participants, especially those that are being raised in traditional Caribbean and African households, shared that they are coming from authoritarian and strict households and it is very difficult to be comfortable approaching their parent(s) with questions regarding sexuality, relationships with peers, and physical and interpersonal changes surrounding their adolescence. One participant shared “I come from an authoritarian household, when I try to voice my feelings, I often feel like they don’t care. I want somewhere I can go and talk about the things I can’t at home.” The non-parental adult connectedness is a critical role for adolescents seeking a safe way to connect with and receive support during this time in their life, especially for adolescent girls. This population group is very vulnerable and experience higher rates of depression, low self-esteem, acceptance and peer pressure. Papadakis et al. (2006) found that the gender difference during adolescence shows that girls are more likely to experience depression than boys. Youth-Adult connectedness is critical to mitigate the risk of depression amongst other mental health challenges as the relationship to share and receive insight can significantly enhance the protective factors such as positive relationships to adults and peers where they can be listened to and heard and positive self-perception.

The resounding element from these young women is the desire to be heard. They want staff they can be open and honest with and who are willing to help them navigate the terrain that is being a woman and a teenager. While their programmes allow them a free space to meet and to talk they believe that is not enough.

Limitations

A major limitation of the study centres around the population sample used to conduct the focus groups. The focus groups were completed with young women who are familiar with youth spaces and programming. Although our outreach was held in local high schools and malls, participants of the study belonged to local girls groups, or were familiar with the youth drop-in space—The Spot Youth Centre. As such, this sample does not account for young women who do not actively attend or are aware of youth programming. However, many young women spoke to barriers they feel existed for young women who were not formally in youth programming,

i.e. caring for younger siblings and in after-school employment. Future research could involve youth who do not attend formal youth programming and youth spaces.

Another limitation to this study involves the youth researchers in the study. Some of the youth researchers did not reside within the boundaries of the community we were working with. Different environments, educational, and racial backgrounds impact how individuals process, interpret and analyse data that is collected. A future study that focuses on bringing young women from the community into leadership roles as research assistants may help limit unconscious bias. The Jane Finch community has a complex history between the Northside and Southside boundaries of the neighbourhood. One of the research challenges surrounded turf conflicts and we navigated this through conducting two focus groups in both regions of the community. However, we did not account for “community conflict” or “fear of attending community spaces” when considering the potential barriers for young women accessing different programmes within the community. A future study that explores community violence and safety as barriers to youth engagement will further support the development of strategies to increase youth participation and programme implementation.

Conclusions

In summation, we used participatory action research to find best practices that increase the engagement of young Black women in health promotion programming. Chesney-Lind (2008) suggests that there is a crucial need to involve adolescent girls in the development of gender-specific programming to ensure the focus of prevention and intervention programmes meet the developmental needs of adolescent girls. During our research, three main themes regarding barriers to accessing youth services were discovered: safe and women-only youth spaces, empowerment opportunities, and healthy youth–adult relationships.

The young women in this research study noted the most important thing to them was a space they felt safe. The concern for many young women is that spaces like The Spot are often associated and seen as a male-only environment. They would like a space for just women or a dedicated time within the week catered to young women alone. Furthermore, they described spaces where they can connect with safe and caring staff to help them navigate the challenges and joys of being young women of colour. One participant said “I come from an authoritarian household, when I try to voice my feelings, I often feel like they don’t care. I want somewhere I can go and talk about the things I can’t at home.” This is a clear indication that best practices for providing clear and supportive environments must be at the centre of future programming. Lastly, the young women spoke about increased opportunities for empowerment and economic mobilization as well as exposure to new experiences. They discussed the importance of entrepreneurship training, mentorship, and skill building offered through intentional and considerate programme implementation with accommodations that facilitate and promote their full involvement and

participation. Integrating these types of targeted population and gender considerations into interventions has a positive effect on health outcomes across various domains. As public health continues to shift from reactive to proactive, we must ensure that the target population of health promotional programming are being included in both development and implementation processes in order to create meaningful programming and impactful engagement.

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Chapter 13

Promoting Male Mental Well-Being Through Community-Based Strategies



Roxann McNeish Taormina and Quynh Tran

There is a known but unaddressed gender gap in health. Globally, men have shorter life spans and suffer from more health challenges than women. Despite technological and medical advances, globally men's life expectancy in 2019 was 70.85 years compared to 75.87 years for women (World Health Organization [WHO], 2022a). More alarmingly, in the United States, gender health discrepancies have somehow worsened in recent years compared to a century ago (see Table 13.1) (National Center for Health Statistics, 2020–2021). Male mental health is also a global public health concern and though these concerns have increased recently, this topic remains understudied in research and overlooked in practice.

Suicide is a leading cause of death for all people at any age, but men are disproportionately more likely to die from suicide than women. Male suicide rate (12.61 per 100,000) around the world was over twice that of females (5.44 per 100,000) in 2019 (WHO, 2022b). This pattern is consistent across continents, with the highest sex discrepancies in Europe, the Americas, and Africa (Table 13.2). Interestingly, when examining socioeconomic status, data reveal that the ratio widens the most for high-income countries; men in wealthier nations have three times the risk of dying by suicide compared to women (Table 13.3).

Men and boys have higher prevalence of externalizing problems (e.g., alcohol and substance use disorders, antisocial personality disorders, attention-deficit hyperactivity disorder, conduct and oppositional defiant disorders, and autism spectrum disorders; Courtenay, 2003; Sacco et al., 2022), which often contribute to challenges with education, criminal justice, and employment.

There is higher prevalence of internalizing problems, such as mood and anxiety disorders, in female populations but prevalence in males might be masked by social,

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Table 13.1 US life expectancies by gender

	Male	Female
1900	46.3	48.3
1950	65.6	71.1
2000	74.1	79.3
2019	76.3	81.4

Note. Reprinted from <https://www.cdc.gov/nchs/data/health/2020-2021/LEExpMort.pdf>. Copyright 2020–2021 by National Center for Health Statistics

Table 13.2 Gender differences in suicide rates by WHO regions

	Male	Female	Male-to-female ratio
Global	12.61	5.44	2.32
Africa	17.98	5.23	3.44
Americas	14.17	4.09	3.46
South-East Asia	12.35	8.09	1.53
Europe	17.14	4.29	4.00
Eastern Mediterranean	9.15	3.48	2.63
Western Pacific	9.65	4.81	2.01

Note. Adapted from <https://www.who.int/data/gho/data/themes/mental-health/suicide-rates>. Copyright 2022b by World Health Organization

Table 13.3 Gender differences in suicide rates by socioeconomic status

	Male	Female	Male-to-female ratio
Low income	15.19	5.32	2.86
Lower-middle	13.11	7.11	1.84
Upper-middle	10.65	4.05	2.63
High income	16.45	5.43	3.03

Note. Adapted from <https://www.who.int/data/gho/data/themes/mental-health/suicide-rates>. Copyright 2022b by World Health Organization

cultural, and institutional norms. Many males are socialized to adopt certain masculine norms, such as strong self-reliance and control over one’s emotions, which discourage emotional expression. Such socialization challenges providers in accurately diagnosing these disorders in men. For example, women often display depressed moods and somatic symptoms that are consistent with standard depression diagnoses. Male depression symptoms are atypical, often exhibited as violence, anger, reckless behaviors (e.g., alcohol or drug use), leading researchers to coin the term “male depressive syndrome” (Affleck et al., 2018). Under-detection of depression in males may help partially explaining why their depression rates are lower, but their suicide rates are higher.

Given the crisis of male mental health across the world, current methods to address it appear ineffective. Deficit and medical models that solely focus on

treatment are not practical when supporting men (Guntuku et al., 2021). Many scholars advocate using of a public health-oriented approach that addresses social determinants of health to better improve male mental well-being (Affleck et al., 2018; Courtenay, 2003; Guntuku et al., 2021). Atkins and Frazier (2011) have long proposed a three-tiered public mental health model to counter the limitations of traditional mental health services (i.e., medications and psychotherapy) and broaden the scope of practice to emphasize prevention and intervention. This model consists of three levels of mental health promotion: universal, targeted, and intensive. The universal tier outlines macro-level prevention in natural settings (e.g., communities, schools, etc.) by building their capacities to deliver services that may directly or indirectly benefit mental health. The targeted tier prioritizes outreach, screening, and early intervention for high-risk groups (e.g., those exposed to social injustice, intergenerational trauma, poverty, etc.). The intensive tier is concentrated on evidence-based treatments of mental health disorders.

A primary risk factor for males experiencing adverse outcomes when there is a mental health concern is reluctance to seek help and/or utilize mental health services. While there are various contributing factors to this global trend (e.g., masculinity norms, stigma, service delivery issues, etc.), research demonstrates males are far less likely to participate in most, but particularly individualized, treatment-focused mental health services (Guntuku et al., 2021). Furthermore, clinical programs and services rarely incorporate a gendered lens and experts suggest, “mental health services are inherently ‘feminized’” (Affleck et al., 2018, p. 586). The result is unresponsive and untargeted treatment modalities and systems for males across the lifespan. Addressing male mental health also warrants alternative non-individualized, tailored, community-based prevention and intervention efforts, for which utilizing the public health model is best suited. The following section will describe an example of such effort: the *Making Connections for Mental Health and Well-Being Among Men and Boys in the U.S.* Initiative.

Community-Based Mental Health Promotion Strategies

Creating a Foundation

The Making Connections Initiative (MCI) was designed to empower communities to develop local prevention-focused efforts to promote the mental health and well-being of an at-risk male population. Grantees were community-based organizations or large organizations located in the community. Each grantee had to identify a specific focus population and geographic focus area. Utilizing Atkins and Frazier (2011)’s public mental health model, MCI efforts addressed both the universal and targeted levels of mental health promotion.

The MCI as well as research found that to be successful in any community health effort, it is necessary for to build on a collaborative foundation, recognizing the community as partners and community members (the focus population) as

co-leaders in all aspects of programming (Bogart & Uyeda, 2009; McNeish et al., 2022). During the planning phase (Year 1), all grantees had to create a coalition of community partners to help lead/inform their efforts. Grantees also engaged in various processes to enable the community to identify its own needs, another principled and grounding approach to community-based implementation. Creating a foundation of trust is imperative, and community engagement facilitates this process (McNeish et al., 2022).

Creating Safe Community Spaces

Almost all MCI programs included creating safe (physical and emotional) spaces in their community for young men to connect, converse about relevant topics, heal, create/work on activities (e.g., fixing bikes, gardening), play (sports), and feel comfortable just being themselves. Having a drop-in type space that allowed for some unstructured activities outside of programming fostered participation. Programs with these spaces were better able to sustain engagement, build peer connections, as well as identify and involve men and boys in planning and executing activities to improve community conditions that impacted their mental well-being. Participants described these spaces as “home” and “lifesaving” as they provided temporary insulation from other adverse community activities and conditions. These programs/spaces became known and functioned as community resources for positive male development.

Developing Capacity to Promote the Mental Well-Being of Self and Others

Grantees had a primary focus on building the capacity of participants and of the community to better serve males. Programs provided structured and unstructured education based on stated goals and the needs of participants and the community. These included individual training such as leadership development, restorative practices, bike repair, suicide prevention, and mental health. Community training/workshops/gatherings also included these topics and many others. Training ranged from those existing, such as Mental Health First Aid and Question Persuade Respond (QPR), to being tailored, such as training community organizations on cultural considerations when working with certain groups of males. Individual trainings created a cadre of community members with additional/marketable and transferable skills, a conduit for the spread of information within families, ignition for advocacy and preparation for employment marketability. Community education helped create

responsive community institutions, catalyzed change in community conditions and provided hope for a better future for males in the community.

Creating Cultural and Responsive Approaches

During the MCI planning year, grantees identified needed, responsive strategies targeted to the focus population. This necessitated considerations of community, group, and individual culture, and their intersection. Most focus populations had a shared culture—connected by ethnicity, country of origin, religion, and/or community experiences. Programs utilized culturally based approaches (culture/healing circles, food, community conversation, sports, etc.) to engage and inform participants and the community. This facilitated the creation of gendered peer networks, grounded in cultural understanding. At the program level, participants' connections extended beyond programming, into school and the wider community. At one MCI site, young men connected outside of programming to plan their own (often male-focused) well-being-promoting community events. Programs also increased community knowledge of mental health and community resources and helped create formal and informal referral networks among community organizations and members.

Facilitating Advocacy for Community Change to Promote Well-Being

Providing space and knowledge were facilitators to civic engagement and advocacy efforts. Programs ensured the validation of participant voices in helping to direct programming, which helped some to find their voice and others to amplify theirs. This carried over to voicing concerns about community conditions. Programs also used community asset-based approaches to foster concern for and connection to the wider community, empowering participants to advocate for needed change and to resist potentially harmful propositions/plans. Boys and young men were particularly active in these efforts, targeting community conditions they deemed important. For example, participants successfully advocated for the installation of a bike lane on the road where the program was located and for changes in the availability of bus passes.

Grantee staff and other community organizations also advocated for and instituted changes (resulting from participation in MCI) to benefit their focus population. These included changing policies to incorporate restorative practices in hiring, changing intake forms to collect data on males (veterans) to better serve this population, and attending to how to support the wellbeing of male employees.

Shifting Community Narratives

Most MCI programs were based in communities with challenging conditions (e.g., violence, limited opportunities, etc.). Participants were well aware of these conditions as well as the associated negative narrative from both residents and outsiders. Through the strategies outlined prior as well as more direct efforts such as education about the community's history and reframing their social biographies, participants' perspectives of their communities changed. Many rejected the negative narrative and instead created new narratives that emphasized strength and hope. Evaluation findings highlighted differences in perspectives, indicating that program participants always had a more positive view of their community than other community members. Changing and sharing these narratives fostered a sense of community connection and ownership.

Conclusion

While changes in some community conditions that negatively impact mental health and well-being were not realized (or expected) by the end of the MCI, what was achieved was improved capacity to create community change that positively impacted male lives. Knowing the dire global status of male mental health and the limited, ineffective treatment options, a focus on universal and targeted prevention is imperative. Maternal and child health is inextricably connected to male health so any investment in better serving males is an investment in better family and societal health.

More information about formulating a gendered and community-level approach to improving male mental well-being can be found in the Making Connections Backpack at <https://preventioninstitute.org/making-connections-backpack>.

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Chapter 14

Faculty Expectations and Experiences: The Return to On-Campus Teaching and Learning



Maria Lucia DiPlacito-DeRango

The COVID-19 pandemic and its associated lockdowns/restrictions stifled Canadian post-secondary professors' and students' teaching and learning experiences. The pandemic forced a dramatic shift to virtual teaching and learning during the Spring/Summer 2020 semesters, which left many professors and students feeling displaced, confused, and ill-prepared (Blankstein et al., 2020; McDaniel et al., 2020; Means et al., 2020). In the following semesters (Fall 2020 to Fall 2021), virtual instruction continued to dominate. Guided by federal and provincial health and safety policies, Canadian colleges and universities resumed on-campus teaching and learning activities in the Winter 2022 semester or, at the very least, began an incremental approach to a full return (University Affairs, 2022). Post-secondary institutions welcomed a full return to in-person or on-campus teaching and learning in the Fall 2022 semester: 83% of 150 Canadian colleges and universities deliver courses in person, and 2% of students engage in fully online courses (Brown, 2022).

Research into the well-being and engagement of professors and students once they returned to campus has gradually come to fruition, with a seemingly greater focus on the latter group (Dhingra, 2021; Mackenzie, 2021; Schwartz et al., 2021). More thoughtful consideration of professors' perspectives can help place higher education institutions in a better position to support teaching and learning processes for faculty, staff, and students, as well as contribute to improved public mental health (PMH) models more broadly (Ozamiz-Etxebarria et al., 2021). A public health approach to population mental wellness (a paradigm that guides Canadian public health) involves the organized efforts of various sectors, including academia, in implementing wellness prevention and intervention strategies (Campion et al.,

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2022; Canadian Public Health Association, 2021). Human rights, equity, social justice, and evidence-informed practices underscore the strategies (Dykxhoorn et al., 2022; National Collaborating Centre for Healthy Public Policy, 2014). According to Campion et al. (2022), “the COVID-19 pandemic has widened the implementation gap but has also increased mental health awareness and highlighted the need for a PMH approach” (p. 178). Academic and work environments serve as central community areas that can help individuals enjoy life, deal with challenges, and carry positive feelings overall (Canadian Public Health Association, 2021).

Purpose and Methods

This chapter presents a scoping review of the literature that examines higher education professors’ perspectives about their return to campus following their experiences with pandemic-driven remote teaching. Two research questions guided the literature search: *How did professors feel about their return to on-campus teaching? What changes (opportunities or challenges) did professors (expect to) experience after returning to on-campus teaching?* The review included scholarly/academic papers, opinion editorials, and organization/government documents that precisely captured professors’ perspectives on returning to on-campus teaching. Publications dated from the Summer of 2020 and onwards were considered, aligning with when Canadian colleges and universities began planning their incremental return to campus (University Affairs, 2022).¹

How Did Professors Feel About Their Return to On-Campus Teaching?

Current literature demonstrated that professors experienced a wide range of feelings after returning to campus (Chronicle of Higher Education, 2020; Fichtel & Bhojwani, 2020; Ogidigben et al., 2021; Ozamiz-Etxebarria et al., 2021; Wyne & Hudak, 2021). Three umbrella terms were chosen to define how professors reportedly felt: *Opportunistic*, *Apprehensive*, and *Apathetic*. The review demonstrated that many professors were *happy*, *optimistic*, *positive*, *keen*, and *excited* about returning to campus (Deshmukh, 2021; North Western Michigan College (NWMC), 2021; Varol et al., 2022). For example, after surveying academic personnel (45.9%) and support staff on their return to a post-secondary institution in the Netherlands, Varol et al. (2022) revealed that 65.8% of teaching faculty were happy to work at the institution again and connect with colleagues and students. Similarly, the 49 one-on-one interviews with faculty and students at over 40 higher education

¹ Additional details on methods are available upon request.

institutions across 12 countries (including Canada) presented in Deshmukh (2021) demonstrated that educators were unanimously eager to resume their campus presence. The review indicated that much of the optimism professors exhibited was driven by their want to engage in more meaningful conversations about “the new normal” in teaching and learning after their experiences teaching remotely during pandemic lockdowns (Ashour et al., 2021; Dea, 2021; Deloitte, 2021; Thomas, 2021).

While the review represented many professors who felt opportunistic about their return to on-campus teaching, a fair share of professors reportedly felt apprehensive (Chronicle of Higher Education, 2020; Fichtel & Bhojwani, 2020; Ogidigben et al., 2021; Svalargo, 2021; Varol et al., 2022). The Chronicle of Higher Education (2020) surveyed 1122 faculty members at various institutions around the United States of America and found that “the professoriate is overworked, stressed, and thoroughly exhausted.” Ozamiz-Etxebarria et al.’s (2021) investigation of the psychological state of teachers ($N = 1633$) returning to face-to-face instruction at a university in Spain revealed that “a high percentage of teachers suffered from symptoms of anxiety, stress and depression when the schools and universities reopened” (p. 4). Similarly, 58% of surveyed university students from a Canadian university featured in Liddle’s (2022) study disclosed feeling *less than okay* about the return to campus. Professors identified several factors that contributed to their uneasy feelings about returning to on-campus teaching: Increased exposure to or contraction of the COVID-19 virus (Cassels, 2021; Marek, 2020); disengaged students who are unwilling to learn and unable to cope (Deloitte, 2021); (re)adjustment to on-campus activities and face-to-face teaching (Rapanta et al., 2021; Salmi, 2020); workload inequities (Dea, 2021; Robson et al., 2022); and personal/home obligations (Svalargo, 2021). Some of these factors are explored further later in the review.

The review also pictured a few professors with apathetic feelings (Cengage, 2021; Doherty et al., 2021; NWMC, 2021). Cengage’s (2021) survey of 1702 faculty and administrators from 967 American higher education institutions revealed that 8% of instructors felt the same as they did pre-pandemic, specifically about their teaching practices. Similarly, 20% of Michigan State University’s faculty responded with indifference and no concerns about returning to campus (NWMC, 2021).

What Changes (Opportunities or Challenges) Did Professors (Expect to) Experience After Returning to On-Campus Teaching?

The review revealed that professors expected or experienced many changes (challenges and opportunities) after they returned to on-campus teaching. These changes were organized and discussed according to the following themes: *Physical Health and Safety*, *Delivery Modes*, *Teaching Practices*, and *Institutional Philosophies and Practices*.

Physical Health and Safety

The review demonstrated that professors anticipated or experienced physical health and safety concerns upon returning to campus, namely being exposed to or contracting the COVID-19 virus (Cassels, 2021; MacLean, 2021; Marek, 2020; NWMC, 2021; Pandit et al., 2022; Svalargo, 2021; Varol et al., 2022). For example, Cassel's (2021) report, *Majority of faculty and staff feel unsafe returning to campus, surveys indicate*, noted that "seventy-one percent of Canadian Union of Public Employees (CUPE) 3904 and 68 percent of Ryerson Faculty Association (RFA) respondents felt that the risks of in-person learning outweighed the value." Likewise, in Pandit et al.'s (2022) cross-sectional study, student and faculty survey responses revealed that "returning to campus and getting sick (34.5%; $n = 193$) was the top concern rated by both employees and students" (p. 3). Limited institutional vaccination and masking policies were sometimes identified as potential barriers to keeping professors safe (MacLean, 2021; Varol et al., 2022). Only a few literature sources represented faculty members as unencumbered by physical health and safety concerns. For example, Svarlago's (2021) editorial noted faculty members at the University of Oklahoma who pushed back against mask and vaccine policies, not concerned by health and safety risks.

Delivery Modes

The present review revealed that professors expected or encountered opportunities and challenges with all delivery modes (on-campus/face-to-face, online/remote, hybrid/blended, HyFlex) after returning to campus (Ashour et al., 2021; Deloitte, 2021; NWMC, 2021; Robson et al., 2022; Veletsianos et al., 2020). Concerning on-campus or face-to-face instruction, the review revealed that professors leveraged in-person time with students more carefully, using the time on campus to provide high-level and engaging education (Doherty et al., 2021; Mathew, 2020; Rapanta et al., 2021; Salmi, 2020). For example, Thomas' (2021) inquiry into the ways COVID-19 has changed how Canadian universities teach revealed that "you [professors] take the time that you're in person to have discussions, conversations, experiential learning opportunities, capstone projects, hands-on learning."

The review suggested that professors continued to value online/remote delivery modes even after returning to in-person teaching (Ashour et al., 2021; Gonzalez & Griffin, 2020; Mathew, 2020; Rapanta et al., 2021). Cengage's (2021) survey exhibited that "half of faculty (51%) are more positive about online learning today than pre-pandemic." The review demonstrated that professors carried a reduced resistance, increased comfort, and greater familiarity with remote teaching and learning:

Getting over that initial sort of "no, not interested, don't understand it, impossible to deliver the quality that I want in an online space"—that initial reaction, we're now well

beyond that,” he said. “We’re now sort of talking, ‘OK, what makes sense to put online? What are the pedagogical strategies that work best online?’” (Thomas, 2021)

Professors reportedly valued online delivery modes for their use of varied technologies, promotion of inclusivity and flexible learning pathways, encouragement of curricular co-construction, and ease of collaboration between faculty, students, departments, etc. (Deloitte, 2021; Kandri, 2020; Robson et al., 2022). They also noted taking opportunities to evolve existing digital pedagogies, expand digital learning capacities, and build technology infrastructure (e.g. increasing remote social/communication features) in order to ensure bolstered, well-designed, high-quality online instruction (Rapanta et al., 2021; Salmi, 2020; Veletsianos et al., 2020).

The review revealed that although professors admired face-to-face and online delivery modes, they drew greater attention to blended/hybrid models (Ashour et al., 2021; Cengage, 2021; Fichtel & Bhojwani, 2020; Rapanta et al., 2021; Thomas, 2021; Veletsianos et al., 2020). Professors and university managers from three Middle Eastern higher education institutions completed open-ended questionnaires in Ashour et al. (2021). The questionnaires uncovered that a majority of respondents opted for a hybrid mode of provision when asked about their preferences: “Respondents foresee more sophisticated forms of hybrid campuses that are based on partial digitalization and make use of technology in the teaching and learning processes but still have many options for F2F [face-to-face] interaction” (Ashour et al., 2021, p. 232). Likewise, quantitative and qualitative data collected from two American Return to Campus Forums with higher education experts (including professors) showed that 72% of participants preferred a hybrid work model (Deloitte, 2021).

The review demonstrated that professors recognized the opportunity for blended or hybrid learning delivery modes to serve as a “pedagogic approach” in driving technology forward, as well as promoting accessible, well-rounded teaching and learning experiences (Mathew, 2020; Rapanta et al., 2021; Robson et al., 2022; Thomas, 2021). As Thomas (2021) stated, teaching a hybrid course “allows students to choose when they’re online and when they’re in the classroom...students are provided classroom options and online options and they’re given the freedom to choose which option is the best fit for them for every session.” Additionally, the review showed that professors questioned the notion of learning spaces in light of the digital footprint expansion that hybrid/blended delivery modes have presented—blurred boundaries between all modes (Deshmukh, 2021).

Teaching Practices

The present review revealed that professors anticipated or experienced various challenges, opportunities, etc., in their teaching practices after returning to on-campus teaching (Cengage, 2021; Ogidigben et al., 2021; Rapanta et al., 2020; Salmi, 2020; Wyne & Hudak, 2021). The anticipated or experienced changes reportedly occurred

in the following areas: Assessments, emotional support, curriculum planning and dissemination, and attendance. The review highlighted a need for professors to (re) adapt assessments in ways that align more closely with learner needs and the variable nature of delivery modes (Rapanta et al., 2020; Salmi, 2020; Veletsianos et al., 2020). Interviews with higher education instructors from Switzerland, Australia, Spain, and Canada revealed that “we [educators] realized that new modes of evaluation can change the focus of evaluation itself, e.g. from factual knowledge to competences, or from a one-time snapshot (the test) to the ongoing collection of evidence” (Rapanta et al., 2021, p. 727). Professors often pointed to increased reliance on digital platforms as driving the need to readapt assessments—making specific evaluation procedures align with online curricular and pedagogical approaches, as alluded to in Salmi’s (2020) document analysis and interviews with global higher education faculty, staff, and researchers.

The review demonstrated that professors recognized the intensity and importance of the emotional labour involved in their work (Dea, 2021; Gonzalez & Griffin, 2020; Salmi, 2020). Professors identified that support for students occurred by personalizing the curriculum, scaffolding, and accommodating outside-of-school needs (Rapanta et al., 2021). As professor Dea (2021) put it in *Imagining the post-pandemic university*,

For the first time in my recollection, there is a critical mass of professors seriously discussing the broad range of challenges their students are experiencing (bad Wi-Fi, distant time zones, no private place to study, family health crises, poverty, childcare, disabilities that make remote learning harder...) and how to make their pedagogy as supportive and flexible as possible for different learners’ situations.

Professors featured in Gonzalez and Griffin’s (2020) report, *Supporting faculty during and after COVID-19*, noted that they remain concerned with how/if the emotional labour is evaluated or appreciated.

The review revealed that professors expected or experienced several changes related to how they planned and delivered curriculum after resuming on-campus teaching (Deshmukh, 2021; NWMC, 2021; Rapanta et al., 2021; Robson et al., 2022; Salmi, 2020; Thomas, 2021; Veletsianos et al., 2020). The review demonstrated that professors increased their efforts in upfront, authentic, and creative curriculum design—emphasizing approaches such as experiential learning, active learning, autonomous and peer learning, flipped learning, and anything else that adapts well to multiple delivery modes (NWMC, 2021; Rapanta et al., 2021; Robson et al., 2022; Salmi, 2020). Most cation teachers ($N = 143$) surveyed by Robson et al. (2022) revealed that they would not return to conventional lecturing. As Veletsianos et al. (2020) concluded from their study on how Canadian faculty and administrators imagine the future of higher education, there will be “fewer big-box large lecture halls where someone is delivering information to hundreds at a time.”

Perspectives around student attendance represented another area that shaped professors’ teaching practices once they returned to campus (Dea, 2021; Rapanta et al., 2020). As Dea (2021) passionately remarked, “stop assigning attendance grades. They punish learners with disabilities, and students with jobs and caring

responsibilities for the days they are unable to come to class.” Professors shared that they no longer tied attendance to a particular space but to how students exhibit their presence while interacting with the curriculum or others (Rapanta et al., 2021). Whether about assessments, curriculum planning and dissemination, emotional support, or attendance, professors advocated the need for increased time, flexibility, and role assumption after they reentered the in-person teaching environment (Ashour et al., 2021; Dea, 2021; Salmi, 2020; Veletsianos et al., 2020).

Teachers discovered that they are not just ‘knowledge dispensers’ for their students... they are adults or experts that students can meet and interact with also informally... being a teacher is not keeping up some specific instructional form, but adjusting to the ever-changing and diverse needs of students... the teacher acts as tutor, organizer of the learning process, curator of the learning resources, motivator and project manager of students’ learning. (Rapanta et al., 2021, p. 727)

Wider Institutional Philosophies and Practices

The review showcased only a few studies or editorials where professors acknowledged the progressive and supportive nature of institutional policies and practices following their return to campus (Dea, 2021; Salmi, 2020). For example, some professors in Gonzalez and Griffin (2020) and Salmi (2020) noted institutional efforts in providing equity-focused resolutions to problems that came about during lockdown-driven remote learning, as well as paying greater attention to supporting learning and teaching needs. For the most part, however, the review revealed that professors expected or encountered challenges with several broader institutional philosophies and practices (Deloitte, 2021; Doherty et al., 2021; Gonzalez & Griffin, 2020; Liddle, 2022; NWMC, 2021; Varol et al., 2022). Professors employed terms such as *uncertain*, *unstable*, *untrustworthy*, *uncommunicative*, and *unilateral* to describe recent institutional policies and practices (NWMC, 2021; Ogidigben et al., 2021; Varol et al., 2022). Online surveys distributed to faculty, staff, and administrators at Kennesaw State University (Ogidigben et al., 2021) revealed that participants (approximately 15% of 48 in total) lacked trust in the institution’s policies and protocols once they returned to campus from their pandemic-driven remote teaching experiences. Likewise, Liddle’s (2022) piece, *Frustration mounts among faculty amid return to in-person learning*, revealed that important academic decisions are being made without the consultation of faculty, staff, and students.

The review demonstrated that professors were concerned about the quality/values underwriting higher education institutions’ current and future policies and practices (Doherty et al., 2021; Liddle, 2022; Robson et al., 2022). Survey data featured in Robson et al. (2022) revealed that professors pointed to cost-effectiveness and workload (as opposed to sound pedagogy) as the drivers of future institutional policy and practice development. Some professors noted the potential permanency of emergency response teaching and learning forms (Liddle, 2022), while others pointed out the “student as consumer” model making headway (Doherty et al.,

2021). Drawing from roundtable discussions with academics about returning to in-person teaching, Doherty et al. (2021) concluded that increases in selectivity (e.g. delivery modes) offered in today's post-secondary institutions serve as evidence of a consumer model approach.

The review showed that professors anticipated the exposure and perpetuation of learner and workload inequities upon returning to campus (Dea, 2021; Gonzalez & Griffin, 2020; Rapanta et al., 2021). Professors indicated that the current version of high-quality higher education (i.e., one with an increased reliance on digital competencies and technologies) is easily accessed by privileged students—exacerbating the inequities marginalized groups already faced pre-pandemic (Dea, 2021; Doherty et al., 2021; Thomas, 2021; Veletsianos et al., 2020). In addition to learners, professors noted the “various highly differential challenges academic staff and other university employees are themselves experiencing, and about how to ensure that COVID-19 doesn't widen the gap between different groups of employees” (Dea, 2021). The review demonstrated that professors hold varied perspectives on productivity and workload (often related to delivery modes) after resuming on-campus teaching activities, which they believed widened equity gaps between colleagues (Gonzalez & Griffin, 2020; Robson et al., 2022).

Implications for Post-Secondary Teaching and Learning

This paper presented a scoping review of current academic and gray literature on the perspectives of higher education professors following their return to on-campus teaching from the pandemic-driven lockdowns and periods of remote teaching activity. The review demonstrated some methodological drawbacks in this area of study. One, an underwhelming amount of scholarly research has been conducted in this study area (compared to a more significant number of gray literature sources). Two, only some works considered the Canadian higher education context. Lastly, the professor's perspectives were never examined exclusively, regardless of context or resource type. The above-noted methodological drawbacks were expected considering Canadian professors' recent return to in-person teaching. Publications in this subject area will likely grow in number, quality, and breadth (Doherty et al., 2021). As Varol et al. (2022) noted, “that feeling cannot be switched off by a cognitive decision; people need some time to get accustomed again to social contacts... changes in the mitigation rules, staff members' perspectives, and concerns may shift over time” (p. 10). Although it may be too early to capture a complete picture of how professors respond to their return, it is still feasible to explore the feelings and changes they have expected or encountered thus far (Salmi, 2020).

The review suggests that professors exhibited a range of feelings (opportunistic, apprehensive, or apathetic) after returning to on-campus teaching, representative of the continued unpredictable responses of individuals living in a pandemic. The Canadian Public Health Association (2021) revealed that “the COVID-19 pandemic

provides a striking example of the influence of a crisis situation on the social determinants of health and their subsequent effect on vulnerable populations.” The feelings that professors shared signal a need for higher education institutions to (re)visit public mental health support models. Attempts to solely target their personal feelings would carry little impact on the well-being of populations throughout post-secondary institutions or in public at large (National Collaborating Centre for Healthy Public Policy, 2014). Comprehensive programming in academic settings that follow a strength-based, whole-population, multi-tiered approach can help ensure professors’ feelings go acknowledged and supported, and creates opportunities for more robust public mental health models (Bazyk, 2020; Campion et al., 2022). Higher education institutions and future researchers are encouraged to monitor faculty and staff’s feelings and adjust relevant supportive models and practices accordingly (Varol et al., 2022).

The review suggests that professors anticipated and experienced various changes (challenges and opportunities) once they returned to campus. As suspected, professors demonstrated physical health concerns upon returning to campus. Professors’ viewpoints on physical health and safety were likely mitigated by personal perceptions of risks, masking, vaccination, etc., policies upheld within individual institutions (MacLean, 2021; Varol et al., 2022). Higher education institutions are encouraged to communicate clear(er) and informed guidelines that protect the health and safety of faculty and staff as they continue working through the current pandemic (MacLean, 2021). Post-secondary institutions are urged to think about faculty and staff’s physical health and safety through a holistic lens; to consider the fundamental similarities between public mental health and public health and go beyond standard healthcare access and measures (Public Health Sudbury and Districts, 2019).

The review suggests that professors have enlivened or repurposed face-to-face teaching and welcomed the benefits of online instructional approaches. The pedagogical value of in-person and virtual teaching has been recognized: “digital technologies are not an enemy disrupting ‘humane’ education, but a potential ally for a better education” (Rapanta et al., 2021, p. 732). Although they acknowledged the work ahead in developing sound and meaningful delivery modes (e.g. evolving existing digital pedagogies), professors seemed open to continuing teaching via in-person, online, or hybrid—aligning with the growing appetite from students for both online and in-person course offerings (Doherty et al., 2021; Kandri, 2020). As one professor thoughtfully shared, “we need to leverage the best of physical place and virtual space to create a community of learners that is not solely bound by either” (Mathew, 2020). Higher education institutions are urged to include professors in the decision-making processes around delivery modes, as the latter likely carries the experience and pedagogical knowledge necessary to scale up the potential of in-person, online, and/or hybrid instruction. Additionally, more significant research is worthwhile into the purpose and use of physical learning spaces, where higher education settings can, perhaps, consider removing departments or decentralizing existing institutional ecosystems (Deshmukh, 2021; Salmi, 2020).

Unsurprisingly, professors have changed their teaching methods following their return to campus. More holistic approaches to assessment seem warranted to accommodate (and ensure consistency between) the different modes college and university students use to access their education (Ashour et al., 2021; Rapanta et al., 2021). Professors exhibited efforts in planning and disseminating curricula in ways that are accessible, flexible, tech-friendly, dynamic, and stimulating for students (Dea, 2021; Salmi, 2020). Additionally, professors seemed to have situated themselves in a supportive role for the mental health and well-being of students (Di Placito-DeRango, 2018): “taking on the complicated role of caring...the necessity of rethinking their roles [and] ways of supporting students’ learning tasks” (Rapanta et al., 2021, p. 716). A redefinition of attendance was also recognized. Student attendance can be constructed as a social, cognitive, and facilitatory presence or as post-humanistic, considering the involvement of non-physical spaces (Rapanta et al., 2020). Future researchers and practitioners are encouraged to evaluate the resources (e.g. toolkits, training, flexibility) necessary to support the growth in time and learning required to accommodate new teaching practices and roles (Deloitte, 2021; Rapanta et al., 2021).

The review suggests that professors questioned the unwritten values of higher education and exposed the inequities for educators and learners alike. The concept of labour seems to have been problematized, calling for a redefinition of professor work models that reflect flexibility and sustainability (Deloitte, 2021; Wyne & Hudak, 2021). Cost-effectiveness and workload are the likely drivers of future institutional policies and practices (Robson et al., 2022). To accommodate (or capitalize on) the openness of professors and students, post-secondary institutions may divide higher education into (a) less expensive subjects (e.g. humanities) taught online, and (b) more expensive subjects (e.g. nursing) taught on campus (Ashour et al., 2021). Equity-focused responses are warranted; an investment in inclusive, comprehensive policies and practices that model wider public (mental) health approaches for marginalized students and faculty (Dea, 2021; Rapanta et al., 2021; Salmi, 2020).

Conclusions

The pandemic has undoubtedly prompted a sea of changes in Canadian higher education institutions’ operations. Professors have returned to on-campus activities, including in-person teaching, and have been met with experiences asymmetrical to pre-pandemic nuances. These experiences provide opportunities to design and embrace informed, flexible, equitable, and synergetic processes for future higher education teaching and learning and larger Canadian public mental health models. “The coronavirus crisis has made it clear that it’s more important now more than ever to connect with faculty and staff and to thoughtfully consider how they’ll do their best work” (NWMC, 2021).

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Chapter 15

Understanding Stressors of School Teachers in Nepal



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Introduction

The complexity of contemporary society has made stress a pervasive phenomenon in every walk of life. The teaching profession does not remain untouched by the “disease of our time” (Olivier & Venter, 2003). Currently, teacher stress has become an endemic problem, with teaching regarded as one of the most grueling and stressful professions in the world (Griffith et al., 1999; Kyriacou, 2001; Valli & Buese, 2007; Skaalvik & Skaalvik, 2016).

Although definitions and theoretical frameworks of stress differ widely across scholars (Fink, 2010), Hans Selye’s (1974) physiological approach to stress is the most widely subscribed (Fink, 2010). Selye (1974) defines *stress* as “the body’s nonspecific response to any demand upon it.” Lazarus and Folkman (1984) proposed a cognitive psychological approach and defined stress in terms of the transactional relationship between individuals and the environment, whereby the demands of the environment surpass one’s ability to deal with them. In sum, the incongruity between risk factors and protective mechanisms reduces the ability to cope with the situation, resulting in stress reflected in negative cognitive-affective valence (Selye, 1975; McCarthy et al., 2014; Prilleltensky et al., 2016). Teacher stress can be conceptualized as a situation where “a response syndrome of negative affects results from the teacher’s job and is mediated by an appraisal of threat to the teacher’s self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat” (Kyriacou & Sutcliffe, 1978, p. 159). Teacher stress can also be defined as a disturbed equilibrium of risk and protective factors (Prilleltensky et al., 2016). It is a form of stress observed in an educational context (von der Embse et al., 2019).

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Stress is pervasive in the teaching profession everywhere. One study has revealed that almost half of teachers experienced occupational stress during the school year and that this percentage is on par with other notably stressful professions like physicians and lawyers (Greenberg et al., 2016). Studies in countries like Malaysia, China, India, and Ethiopia showed a high prevalence of stress (Hadi et al., 2009; Li et al., 2020; Kaur & Kumar, 2019; Kabito & Wami, 2020). In Nepal, a previous study showed a prevalence of 51% of occupational stress (Kayastha & Kayastha, 2012) in secondary school teachers.

Several factors contribute to teachers' stress. Individual factors such as values, personality traits, and knowledge (Kyriacou, 2001) and school environment contain some inherent risk factors associated with stress (Halpin et al., 1985; Prilleltensky et al., 2016). Student apathy and negligence, lack of discipline and respect for teachers, rigorous standards of job performance, demanding workload; strained or unsupportive relationships with colleagues and administration, and rapid technological changes are some oft-reported sources of teacher stress (Kyriacou, 2001; Geving, 2007; Prilleltensky et al., 2016; Toropova et al., 2021). Teaching in rural areas, at the elementary level, and being a novice teacher tend to increase the risk of high stress and burnout (Haberman, 2005; Neuenschwander et al., 2017; Goddard et al., 2006). Excessive monitoring, harassment, and lack of proper breaks in school are also some stressors to school teachers (Mondal et al., 2011). Montgomery and Rubb (2005) thoroughly reviewed existing literature on theoretical models of teacher stress. They revealed that teacher stress stems from intra-individual situational process disturbances, consisting of professional aspects (for example, students, administration, colleagues, workload, and role ambiguity) and personal relationships (family and friends). This process is mediated by other factors such as personality traits, supportive environment, subject taught, and other demographic variables such as age and gender. Thus, the sources of teacher stress are diverse and mutually reinforcing (Montgomery & Rubb, 2005).

Teachers' stress can have several negative consequences. Stress can engender long-term deterioration of health and increase debilitating anxiety and depression (Cranwell-Ward, 1990; Scheuch et al., 2015). Stress can contribute to poor mental health, high turnover, and lowered productivity of teachers (Khan et al., 2012; Liu & Onwuegbuzie, 2012; Schonfeld et al., 2017). Teacher stress adversely impacts the teaching-learning atmosphere, directly affecting student learning (Ransford et al., 2009). It is equally relevant for administrators and policymakers due to its cardinal role in absenteeism and the high turnover rate for teachers (Darling-Hammond, 2003).

Despite the pervasive nature of teacher stress, very few studies have been conducted in this domain in Nepal (Mondol et al., 2011; Kayastha & Kayastha, 2012). Mondol et al. (2011) reported mild to moderate stress levels, with significantly higher psychological stress in male teachers than female teachers, whereas Kayastha and Kayastha (2012) indicated low-stress levels in teachers. These studies did not focus on possible stressors to teacher stress. We seek to understand teacher stress from a qualitative viewpoint since the number of qualitative studies conducted in Nepal about teacher stress is virtually nonexistent. This study seeks to understand the issue through the subjective viewpoints of the teachers of public and private schools in Nepal.

Methodology of the Study

A qualitative study design was used to explore the sources of stress in teachers of private and public schools in Nepal. The epistemological principle of qualitative design is comprehending the other's viewpoint, activities, and experiences by gaining firsthand information about their subjective world (Flick, 2014). We were guided by this methodological stance throughout the research process. A set of closed-ended and open-ended questions was prepared in Google forms and provided to the participants through online platforms. Using convenience and snowball sampling, we interviewed 275 teachers in private or public schools responded to the question set, of which 272(98.9%) consented to participate in the study.

Data Collection Tool

The data collection sheet included demographic information and open- and closed-ended question set. Demographic data collection sheet comprised information such as name, age, sex, religion, relationship status, current address, highest academic qualification, and information related to teachers' professional life such as name and type of teaching institution, years of teaching experience, and the educational stage they teach. Open-ended question related to the source of occupational stress was posed along with subquestions pertaining to the role of specific potential stressors such as students, colleagues, administration, and guardians of students.

Data Collection Process

After preparing a Google form comprising demographic and stressor-related questions, the form was sent to teachers teaching in private and public schools in different districts of Nepal. Many of those teachers recruited other teachers. The Google form was also uploaded to social networking sites for school teachers.

Data Analysis

Thematic analysis, proposed by Braun and Clarke (2006), was used to extract themes and subthemes from the dataset. As the study aimed to encapsulate the data into condensed versions and present the information in a structured and accessible format, we deemed thematic analysis the most befitting method. An inductive approach was employed to find the patterns within the data; no attempt was made to fit the data into "any pre-existing coding frame or the researchers analytic preconceptions" (Braun & Clarke, 2006, p. 83). After familiarizing ourselves with the data

through multiple readings, we produced an initial set of codes grouped into different themes and subthemes. Themes and subthemes were checked against the data and initial codes to ensure no crucial information was overlooked. The themes and subthemes were visually represented in a “thematic map” to ease their organization (Braun & Clarke, 2006). Themes were reviewed using two criteria for categorizing qualitative data: internal homogeneity and external heterogeneity (Patton, 1990, as cited in Braun & Clarke, 2006). Finally, the themes and sub themes were defined, and the report was produced.

Results of the Study

The age of the respondents ranged from 21 to 57 ($M = 37.15$, $SD = 7.31$), and 79.6% were male. The majority of the respondents were teaching in public schools (57.1%). More than 94% of the respondents were Hindus, followed by Buddhists (2.2%), Kirat (1.1%), Christians (0.7%), and Muslims (0.4%). The sample consisted of married (85.5%), unmarried (13.5%), widowed (0.4%), and live-in relationship (0.4%). Secondary school teachers constituted the largest proportion (83.3%), followed by primary level teachers (14.5%), pre-primary (1.5%), and Montessori (0.4%) teachers. One hundred and fifty-three (56%) had an experience of more than 11 years, 73(26.5%) had between 6 to 10 years, 45(16.3%) had between 1 to 5 years, and 2(0.7) had less than 1 year of teaching experience.

Analysis of the data culminated in three overarching themes: (1) student behavior and classroom dynamics, (2) professional issues, and (3) stress due to colleagues and parents of students. The themes and subthemes are elucidated with the relevant verbatim quotes of the participants.

Student Behavior and Class Dynamics

Many teachers have reported the unruliness of students and frequent breaches of discipline in the classroom as stress inducing. Disruptive noises and challenging behaviors of students are the major sources of nuisance in the classroom for them. Several teachers expressed the predicament of being on the receiving end of consistent non-compliance and outbursts of verbal abuse and threats of physical violence. A middle-aged teacher reported that one of his students threatened him with physical assault at the hands of his “gang” members because of his discontent with the score assigned in the examination. In a similar vein, another expressed, “Some students force teachers for higher marks. If we do not comply, we will be targeted by their gangs. Students do not listen in class, and we will be the source of comedy for them. They make trolls on teachers”. Such fears were more pronounced in public school teachers than in private school teachers.

Furthermore, student indolence contributed a lot to the sense of demotivation and dejection in teachers. “Some students do not pay any attention in class and do not work hard at home; nonetheless, they want a top-notch outcome.” Moreover, students tend not to attribute their concomitant failure to their lack of diligence; instead blame it on the teacher’s incompetence. Not handing in assignments on time, not displaying any motivation or engagement during the class and deficient work orientation of students are major sources of teachers’ distress. A heterogeneous group of students with markedly different learning capability and aptitude levels is the norm of the current paradigm of classroom learning. A substantial minority of teachers have pinpointed the difficulty of tailoring the curriculum based on the needs and abilities of students and regard it as a significant hindrance in the timely completion of the curriculum. “The level of learning ability varies greatly among students, and the curriculum is too advanced for some of them, which makes it a challenging task to complete the course in time.” Lack of training in the pedagogy aimed at children with learning difficulties has led to a “feeling of not being adequately helpful”: “Some children may have ADHD or other learning difficulties. We do not know what works for them.” In a similar vein, some teachers reported a sheer dearth of skills and knowledge that “prepares them to deal with students with psychosocial difficulties.”

Despite marked similarities in student-induced stressors, some differences existed between the stressors in private and public school teachers. Student absence and irregularity in the classroom was a grave recurrent problem for public school teachers, while private school teachers did not face it. Over-crowdedness in the classroom was the issue persistently brought up by public school teachers.

Professional Issues

Financial and Social Rewards

Most private school teachers maintain that they are grossly underpaid, as evidenced by these excerpts: “My salary does not suffice to manage my family.” “We get a much lesser salary than the teachers of government schools, but we are over imposed with a lot more school activities than they are.”

Remuneration is not congruent with academic qualification and “the overwhelming workload,” which was the fundamental cause of dwindling motivation and subsequent stress and burnout in teachers. Lack of assurance of job security and inclination of employers toward “hire and fire” policies have resulted in gruesome ambiguity and a loss of sense of control. Although private school teachers frequently cited low job security and low salary as a chief source of their stress, public school teachers also shared dissatisfaction with their salaries.

In addition, some private school teachers touched on the issue of “lack of any provision of pensions or other additional benefits.” Perceived lack of social prestige

was a source of stress for some, although the majority of the respondents did not concur with it. Public school teachers were more likely to consider their job as prestigious.

The delayed salary was another primary source of stress, usually among private school teachers.: “We have not been paid our salary for the last 6 months; how do they expect us to survive?” The lockdown incurred by COVID-19 pandemic has exacerbated the financial situation of the private school teachers and aroused “extreme fear of losing a job” and “absolute uncertainty about future.”

Excessive Workload

Long hours at the job negatively impinge upon their mental health as well as their social/familial life. “We are forced to take eight periods in a day,” one said, describing it as “over-exploitation.” Although most participants reported easily balancing work and family, some private school teachers expressed being “...weary of the overburden and lack of family time...no time for fun.” One stated, “We have to be formal each and every time, even at home, that is what people expect from us ...no personal and private life for teachers.” Also, extra classes on the weekends were regarded as significant intrusions on other facets of their life. “Tedious documentation and paperwork” along with “too many mandatory meetings” are deemed “vacuous” activities that add to an already strenuous workload.

Although both private and public school teachers considered excessive workload as deeply problematic, a disproportionately high number of private school teachers voiced the concern.

Administration and Management

Acute lack of classroom resources and basic facilities such as toilet, soap, markers; overcrowded classroom; the insistence of school administration to gear studies toward the path that guarantees higher grades; and lack of sense of autonomy in decision-making are some of the oft-expressed sources of stress. One public school teacher expressed, “most of the school administrators do not cooperate, and are not supportive at all, even in the matters related to teaching methods and other progressive issues we raise.” Many respondents deem the lack of self-development and stress management training a considerable gap in the stress-inducing contemporary workplace. One teacher expressed how resistant and intolerant of differing opinions her school administration was, “my voice has always been for the betterment of the school, but I was always insulted among the teachers; the works I had been doing was snatched away and given to somebody else. It made me cry. I have so many similar experiences.” The administrators’ (especially coordinators and principals) lack of equitable and fair treatment was frequently expressed as distressing by private and public school teachers.

Public school teachers commonly reported the “troubling” issue of undue political influence at the administrative and management level. For instance, one teacher stated, “now schools have become a political playground.” One public school teacher claimed the “groupism among teachers based on similarities and differences of their political parties,” which is observed in both teachers and administrative factions.

Stress Due to Colleagues and Parents of Students

Gossip came out as a prominent source of stress induced by other teachers. “I have been teaching for the last 7 years; in the course of my career, I have been badly impacted by backbiters who tend to be close to the principal.” Another teacher voiced a similar concern—“My colleagues who are close to the administration convey unnecessary and trivial flaws of others by exaggerating them.” Some novice teachers expressed that their stress emanated from a certain sense of disdain exhibited by senior teachers and those who teach senior students. “Senior teachers look down upon junior teachers in many ways, and some of them do not even try to conceal it.” Intrusive interference by other teachers during the disciplinary intervention of students is an occasional concern for few teachers. “During my conversation with a rebellious student, another teacher unnecessarily interfered and demanded physical and mental punishment. Such intrusions stressed me out.” One female teacher enunciated that gender harassment was at play in school, “Since we have a patriarchal society, some male teachers try to dominate female teachers, and they look at us in ways that make us utterly uncomfortable.”

Parents complain about the low academic achievement of their children to the principal and occasionally raise questions about the teacher’s competence. “They make unnecessary complaints about teachers to the school management without being responsible for their kids themselves,” one said, “If a student fails, their parents blame it on us.” “Some parents bicker over trivial matters,” one teacher remarked, “They quarrel with us for a minor issue; when a teacher scolds a student or gives a minor punishment for not doing homework or for his mischievous acts, they make a fuss. They do not try to look at the situation from our vantage.” This stressor was frequently expressed disproportionately more by private school teachers than by public school teachers. Some public school teachers complained that some parents were utterly uninvolved in the academic matters of their children.

Limitations of the Study

The study’s findings do not establish the causal link between the sources and the severity of stress. Similarly, the results cannot be generalized to the overall population of teachers. Further studies can focus on the effects of teacher stress on their well-being and student learning. Although an extensive effort was put into the

pursuit of objectivity, researchers' interpretations may have influenced the final results due to personal biases and the subjective nature of the qualitative study. Hence, collaboration with other researchers and different teachers' samples is necessary to establish external validity.

Implications of the Study

School administration and the concerned government authorities should be cognizant of the teachers' physical, mental, emotional, and social health, acknowledge the adverse effect of teacher stress on the quality of education, and make provisions to mitigate the stressors. Furthermore, educators should devise innovative and constructive ways of maintaining discipline in the classroom without resorting to corporal punishment. School administration should take the initiatives to conduct workshops and training to empower teachers by making them more skillful, knowledgeable, and confident. The financial distress of teachers should be addressed at the level of national policy-making. Insofar as an individual effort on the part of teachers is concerned, they should learn means and methods of stress reduction and self-enhancement such as exercise, recreational activities, vacation, and sound sleep. Positive self-talk (Lamb, 1995), the creation of teacher support groups (Cooper & Travers, 2012), and mindfulness meditation (Taylor & Harrison, 2013) are found to be the most effective ways of managing teacher stress.

Discussion and Conclusion

School is one of the major milieus that is pivotal not only for the propitious academic growth of children but also for their enduring behavioral and social development (Cappella et al., 2008). Teachers play a critical role in their growth. However, studies conducted worldwide in different time spans converge on the same conclusion that teaching is stressful, with stress levels ranging from moderate to high (Fontana & Abouserie, 1993). Hamre and Pianta (2005) maintained that long-term stress in teachers has negative repercussions on the teacher-student relationship, which is the elemental factor for student learning. Hence, the present study explored the sources of teacher stress by employing a qualitative approach to delve into the issue and gain richer insights.

The themes and subthemes are analyzed in light of past studies. The first theme that emerged was student behavior and class dynamics. This theme constituted the stressors such as breaches of discipline like disruptive noises, verbal abuse, threats of physical violence, mocking taunts, laziness and indifference, striking homogeneity in learning abilities, children with learning difficulties, and psychosocial problems. Innes and Kitto (1989) indicated that student misbehavior was the most frequently mentioned source of teacher stress. Particularly lack of effort from

students in doing classroom activities and home assignments is extremely distressing (Blaise, 1986; Payne & Furnham, 1987; Geving, 2007). Our finding is consistent with the previous studies, as most participants in our study regarded student indolence as a significant stressor. Students' refusal to embrace the teacher as an authority strongly correlates with teachers' stress (Kyriacou & Sutcliffe, 1978). Violation of classroom decorum through raucous noises and disobedience to the teacher's instructions were the common instances of non-acceptance of the teacher's authority observed in our study. The issue of disobedience and disrespect arose multiple times in our study, along the spectrum of minor classroom misbehavior to making trolls of teachers or threatening to harm them physically. Teacher-directed hostility and threats of physical violence are the strongest predictor of teacher stress, followed by inattention and noisiness (Geving, 2007).

Although Jain et al. (2015) have indicated that novice teachers are more prone to stress than experienced ones, we did not find those beginner teachers were particularly more prone to stress. It may be because financial distress, which inflicts almost all teachers irrespective of their years of experience, is the primary stressor in Nepalese teachers (McLean et al., 2017). Our result that teachers felt stress due to inadequate professional preparation to deal with the challenging behavior of the students inflicted with psychosocial difficulties and/or disabilities is consistent with the findings of the previous studies (Fox & Conroy, 2000; Westling, 2010). Heterogeneity in the students' abilities was a source of difficulty in completing the curriculum on time and teacher stress. Shernoff et al. (2011) indicated that wide discrepancy among the learners' abilities necessitating the need to employ different approaches of teaching to meet the demands of the students of differing abilities engendered stress in school teachers. A high pupil-to-teacher ratio has been linked with a motivation crisis and stress in teachers due to the severe burden it places on teachers concerning the maintenance of discipline and administration of assessments (Dworkin, 1987; Chireshe & Shumba, 2011). An overcrowded classroom constituted one of the most potent sources of stress for the teachers participating in our study.

Low pay is the most dominant and recurrent source of stress observed in our study. Studies worldwide show that teachers are underpaid, thus being a pivotal factor in teacher attrition (Gonzalez et al., 2008; Liu & Onwuegbuzie, 2012; Aftab & Khatoon, 2012). A feeling of being on the lower rung of the social ladder also induces stress in teachers (Shumba et al., 2016; Mearns & Cain, 2003). Lack of social prestige was a factor teachers of our study linked with stress, although many regarded "teaching" as an esteemed profession.

Different models explained the role of effort and reward in occupational stress. Effort-Reward Imbalance Model proposes that works characterized by low reward/incentives and high effort will lead to physical and mental strain (Siegrist, 1996). Thus, perceived incongruence between the effort expended and rewards (tangible or intangible) obtained is detrimental to the employees' physical, psychological, and occupational health, which is also observed in our study. Teachers' lack of autonomy in decision-making in and out of the classroom was the root cause of their lack of sense of control which led to recurrent stress in them. The Demand Control

Model suggests that low decision latitude coupled with high workloads has deleterious effects on the employee's well-being (Karasek Jr, 1979). This model is quite helpful in comprehending the focal role played by a lack of autonomous decision-making and a sense of control in stress experienced by the respondents. The organizational injustice model incorporates the role of fairness practice and a sense of justice as the crucial ingredients for the psychological well-being of the employees. The findings of our study that stress is engendered by a sense of injustice and partiality shown by coordinators and principals are consistent with the proposition of the organizational injustice model. Gluschkoff et al. (2016) also reported similar results. Lack of empathy and support from the administration led to exasperation and a sense of being undervalued by teachers (Tsang & Liu, 2016). Administrators are the tone-setters of the organization; hence, it is their responsibility to boost the morale of the teachers by creating a safe institutional climate that reduces stress-inducing tendencies (Brown & Mitchell, 2010). The demoralizing feeling of being "unacknowledged" by the principals reported by teachers in our study is similar to the feeling of being treated as "invisible" (Van Dick & Wagner, 2001).

Apart from students and school administration, our study revealed that colleagues and parents of students are also notable stressors. In a meta-theoretical model of teacher stress, relationship with colleagues is a salient construct (Montgomery & Rubb, 2005); it supports our finding regarding colleague-related stress. Studies show that teachers with more than 10 years of experience have significantly less colleague-related stress than teachers with less experience (Alhija, 2015). This theme did not emerge in our study; it may be due to disproportionately large numbers of teachers with more than 10 years of experience. The only exclusive concern of novice teachers raised about their relationship with colleagues is the unappreciation or downright disdain shown by senior teachers. Troman (2000) and Clement (2017) maintained that the support of teacher peers is a crucial factor in positive adaptation to stressful events; lack of bonding with colleagues is one of the prominent predictors of quitting a job. Studies conducted in Nepal converge with the foregoing conclusion, thus firmly establishing that poor peer relationship is a significant factor in teacher stress (Kayastha & Kayastha, 2012). Our finding concurs with the conclusions of those national and international studies. Consistent with our findings, the literature shows that staff cliques and backbiting are major colleague-related stressors that impact teachers (Motseke, 1998).

According to the Relational Regulation Theory of Lakey and Orehek (2011), social interactions and relational support are the fundamental factors in a teacher's emotional well-being. The lack of such a support system was incredibly distressing to the respondents of our study. Some parents of pupils induce stress by blaming teachers for their children's failure or dissatisfactory academic achievement and by complaining to the school administrators about minor punishments given to students. Although the particularities of the parents-induced stress in our respondents are not echoed in the existing literature, increased parental involvement in children's education and overexpectation of the student's results (von der Embse et al., 2015) may partially explain their concerns. Brown (1990) regards this as "parentocracy," referring to parents' greater control over and choice in their children's education.

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Chapter 16

What's Next? Surviving the COVID-19 Pandemic Era and the Mental Health Ramifications Among Emerging Adults (18–25 Years) in Canada



Donna Richards and Samantha Zerafa

Introduction

This chapter focuses on identifying the ramifications of the COVID-19 pandemic on the mental health of emerging adults in Canada. The discussion will be guided by elements of the public mental health framework, an approach that works toward identifying potential issues for intervention and prevention and promotes health and well-being. Public mental health strategies focus on the promotion of good mental well-being and the prevention of mental illness at the population level while acknowledging and giving special attention to individuals at greater risk and who may not benefit from universal care (Stein & Wessely, 2022).

There is a paucity of research that examines the potential impacts of COVID-19 on the mental health of emerging adults, 18–25 years, in the Canadian context. Given this gap in research, inferences we make here are drawn from research, published discussion papers and commentaries, grey literature, and from research conducted in the USA, UK, and beyond. One of the authors of this chapter also brings experiential knowledge regarding emerging adults and mental health challenges, garnered through her work as a counsellor with young adult populations for more than ten years.

While most of the restrictions that were implemented during the initial phases of the COVID-19 pandemic have been lifted in Canada and eased in most countries globally, experts have called attention to a “twin pandemic” of COVID-19 and mental ill-health occurring globally, signaled by deteriorating mental health, especially

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among young adults (Patterson et al., 2021; Stein & Wessely, 2022). While the adverse psychological impacts of the pandemic and the associated prolonged social isolation, along with the short-term and long-term physical effects, were noted during the acute stages of the pandemic, its lingering mental health effects are still being felt. While there is a vast body of emerging literature on the impact of COVID-19 on the mental health of the general population, there remains a significant gap in our understanding, particularly within the Canadian context, of exactly which segments of the population are experiencing the greatest decreases in mental well-being and of the coping strategies being used to support and sustain good post-pandemic mental health.

Operationalizing Definitions and Underscoring the Need for Research

Emerging adulthood refers to those aged 18–25 years old. This age range is understood to capture a distinct developmentally sensitive stage that is marked by significant life changes, including the transition from adolescence to adulthood, educational, and employment changes and pursuits, romantic relationships, independent living, uncertainty about life direction, and an overall era of exploration (Arnett, 2000, 2007; Arnett et al., 2011). This emergent state is usually identified by five main features: (1) identity development—trying out different life trajectories and getting to better know oneself; (2) instability—in work, education, love life, and living situations; (3) self-focus—paying more attention to one’s self; (4) feeling in-between—no longer being an adolescent but being not quite an adult; and (5) a sense of possibility and optimism about life opportunities and one’s future (Arnett, 2000, 2015; Arnett et al., 2011). In 2021, 9.4% of citizens, landed immigrants, and non-permanent residents in Canada were between the ages of 18 and 25 years old (Statistics Canada, 2020). It is also noted that the rates of mood disorders are highest among young adults aged 15–30 years compared to other groups, with women having a higher rate of 12% compared to men.

Mental health can be defined as “a state of well-being in which every individual realizes their own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make contributions to their community” (WHO, 2014). It is also seen as a “positive sense of emotional and spiritual wellbeing that respects the importance of culture, equity, social justice, interconnections and personal dignity” (Public Health Agency of Canada, 2006, p. 2). Mental health is also considered to be an “important dimension of overall health, the absence of which contributes to morbidity and mortality in individuals” (Wiens et al., 2020, p. 1). As the period that constitutes emerging adulthood is considered to be a critical transitional life stage, research is needed to better understand the impact of COVID-19 on the overall mental well-being of this subset of the population and possible sources of resilience, and how experiences and challenges around COVID-19 can be understood and mitigated within a public mental health framework.

Positioning Emerging Adult COVID-19 Mental Health Concerns Within a Public Mental Health Framework

To better understand emerging adults' experiences of mental health challenges related to the COVID-19 pandemic, a public mental health approach is important, as it provides a multilevel lens through which to evaluate issues and steps to address them. This approach contributes to an enhanced understanding of how mental health challenges emanating from stressors brought on by the pandemic can be mitigated and what protective factors may be needed to provide tailored, as well as evidence- and practice-based support, to young adults living with mental health challenges.

A public mental health approach or framework refers to a support and/or treatment system that works toward promoting mental health and well-being as well as preventing factors that may exacerbate mental ill-health. Dykxhoorn et al. (2022) describe a public mental health approach as one that "acknowledges that a wide range of determinants across individual, family, community, and structural levels contribute both negatively and positively to mental health and wellbeing" (p. 1). It is therefore imperative that public mental health initiatives and programs incorporate mental health interventions that operate at all levels of society to adapt policies and programs to improve mental health across the life course (Dykxhoorn et al., 2022; Khenti et al., 2016; Morganstein, 2022; Stein & Wessely, 2022).

Khenti et al. (2016), all of whom identify themselves as employees at the Centre for Addiction and Mental Health (CAMH) in Toronto, assert that there is a significant gap in the accessibility and quality of mental health services worldwide. To address this gap, they worked with CAMH to develop a multilevel framework that includes five central components necessary to address mental health challenges. They suggest that any mental health intervention strategy must address holistic health, be culturally and socioeconomically relevant, embrace collaborative action-based education and learning, and be sustainable. What these researchers demonstrate is the need for mental health to be considered in its multiplicities; from institutional policy to frontline practice, across axes of difference and diverse social positioning, and as part of one's overall health and well-being. All of these are uniquely served through a public mental health perspective.

Since emerging adults' mental health is "inter-linked to their context (micro, macro levels) and shapes their micro and mezzo level experiences" (Pashang et al., 2018, p. 2), young adults are at a higher risk of developing and living with mental health challenges, particularly with the impacts of the global pandemic. Therefore, promoting emerging adults' mental well-being at the systems level is integral to ensuring their development and improved health and well-being across their life span. The Public Health Agency of Canada (PHAC) and the Mental Health Commission of Canada (MHCC) acknowledge the need for a conceptual framework to evaluate the mental health of Canadians toward enhancing public health response. To meet this need, these organizations collaboratively developed the Positive Mental Health Surveillance Framework, aimed at monitoring and identifying the mental health needs of Canadians (Orpana et al., 2016). As part of the Canadian Mental

Health strategy, this was meant to serve as a tool to identify gaps in existing supports and policy. However, it has become obvious that mental health must be critically prioritized and that a more extensively inclusive approach to public mental health must be undertaken.

Health emergencies such as the pandemic have detrimental and long-lasting consequences on mental health, particularly for young adults, while simultaneously wreaking havoc on the very systems called on to ameliorate these challenges. Public mental health practices and principles are therefore critical in understanding “where the risk is concentrated and how it changes over time to allow more timely and tailored interventions and strategies that are altered to meet current and evolving needs” (Morganstein, 2022, p. 192).

Ongoing Mental Health Impacts of COVID-19 on Emerging Adults

Mental health challenges are prevalent among youth during the period of transition from adolescence to emerging adulthood. This period of development is said to be the “peak for onset of mental ill health with 75% of all mental health diagnoses having an onset before the age of 25 years” (Kessler et al., 2005). Additionally, most mental health challenges begin in childhood which makes it essential that mental health needs are identified and appropriately addressed as early as possible to increase quality of life. During the initial wave of the COVID-19 pandemic, elderly people and those with underlying health conditions were undoubtedly the most affected groups. Emerging adults, however, were not immune to the consequences of the virus, such as adverse effects on their mental health. However, the second wave showed a significant increase in rates of infection for young adults (Public Health Agency of Canada, 2020). In addition to concerns around evolving strains of the virus, young adults’ physical and mental health requires significant attention. Emerging adults encountered many challenges and stressors as a result of the pandemic that contributed negatively to their mental health, both for those already living with mental ill health and those who had no prior mental health challenges. These stressors are layered and include, but are not restricted to, economic and financial burdens, loss of social network, challenges with re-integration into everyday pre-pandemic routines, shifting careers, and uncertainties about the future impact of the pandemic.

CAMH conducted a series of nine studies to determine the mental health and substance use of the country’s young adult population over the course of the COVID-19 pandemic, during the last two years. These studies found that there were increases in mental health struggles during the summer of 2021 corresponding with the roll-out of the vaccine. However, the final study published in winter 2022 during the height of the spread of the Omicron variant found that overall, Canadians reported increased levels of anxiety, loneliness, and depression, with the highest levels being reported by people between the ages of 18 and 39, a population that

includes emerging adults (CAMH, 2020a, b). They also found elevated levels of unmet mental health needs, as 24% of Canadians said that they required mental health services in order to cope with the ongoing stressors of the pandemic.

In early 2021, in the midst of the second wave of infections and resulting lockdowns, concerns about both short- and long-term mental health consequences were prevalent. Now more than two years into COVID-19, it is obvious that the pandemic has created a perfect storm (Patterson et al., 2021 p. 517), including a range of stressors for emerging and young adults. Many are experiencing economic and financial concerns, as well as health and mental health emergencies. It is apparent that the COVID-19 pandemic has created detrimental and long-lasting consequences on overall health, which emerging adults are at high risk of facing.

Ongoing Stressors Impacting Emerging Adults' Mental Health

The stressors resulting from the ramifications of the pandemic that have and continue to impact emerging adults' mental health are layered and complex, as this is the stage during which young adults are still developing as they progress to the responsibilities of adulthood. Several studies have examined the ongoing financial, economic, and social impacts of COVID-19 on young adults' mental health.

The COVID-19 pandemic has led to various and ongoing disruptions to young people's lives, such as continuing hybrid educational studies, missed milestone events such as graduation ceremonies, and uncertainties about their futures post-graduation. In their study focusing on college students in China, Cao et al. (2020) found that economic impacts, effects on daily life, and delays in academic pursuits were positively associated with symptoms of anxiety and depression. Findings from other studies also indicate that some symptoms of mental health distress related to pandemics or national disasters can continue for months and even years after restrictive public health measures have ended (Goldmann & Galea, 2014).

Salmon et al. (2022) used research data drawn from waves of the Well-Being and Experiences (WE) study, a longitudinal and intergenerational survey based in Winnipeg, Manitoba, that examined pandemic-related experiences among young adults (16–21 years). These experiences included financial challenges, emotional support, social connections, mental health symptoms, substance use, and relationship conflict. They found that more than half of the 664 participants reported increased stress and anxiety (57.6%) and depression (54.2%) that were attributed to the pandemic, with female participants reporting greater financial and mental burdens.

In their study that explored how youth and young adults within the Greater Toronto Area (GTA) may be particularly impacted by the COVID-19 pandemic, Lindsay and Ahmed (2021) also found that globally, young adults between 15 and 24 years old were nearly three times more likely to be unemployed compared to those 25 years or older. They noted that the stressors faced by emerging adults during and in the aftermath of the pandemic are layered but not limited to shifting careers, returning to postsecondary studies or training, and more precarious

employment (Lindsay & Ahmed, 2021). Results indicated that young adults in the GTA were negatively impacted in all areas of their lives, including economic and financial barriers, employment uncertainties, and reduction or loss of support (Lindsay & Ahmed, 2021).

A survey conducted by Parkin (2021) examined the impact of the pandemic on young adults aged 18–34 years in Canada. Their findings revealed that during the pandemic, workers under the age of 30, especially those under age 25, were more likely to experience adverse working conditions, such as reduced work hours, disruption in earnings, and lay-offs. Additionally, the survey found an increase in rates of young adults who were not in school, education, employment, or training (NEET); one in three discontinued or postponed their plans while only one in five returned (Parkin, 2021). It was also noted that a vulnerable sub-set of emerging adults that includes Indigenous and Black youth were more likely to stop or postpone school and work.

Literature and research on the impact of COVID-19 on postsecondary students, an age range that bridges the stage of emergent adulthood, shows that mental ill-health is rapidly growing and indicates concerns that a crisis is looming (Coulaud et al., 2022; Halliburton et al., 2021). A new report commissioned by the Mental Health Commission of Canada (MHCC) and the Canadian Alliance of Student Associations (CASA) (2022) found that “three quarters of students reported experiencing negative mental health during their studies in 2021–2022 school year” and “more than a quarter reported that their mental health was poor” (CASA, 2022, p. 7). Halliburton et al. (2021) conducted an online survey with college students at a US college to explore and understand their experiences during COVID-19. They found that “two-thirds of participants reported anxiety and depression symptoms in the moderate to severe range,” with the most common stressors including loss of work and finances (Halliburton et al., 2021, p. 430). With such stressors resulting from the pandemic, emerging adults are bound to be impacted in a critical stage of their development when they are expected to develop into functional adults (Arnett, 2015) and positively contribute to their communities.

Mental Health Supports and/or Access

Research indicates that mental health challenges are often preconditions for other forms of illnesses, which is made all the more dire when considered alongside findings that suggest high levels of unmet mental health needs for emerging adults. Findings from an online survey that investigated factors associated with unmet mental health needs among emerging adults between the ages of 18 and 29 years living both in Quebec and France indicated that of the 3222 participants that expressed a need to access services, “58.2% in Canada and 74.8% in France reported unmet needs” (Coulaud et al., 2022, p. 6). Higher rates of unmet mental health needs were found in participants who suffered a loss of income, as well as those who were men, living in rural areas, or identified as Black, Indigenous, or racialized (Coulaud et al.,

2022). Still other research indicates that young adults who receive publicly funded mental health care often experience abrupt discontinuation or fragmentation of services upon transitioning to adulthood at 18 years of age (McMillen & Raghavan, 2009).

A report by CASA and MHCC called for government intervention in enacting policies to address the mental well-being of students. Their survey, with responses from post-secondary students across Canada, revealed that 71% of students in Alberta reported that the mental health care at their academic institutions was lacking in quality (CASA, 2022). Sub-populations of students such as 2SLGBTQ+, racialized students, or those from low-income families were most affected.

Resilience

Resilience is seen as an important element in maintaining and promoting young people's mental health and "as a life-long buffer to potential threats to well-being" (Khanlou & Wray, 2014, p. 65). While the human resilience to significant stress such as that brought about by COVID-19 has been variably defined, the systemic approach has come to dominate resilience literature (Masten, 2019 Theron et al., 2021; Ungar, 2019). Human resilience within this context is "seen as a process that draws on resources distributed across multiple systems, such as biological, psycho-social and environmental" (Theron et al., 2021, p. 2). This approach to resilience is also in line with a public mental health perspective that calls for a multi-system response to better understand it; one that acknowledges that the effects of stress and resilience capacity are dependent on an individual's unique context, including psycho-social, biological, and environmental factors (Manchia et al., 2022).

Though there is a significant dearth of research on the experiences of emerging adults during and "post"-pandemic, the literature on the ways young adults have persevered throughout is even more scant. Commentaries and findings from survey research in the initial waves of the pandemic indicate that some young people are finding ways to cope. Critics also contend that there is an urgent need globally for research that examines resilience factors that may mitigate the ongoing and prolonged effects of COVID-19 on the general population, but more specifically vulnerable sub-groups such as emerging adults (Theron et al., 2021). More research is needed to examine how human stress resilience has been shaped by the pandemic, but some argue that the onslaught of COVID-19, with its momentary disruption, has forced a societal pause that has led some young people to reflect, gain alternative perspectives on their lives, and seek change (Coulaud et al., 2022). In a study by CAMH (2020a, b), researchers noted ambivalence in participants' responses when they were queried about positive changes resulting from COVID-19. Some of the responses spoke to less stress from work and school and more reconnection with families. Many of the young people (40%) who had preexisting mental health challenges identified positive outcomes of COVID-19, as opposed to those respondents who had no prior mental health concerns (CAMH, 2020a, b). The study further

asserted that despite the downsides to the pandemic, including the increase of mental health distress, some young people grasped the opportunity to reflect and improve their long-term well-being (Shahanan et al., 2020). Findings from a study conducted with medical college students after the COVID-19 breakout in Changzhou, China, indicate that protective factors, such as family income, stability, and appropriate government interventions, can serve as protective factors against mental health distress (Cao et al., 2020).

Repo et al. (2021) conducted a study that sought to decipher COVID-19's impact on the mental well-being of emerging adults residing in Finland by analyzing the longitudinal changes in their levels of anxiety based on the Generalized Anxiety Disorder Scale. The authors leveraged a 2017 survey of 330 emerging adults at the start of their post-secondary education and surveyed another 330 emerging adults in the summer of 2020 when they were supposed to graduate. The study aimed to determine whether certain psycho-social factors, specifically experiences of inclusion and exclusion as well as sudden and unpredicted social isolation, led to a change in the levels of reported anxiety amongst the respondents. It was determined that respondents who reported lower levels of pre-pandemic anxiety and loneliness experienced greater increases in anxiety symptoms and feelings of loneliness, respectively. The study found that certain factors appeared to protect against higher rates of anxiety and loneliness, including living with parents and feelings of social inclusion and connectedness during the pandemic. Theron et al. (2021) also conducted a five-week qualitative study with 24 emerging adults in a township in South Africa to determine what may support resilience to COVID-19-related stressors. They found that collective compliance, generous ways of being, and tolerance facilitators supported their resilience to stressors brought on by the pandemic.

From a systems level, the findings of these studies indicate that emerging adults can and do demonstrate resilience to the stressors resulting from COVID-19 that impact their mental health. However, there is a critical need for a more comprehensive support for their resilience from all levels of society. A public mental health approach with a focus on resilience will strengthen resources for emerging adults living with mental health concerns, from the individual to the community and institutional levels of society.

Discussion

This discussion brings attention to the long and lasting consequences of COVID-19 on population mental health, especially as they impact the mental health of emerging adults, both in the short- and longer term. Mental health challenges facing emerging adults, particularly in the aftermath of health crises such as the current COVID-19 pandemic, should be prioritized. While Canada is perceived to be a global leader in pandemic planning, there is a clear lack of focus on the mental health consequences for emerging adults considering their increased risk of mental ill-health. With the emerging mental health crisis, also known as a “parallel pandemic,” (Patterson et al., 2021) mental health and other support systems that are

already being pushed to their limits will be flooded with individuals needing help. This will have significant implications for mental health infrastructure and underscores the need for increased global investments in mental health services. Additionally, there is a need for further research that can better inform how mental health consequences for this population can be mitigated at the start, during, and after a pandemic. Attention must also be given to public health and other governmental agencies to identify, enhance, and promote mechanisms that can foster resilience among youth populations during a health crisis.

Implications

This chapter highlighted the vulnerability of emerging adults to mental health concerns and the increased risk to mental health posed by stressors brought about by the COVID-19 pandemic. The paucity of research on the mental health experiences of this population in the Canadian context prompts a call for more targeted research that can better inform interventions. While there have been attempts by many, such as PHAC and MHCC to address mental health challenges faced by Canadians at a societal level, more studies using diverse methods are needed, particularly cross-sectional, purposive, qualitative studies. Such studies will facilitate the development of more inclusive interventions that target the key mechanisms of the social determinants of health that often underlie mental health challenges (Bantjes et al., 2022; Stein & Wessely 2022). Individuals working with emergent adults such as social workers and health advocacy bodies, as well as health and mental health professionals, must advocate for a more systemic and comprehensive approach to mental health support for emerging adults in the Canadian context. Three main implications to be addressed are practice, policy, and future research.

Practice

First, it must be acknowledged that while emerging adulthood can be a prime stage for accomplishments, hope, and exploration, mental health challenges are also prevalent at this stage: a reality only exacerbated by the negative consequences of COVID-19. Additionally, due to several factors including lack of “institutional capacity, sustainable supports and exclusion of emerging adults voices in decision-making process, they are left with many unmet mental health needs” (Kieling et al., 2011, p. 1517). As a result, approaches to mental health services and supports must embrace a community-based model across various service sectors, one that focuses on fostering wellness, preventing mental ill-health, and promoting optimal mental health (Morganstein, 2022). More understanding of where the risks are concentrated and how they change over time is needed “in order to allow for more timely and tailored interventions that are altered to meet current and evolving needs” (Morganstein, 2022, p. 192).

Policy

Systemic reform must be undertaken by those who have influence over policymaking and the funding of services across mental health, education, and other areas, as well as frontline service providers and agencies (Dyckhoorn et al., 2022). Such policies must reflect the reality that “determinants of mental health and illness include individual, social, and societal factors and their interactions with each other” (Eriksson et al., 2018, p. 414). Mental health must be understood from a biological, psycho-social, and socio-cultural perspective; any mental health supports that are implemented must also take this multifaceted approach. Policies, especially public health mandates, must bear in mind the potential long-term impact of the pandemic on young adults’ mental health and implement support accordingly toward improving well-being at present and in the future.

Future Research

While research on the impacts of COVID-19 across the lifespan is warranted, a more critical exploration specifically of the mental health repercussions of stressors brought on by the pandemic on emerging adults is needed. In this regard, a better understanding of the mental health challenges that emergent adults face, as well as barriers to mental health services, will emerge that can then inform relevant support. Future research should also pay special attention to those emerging adults who face social exclusion based on race, sexuality, and disabilities for a comparative analysis of their experiences and needs. To ensure that mental health interventions for emerging adults are relevant, their voices must be included when making decisions on areas of priority within research (Davies & Mehta, 2013). A public mental health approach both in research and practice coupled with a developmental approach to support may best address the mental health challenges of emerging adults.

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Chapter 17

The Impact of Macroeconomic, Sociodemographic, and Health Status-Resources Determinants on Life Expectancy in Kuwait Population from 1980 to 2020



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Introduction

Life Expectancy (LE) at birth is an important parameter of public health and an indicator of the successful implementation of a country's health policies (UNDP, 2022). LE is used to review the efficiency of the government's health expenditure. The current global average of LE has improved alongside the demographical and epidemiological transition (Frimpong, 2019; Roser et al., 2013). It reflects the twenty-first century's condition where better disease prevention reduces acute infectious disease, and the aging people group grows (Adogu et al., 2015; Canning, 2011; Galor, 2012; GBD 2017 Mortality Collaborators, 2018; Montez et al., 2020; Roser & Ritchie, 2021).

Lately, some developed countries have faced stagnation or a slowdown in LE projection (Biciunaite, 2014; Kim et al., 2020). Some are still haunted by public health crises because their LE is below the global average (Roser et al., 2013).

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Hence, there is a need to examine the model of LE projection longitudinally and determine the influencing factors (Wirayuda et al., 2022). Among many perspectives to define the LE determinants, previous literature shows that macroeconomic (ME), sociodemographic (SD), and health status–resources (HSR) factors contribute significant effect on LE in South East Asia and Oman (Chan & Taylor, 2013; Chan, 2015; Chan & Kamala, 2015; Wirayuda & Chan, 2021; Wirayuda et al., 2022). The model and knowledge may be used for predictive and causative studies to explain and take action according to the macro situation of the nation's health (Wirayuda & Chan, 2021; Wirayuda et al., 2022).

Kuwait has a relatively higher LE than the average country globally (Al-Ramadhan, 2018; Khoja et al., 2017; Ram, 2014). All population health parameters are improving because of socioeconomic access development (Al-Ramadhan, 2018). However, compared with other Gulf Cooperation Council (GCC) members, the LE of Kuwait is lesser. Furthermore, the LE in Kuwait has undergone stagnation for over a decade (Philipp, 2020; WHO, 2018a, b; United Nations, 2019). This information is a matter of public health concern. A further look into its determinants (ME, SD, and HSR) may give insight into this phenomenon.

Macroeconomic (ME)

ME represents the national economic status (McDonald, 2021). It connects with national productivity, such as Gross National Product (GDP), inflation rate, foreign exchange rate, and monetary policies on a grand scale (McDonald, 2021). The ME perspective is highly important as the current twenty-first-century economy is intertwined with many crises on both national and global scales, especially in the aftermath of the COVID-19 pandemic (Darvas et al., 2018; McKibbin & Fernando, 2021). Studies showed that ME factors highly correlate with LE, especially GDP (Bai et al., 2018; Roser et al., 2013; Miladinov, 2020). Understandably, a productive community has greater means to extend its resources to build a better life (Biciunaite, 2014; Darvas et al., 2018; Roser et al., 2013). Previous reviews show that GDP per capita, GINI index, household income, unemployment rate, and inflation rate contribute at most as determinants of LE from ME's perspective (Wirayuda & Chan, 2021).

Like other GCC members, Kuwait benefited from an oil boom era after World War II, which expedited its national revenue and boosted its development (Etheredge, 2010). Every Kuwaiti belongs to a universal health insurance program altogether with basic income and other socioeconomic protection. It elevates them into high-income, developed countries (Etheredge, 2010). Kuwait has ranked among the highest GDPs globally (Heritage Foundation, 2022; Joy, 2022). The economy is dominated by petroleum-based products (Etheredge, 2010). Unemployment is relatively low despite a spiking increase in 2020 due to the global pandemic. In addition, most citizens have higher-than-average salaries in the government sector (Etheredge, 2010; World Bank Group, 2021). Hence, Kuwait seems to be a relatively stable economy with a high-income status.

Sociodemographic (SD)

SD informs about the complex constitution of the social, cultural, and historical background of a society (Artiga & Hinton, 2018; Conerly et al., 2021). SD indicators vary between urban and rural areas, accounting for the geographical exposure and traditional values inherent within their legacy (Greenwood, 2009; Link & Phelan, 1996). The parameter became more homogenous as modern people tended to be more urbanized through the ages. Globalization of western culture has been absorbed partially or even dominantly in modern communities (Fasanmade et al., 2014; Kawachi & Wamala, 2006; Seltzer, 2019). Demographic transition and modernization, together with current global morbidity situations, have changed the population's behavior toward their health (Fasanmade et al., 2014; Kawachi & Wamala, 2006). Based on a previous systematic review: literacy rate, education status, Infant Mortality rate (IMR), fertility rate, sanitation, socioeconomic status, and gender inequality are many HSR indicators that significantly contribute to LE (Wirayuda & Chan, 2021).

The Kuwaiti government provides citizens with free schools and related services (Al-Nakib, 2016; Etheredge, 2010). To improve sanitation and socioeconomic, Kuwait's young and newly married couples also benefit from a free house provision. Based on the government rule, it will provide basic security for household development (Etheredge, 2010; Sadek et al., 2022). These services contribute to a very high human development index of average Kuwait citizens at approximately 0.8 value (UNDP, 2022). Despite all these substantial social supports, Kuwait has the lowest happiness index in the GCC region (Countryeconomy, 2022). This condition could be an insight that happiness needs to be emphasized as it is associated with longevity (See & Yen, 2018).

Traditional values and religion influence the daily activities of Kuwaitis. For example, women's physical exercise is limited outdoors (Al-Nakib, 2016; Etheredge, 2010). Moreover, Kuwaitis are still dominated by youth and young adults, although the general trend is shifting toward population aging (WHO, 2018a). As most residences are in the city, Kuwait is considered the most urbanized society, mainly due to oil and land availability issues (Al-Nakib, 2016; Diwan, 2018). Hence, people can easily access the modern lifestyle, reflected in their food preferences. They adopt western lifestyles like fast food instead of Arabian traditional culture close to the Mediterranean diet. These facts also contribute to increasing health comorbidities, which may also affect LE projection (Thelwell, 2020).

Health Status and Resources (HSR)

In this study, HSR consists of the population's health status, infrastructure, and health system (Jarvis et al., 2020). It depicts health access and community health parameters like nutrition, the burden of diseases, and medical workers' quantity

(Chan & Taylor, 2013; Chan, 2015; Chan & Kamala, 2015). The number of hospitals and medical workers, healthcare expenditure, death rates due to various diseases, vaccination coverage, smoking prevalence, and pollution level is among many indicators of HSR that significantly affect LE (Wirayuda & Chan, 2021).

Kuwaitis have enjoyed free healthcare from the government with many other benefits. Kuwait Vision 2035 emphasizes more investment in high-quality healthcare with state-of-the-art medical technology concerning modern culture changes (Olver-Ellis, 2020). Lately, Kuwait has 20 public hospitals, including Sheikh Jaber Al-Ahmad Hospital, considered one of the largest hospitals in the Middle East (International Trade Organization, 2022). Despite all the advancements, the LE projection of Kuwait does not increase as it is supposed to, especially if it is compared with the other developed countries (Alsaied et al., 2021).

Methods

Data and Sources

This is an ecological and retrospective design that uses publicly accessible secondary data. The data mainly come from reputable databases compiled by the World Bank (2022), the Global Economy (2022), the CEIC data (2022), and the SESRIC (2022). The dataset considers the related ME, SD, HSR, and LE indicators from the citizens of Kuwait nationality, excluding the expatriate or migrant workers. The observation time starts from 1980 to 2020, as data from this period is the most available. Ethical approval exemption was obtained by the university's research ethics committee (MERC #2644).

Analytic Strategy

Structural Equation Model (SEM) is used to explain the relationship among the latent variables (LVs) of SD, ME, and HSR (Fan et al., 2016). As a form of advanced multivariate analysis, SEM can explain all the indicators' pathways and relationships among the LVs and the manifest variables (MVs) (Hair et al., 2018; Tarka, 2018). Partial Least Square (PLS) SEM was chosen over Covariance-Based (CB) SEM because it may handle non-normal data, small sample size, and large missing data (Hair Jr et al., 2021; Wirayuda et al., 2022). The PLS-SEM approach is also suitable for the nature of this study which tends to be more exploratory rather than confirmative. The power of this study is based on the relationship of all variables from the conceptual path model (see Fig. 17.1). If the expected R^2 in each LV construct is at a minimum of 0.25, then the required number of samples (years of observation) at minimum is 30 years, which is still following the exhaustive period taken

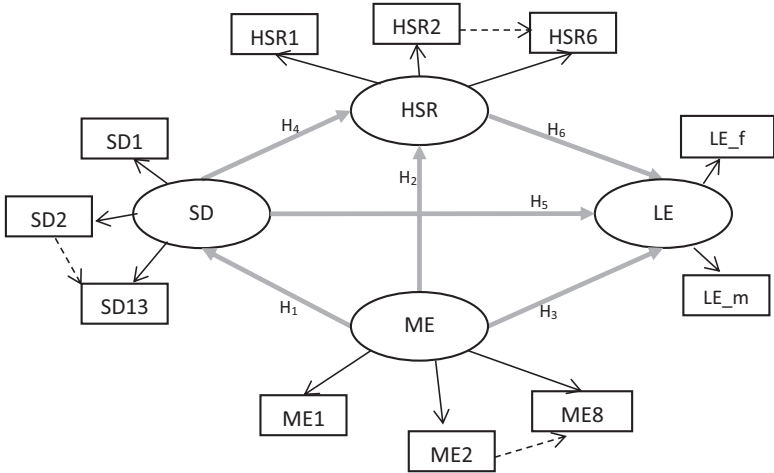


Fig. 17.1 The theoretical model of macroeconomic, sociodemographic and health status and resources on life expectancy in Kuwait (1980–2020). LV: Latent Variable, MV: Manifest Variable, SD: Sociodemographic, ME: Macroeconomic, HSR: Health Status and Resources, LE: Life Expectancy, LE_f: Average Life Expectancy at birth (females), LE_m: Average Life Expectancy at birth (males), $H_{1,2,3,4,5,6} \rightarrow$ the Direct Effect from one LV to the other corresponding LV

into this study and this sample size could achieve 80% power at 5% significant level (Hair Jr et al., 2021). If any part of the data does not support the conceptual and analysis model, relationship adjustment or exclusion was made based on the first several run results (Liengaard, 2020). Imputation was implemented according to the PLS-SEM guideline for missing data on the explanatory variables (MVs) (Chin, 2010; Hair Jr et al., 2021). Based on this criterion, less than 15% of missing data are allowed in the analysis to be imputed (Hair et al., 2018). Regression imputation was used for those values that tend to increase or decrease over time, while for values that do not show any clear yearly pattern, the grand mean was employed (Ibrahim & Molenberghs, 2009). The IBM SPSS v24 was used for the data cleaning process, and SmartPLS 3.3.7® was utilized to perform the SEM analyses. The Hetero-Trait and Mono-Trait 2 (HTMT2) ratio was calculated using an R-package for R-studio. Significant levels were all set at 5%.

The initial model was created based on the theoretical framework and previous systematic review (Wirayuda & Chan, 2021). Details of the MVs and LVs are shown in Fig. 17.1 and Table 17.1. The initial model included 8 MVs for ME, 13 MVs for SD, 6 MVs for HSR, and 2 MVs for LE. Any MV with negative loading in the PLS algorithm should be transformed according to the PLS-SEM guideline. The indicator reliability for each MV should conserve the loading at a significant value ($P < 0.05$). In contrast, the internal consistency reliability for each LV considers Cronbach's Alpha (CA), Composite Reliability (CR), and Rhô-Alpha (Rhô-A) at a minimum of 0.7 (Hair Jr et al., 2021). The convergent validity for each LV was measured using the Average Variance Extracted (AVE) with a minimum cut-off at

Table 17.1 List of variables included and their respective loadings and effects in the initial and final model

				Loading		Source
LV	MV	Indicator	Unit	Initial model	Final model	
LE	LE_f	Average Life Expectancy at birth in Kuwait for females	Years	0.999*	0.999*	The World Bank
	LE_m	Average Life Expectancy at birth in Kuwait for males	Years	0.999*	0.999*	The World Bank
ME	GDP	Gross Domestic Product (GDP)	Current Local Currency Unit (LCU)	0.912*	0.954*	The World Bank
	GNlpc	Gross National Income (GNI) per capita	Current Local Currency Unit (LCU)	0.820*	0.894*	The World Bank
	DR	Dependency ratio	Percent of working-age population	0.999*	0.931*	The World Bank
	Oil	Oil production	Thousand barrels per day	0.972*	0.924*	The Global Economy
	Electricity	Electricity consumption	Billion kilowatt-hours	0.999*	0.953*	The Global Economy
	NFIA	Non-bank Financial Institutions Assets	Percent of GDP	0.252	–	The Global Economy
	GDS	Gross Domestic Savings	Percent of GDP	0.351	–	The World Bank
	CI	Capital Investment	Billion USD	0.870	–	CEICdata
SD	PPE	Pre-Primary Education	Gross percent of school enrollment	0.821*	0.730*	The World Bank
	PE	Primary Education	Number of pupils	0.710*	0.777*	The World Bank
	SE	Secondary Education	Number of pupils	0.581*	0.664*	The World Bank
	TE	Tertiary Education	Gross percent of school enrollment	0.599*	0.681*	The World Bank
	IMR	Infant Mortality Rate	Number per 1000 live births	0.962*	0.960*	The World Bank
	FR	Total Fertility Rate	Number of births per woman	0.950*	0.941*	The World Bank
	AMR_f	Adult Mortality Rate for female	Number per 1000 female adults	0.884*	0.927*	The World Bank
	AMR_m	Adult Mortality Rate for male	Number per 1000 male adults	0.871*	0.912*	The World Bank
	UP	Urban population	Percent	0.950*	0.910*	The World Bank

(continued)

Table 17.1 (continued)

				Loading		Source
LV	MV	Indicator	Unit	Initial model	Final model	
	NMR	Neonatal Mortality Rate	Number per 1000 live births	0.963*	–	The World Bank
	U5MR_f	Under 5 Mortality Rate for female	Number per 1000 live births	0.965*	–	The World Bank
	U5MR_m	Under 5 Mortality Rate for male	Number per 1000 live births	0.966*	–	The World Bank
	CDR	Crude Death Rate	Number per 1000 people	0.610	–	SESRIC
HSR	DPTI	Diphtheria, Pertussis, and Tetanus (DPT) Immunization	Percent of children ages 12–23 months	0.745*	0.825*	The World Bank
	MI	Measles Immunization	Percent of children ages 12–23 months	0.756*	0.800*	The World Bank
	CO2	CO2 emissions	Metric tons per capita	0.798*	0.829*	The World Bank
	OW_f	Prevalence of Overweight for female	Percent of female adults	0.985*	0.928*	The World Bank
	OW_m	Prevalence of Overweight for male	Percent of male adults	0.885*	0.899*	The World Bank
	CPI	Crop production index	Index	0.990*	0.814*	The World Bank

*Significant at $p < 0.001$. Source: The World Bank, 2022; The Global Economy, 2022; CEICdata, 2022; SESRIC (Statistical, Economic, and Social Research and Training Centre for Islamic Countries), 2022; LV: Latent Variable, MV: Manifest Variable

Initial model (Effect, p -value): H₁: ME → SD (0.948, $p < 0.001$), H₂: ME → HSR (0.066, $p = 0.916$), H₃: ME → LE (0.401, $p = 0.982$), H₄: SD → HSR (1.011, $p = 0.103$), H₅: SD → LE (1.656, $p = 0.957$), H₆: HSR → LE (0.290, $p = 0.984$).

Final model (Effect, p -value): H₁: ME → SD (0.941, $p < 0.001$), H₃: ME → LE (0.520, $p = 0.0010$), H₄: SD → HSR (0.897, $p < 0.001$), H₆: HSR → LE (0.435, $p = 0.036$)

0.50, while the upper bound of the Confidence Interval (95% CI) of the HTMT2 criterion should be <1 to establish the discriminant validity between two reflective constructs, which are the LVs in this study (Chin, 2010; Hair et al., 2018; Roemer et al., 2021).

The structure of the model was proposed based on a prior theoretical framework (Wirayuda & Chan, 2021) and studies using CB-SEM (Chan & Taylor, 2013; Chan, 2015; Chan & Kamala Devi, 2015; Wirayuda et al., 2022). The depiction of the proposed model for the PLS-SEM is shown in Fig. 17.1. The model consists of item indicators or Manifest Variables (MV) reflecting the related LV (Hair et al., 2018). Based on a previous systematic review, all these items are considered significant in affecting LE (Wirayuda & Chan, 2021). The structural or inner model observes the relationship between all the LVs indicated as seen in Fig. 17.1. The indirect effect and the total effect can also be provided from the model and the result can be automatically seen in SmartPLS 3.3.7®.

Results

Variable Evaluation

The initial model had to be adjusted as the analysis revealed some non-significant values in the path hypotheses and the loading of the MVs (see Table 17.1). Hence, there is a need to remove some path arrows and MVs to get significant results and a better model (Lienggaard, 2020). After the initial modification of the model pathways, some other indicators (albeit their loadings are significant) also need to be removed to better the discriminant validity of the related LV. The model comparison to find the best model is shown in Table 17.1. In the final model, 3 MVs were removed from ME, 4 MVs were removed from SD, and the ME→HSR & SD→LE path arrows were removed. As shown in Table 17.1, there is an improvement in the overall results from the initial and final models. In the final model result, 5 MVs accounted for ME, 9 MVs for SD, 6 MVs for HSR, and 2 MVs for LE. The description of each final MV is summarized in Table 17.1. The loadings of each MV were significant (Table 17.1 and Fig. 17.2).

Table 17.2 summarizes that all the measurement results of the CA and the CR are above 0.7, including the ME (CA = 0.980 and CR = 0.987), SD (CA = 0.966 and CR = 0.981), HSR (CA = 0.933 and CR = 0.941), and LE (CA = 0.997 and CR = 0.998). The ρ -A are also meaningful in this model (ME at 0.987, SD at 0.981, HSR at 0.941, and LE at 0.998). The AVE for ME, SD, HSR, and LE are 0.670, 0.661, 0.667, and 0.995, respectively. The HTMT2 provide the LVs' validity test, and none of them have an upper bound more than 1, as the HTMT2 score between ME-SD is at 0.959 (0.936–0.988); between ME-HSR at 0.807 (0.699–0.910); between SD-HSR at 0.866 (0.762–0.953); between ME-LE at 0.903 (0.853–0.947); between SD-LE at 0.974 (0.949–0.998); and between HSR-LE at 0.858 (0.710–0.955).

Model Evaluation

The model shows strong predictability for SD ($=0.601$), HSR ($=0.484$), and LE ($=0.834$) according to the Q^2 value. The R^2 explains the variance in the particular dependent LVs, which is also explained by the independent LVs. In the result, the model indicates strong levels of the explanatory level shown by SD, HSR, and LE (R^2 at 92.8%, 77.2%, and 87.8%, respectively). All the information is summarized in Table 17.3.

All the direct, indirect, and total effects have significant results. The f^2 are positive and showed strong effect sizes (Table 17.3). Compared to the prior hypothesis, for H_1 : ME→SD, there is a direct effect at 0.941 ($p < 0.001$), with f^2 at 8.272. For H_3 : ME→LE, there is a direct effect at 0.520 ($p = 0.010$), an indirect effect (ME→SD→HSR→LE) at 0.372 ($p = 0.047$), and the f^2 is 0.438. For H_4 : SD→HSR,

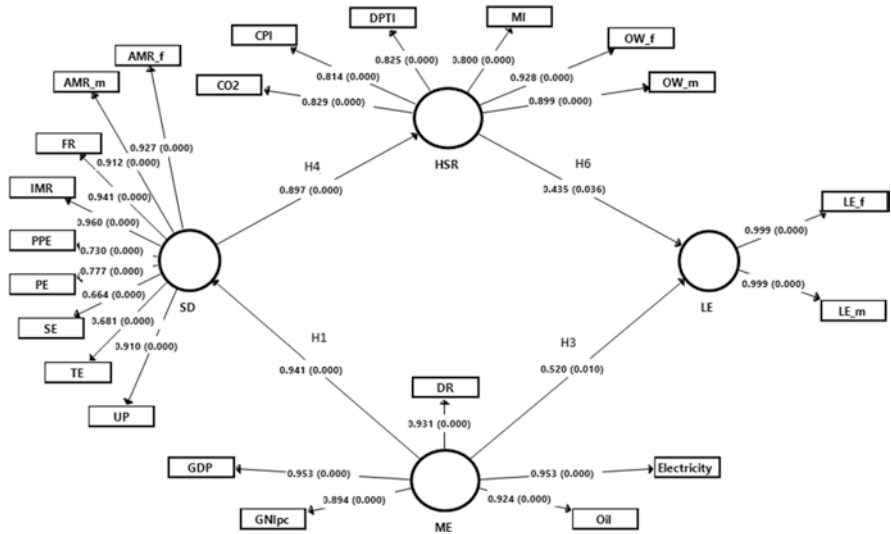


Fig. 17.2 The final model of macroeconomic, sociodemographic, and health status and resources on life expectancy in Kuwait (1980–2020). SD: Sociodemographic, ME: Macroeconomic, HSR: Health Status and Resources, LE: Life Expectancy, LE_f: Average Life Expectancy at birth in Kuwait (females), LE_m: Average Life Expectancy at birth in Kuwait (males), GDP: Gross Domestic Product, GNIpc: Gross National Income per capita, DR: Dependency ratio, Electricity: Electricity consumption, Oil: Oil production, PPE: Pre-Primary Education, PE: Primary Education, SE: Secondary Education, TE: Tertiary Education, IMR: Infant Mortality Rate, FR: Total Fertility Rate, AMR_f: Adult Mortality Rate for female, AMR_m: Adult Mortality Rate for male, UP: Urban Population, DPTI: DPT Immunization, MI: Measles Immunization, CO2: CO₂ emissions, OW_f: Prevalence of Overweight (female), OW_m: Prevalence of Overweight (male), CPI: Crop Production Index; All the values inside the diagram above are significant at $p < 0.05$. Numbers inside the bracket indicate the P -value

Table 17.2 Reliability, validity, and predictability of the latent variables

LV	CA	CR	Rh $\hat{\sigma}$ -A	AVE	Q ²	R ²	HTMT2 (95%CI)		
ME	0.980	0.987	0.987	0.670	—	—	ME	SD	HSR
SD	0.966	0.981	0.981	0.661	0.601	0.928	0.959 (0.936–0.988)	—	—
HSR	0.933	0.941	0.941	0.667	0.484	0.772	0.807 (0.699–0.910)	0.866 (0.762–0.953)	—
LE	0.997	0.998	0.998	0.995	0.834	0.878	0.903 (0.853–0.947)	0.974 (0.949–0.998)	0.858 (0.710–0.955)

CA: Cronbach's Alpha (>0.7), Rh $\hat{\sigma}$ -A: Rh $\hat{\sigma}$ -Alpha (>0.7), CR: Composite Reliability (>0.7), AVE: Average Variance Extraction (>0.50), R² >0.25 recommended, Q² <0.02 (weak), 0.15 (moderate), >0.35 (strong), SD: Sociodemographic, ME: Macroeconomic, HSR: Health Status and Resources, LE: Life Expectancy, LV: Latent variables, HTMT2: Hetero-Trait and Mono-Trait ratio (95% CI <1.0); All estimates are significant at $p < 0.05$

Table 17.3 Effect size, direct effect, indirect effect, and total effect of the latent variables

Hypothesis: LV	Direct effect (95% CI)	Indirect effect (95% CI)	Total effect (95%CI)	f^2
H ₁ : ME → SD	0.941 (0.915–0.972)	–	0.941 (0.915–0.972)	8.272
H ₂ : ME → HSR	–	0.859 (0.795–0.908)	0.859 (0.795–0.908)	–
H ₃ : ME → LE	0.520 (0.091–0.898)	0.372 (0.029–0.766)	0.892 (0.829–0.946)	0.438
H ₄ : SD → HSR	0.897 (0.843–0.956)	–	0.897 (0.843–0.956)	4.799
H ₅ : SD → LE	–	0.394 (0.031–0.823)	0.394 (0.031–0.823)	–
H ₆ : HSR → LE	0.435 (0.035–0.862)	–	0.435 (0.035–0.862)	0.302

LV: Latent variable, SD: Sociodemographic, ME: Macroeconomic, HSR: Health Status and Resources, LE: Life Expectancy, f^2 : Effect size <0.02 (weak), 0.15 (moderate), >0.35 (strong); All effects are significant at $p < 0.05$

there is a direct effect at 0.897 ($p < 0.001$) and f^2 at 4.779. As for H₆: HSR→LE, the direct effect is 0.435 ($p = 0.036$), and the f^2 is 0.302. Meanwhile, the H₂ (ME→HSR) has an indirect effect (ME→SD→HSR) at 0.859 ($p < 0.001$), and H₅ (SD→LE) has an indirect effect (SD→HSR→LE) at 0.394 ($p = 0.049$).

Discussion

The result fulfills all the requirements for the final model’s reliability, validity, and predictability features (see Tables 17.2 & 17.3). These evaluation results suggest that the model framework has high generalizability for extending further longitudinal observation in the future, including different populations. There is a high and significant effect of the macroeconomic factor on the health factor, which showed a good connection between the national income and public health investment to gain the growth of LE in its predictive relationship. In short, the Kuwait model showed that there was a mediating effect from ME to SD, SD to HSR, and HSR to LE, which resembled Oman and Singapore in terms of the mediating and moderating effect between ME→SD→HSR, as the ME factor, also moderated the relationship between HSR and LE (Chan & Kamala, 2015; Wirayuda et al., 2022).

In the final model result, ME is well reflected by GDP, GNI, Dependency Ratio (DR), Oil production, and Electricity consumption. As GDP gives a measure of the overall economic output by all the residents in a country, GNI reflects more on the actual income that flows into the country, which also accounts for the dividend or interest paid by other countries or overseas resources (Clarke, 2004; Song, 2019). In short, both measures may tell the value and growth of a country to evaluate its economy (Song, 2019). The study result shows that both indicators significantly load or weight upon the ME construct. They may relate closely with LE, as confirmed by previous studies (Mondal & Shitan, 2013; Roser et al., 2013; Wirayuda & Chan, 2021). As for the Dependency Ratio, there is an inverse relationship with either GDP or GNI, which is understandable because the more burden or unemployment gap, the weaker the aggregate economy would be (Cruz & Ahmed, 2018;

Hyung, 2013). Meanwhile, oil production and electricity consumption also reflected ME, showing that the two energy resources have been used well for both ME and LE in Kuwait (Abou Elseoud & Kreishan, 2020; Hamdi et al., 2014; Rasoulinezhad et al., 2020). Many studies have pros and cons on the relationship between oil production and LE. However, in a temporary period, energy provision can be channeled to build the national economy and fund a good national health service in Kuwait's context (Abou Elseoud & Kreishan, 2020; Rasoulinezhad et al., 2020; Steinberger et al., 2020; Hamdi et al., 2014). Again, as mentioned in the Introduction part, Kuwait's economy can be considered good because the ME construct in this model has a positive, significant, and stronger effect on LE than on HSR and SD.

The “*Preston Curve*” is well known to classically relate LE growth in a population with ME productivity, especially the GDP (Preston, 1975). Preston Curve shows that a low-income country may benefit well from economic growth in terms of the LE projection by large (Schultz & Strauss, 2008). As a country gets a better economy and starts entering a high-income class, the LE curve projection tends to be flatter (Vaupel et al., 2021). This curve may explain the nature of slower LE growth in most high-income countries, including the Kuwait model. As scientists understand how ME directly affects LE, the model shows that ME also has an indirect pathway to affecting LE (Mondal & Shitan, 2014). This point proves that the implication of the Preston Curve in connecting economic growth and health is not only about individual improvement of accessing health through wealth distribution but also the funding for public health development at the national level that can elevate all population health parameters, especially LE (Bloom & Canning, 2007). While one may argue that the correlation of ME and LE solely reflects the productivity of the people, which may be seen with a longer life span and more productivity to enjoy the wealth accumulation they possess, the realization of the model in Kuwait still emphasizes the importance of public health sector development through the means of ME pathway (Garibaldi et al., 2010; Sharpe, 2011). This insight is also relatable to low-income and high-income countries (Preston, 1975; Schultz & Strauss, 2008; Vaupel et al., 2021).

Another interesting finding is that the health status of Kuwait is also signified by overweight or obesity prevalence. An insight from the recent biomedical field concludes that calorie cutting or calorie restriction is substantially beneficial to prolonging the lifespan of an individual (Flanagan et al., 2020; Spadaro et al., 2022), and the Kuwait model result may suggest that this phenomenon is also true at the population level. Suppose one tries to concur with this conclusion. In that case, tackling the overweight or obesity burden will significantly improve the level of LE in Kuwait as the general effect of all SD, ME, and HSR are positive, unlike the case of the Oman LE model (Wirayuda et al., 2022).

Healthcare, denoted as HSR, directly influences LE and is in turn significantly affected by ME and SD factors. In line with the Preston curve concept, the field of biomedicine asserts that biological or genetic limits cannot be exceeded despite healthcare and technological advances aimed at extending human lifespan (Dong et al., 2016; Gavrilova & Gavrilov, 2020; Parsons, 1996). In this model, the direct effect of HSR is slightly lower than the direct and indirect effect of ME on

LE. Suppose one tries to relate the model with the concepts from the economic (Preston Curve) and the biomedicine perspective. In that case, the economic boost in the population may substantially help the initial elevation from a low-level LE to a higher-than-average global LE. However, the constant LE growth in the next upper-income level is accommodated by the sociocultural aspect (SD) and health-care aspect (HSR) (Dalgaard & Strulik, 2014; Lutz & Kebede, 2018). That is why the Kuwait model, after several modifications and trials, shows that the complete pathway starts from ME first, then SD, and then HSR. This dynamic is also reflected in the previous studies using the SEM approach for low-income countries (Chan & Taylor, 2013), middle-income countries (Chan, 2015), and higher-income countries (Chan & Kamala, 2015). In affluent nations like Japan, where LE growth has plateaued, a further slowdown in LE is anticipated. Any interventions targeting ME, SD, or HSR may no longer significantly raise LE, yet they can preserve its high level (Eisenstein, 2022; Ho & Hendi, 2018). Since, Kuwait has not yet reached this platential, there is potential for ongoing improvement.

The result is subject to an issue of ecological fallacy and lack of model fit as a confirmatory test in its final model result. The dataset utilizes the aggregate population data that may not consider the sub-group exposure that may affect each individual. At the same time, the PLS-SEM result of Kuwait may need to be compared with other models from similar countries to reveal a more comprehensive insight.

Conclusion and Implication for Policy in Kuwait

The final model intuitively implies that economic and sociodemographic aspects may affect the population's behavior and health. The intervention and improvement should be made by considering all the factors of ME, SD, and HSR from the final model. Health literacy and a sociocultural approach are needed to educate a better lifestyle as obesity and other non-infectious diseases are still prevalent in Kuwait. Separately tackling the diseases and morbidity while ignoring the ME and SD aspects may harm the health output in the long run, which is also proven by the last COVID-19 global relief effort. The model implied a need to form policies to comprehensively approach key factors involving ME, SD, and HSR aspects to change the health behaviors of the Kuwait population and to improve the LE projection of Kuwaiti in the long run.

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Data Availability The dataset used in this research can be made available with a reasonable request from the corresponding author.

Author's Contributions Study design (MFC, AM, AABW), data collection and analysis (MFC, AABW), manuscript preparation and review (AABW, AM, MFC).

Ethical Approval Ethical approval exemption was obtained by the University's ethics committee (MERC #2644).

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Chapter 18

Alternative and Complementary Practices for Mental Health Care in the CDMX: The Voice of Therapists and Storekeepers



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The array of beliefs and healing practices embraced by various groups and populations stems from the health issues they encounter, alongside the historical, cultural, and socioeconomic context in which they exist (Ae-Ngibise et al., 2010; Ghaneses Herndon et al., 2009; Mark & Lyons, 2010; Gyasi et al., 2011).

As per the World Health Organization (WHO), the term “traditional medicine” encompasses practices deeply rooted in a country’s culture. In contrast, complementary and alternative medicine, although distinct from the national tradition, are not officially integrated into their respective health systems (WHO, 2003). While the WHO does not strongly distinguish between the terms “complementary” and “alternative” medicine, other organizations like the United States’ National Center for Complementary and Alternative Medicine (NCCIH) provide clarity on these terms. They define “complementary” as non-conventional practices used alongside biomedicine and “alternative” as non-conventional practices used in place of biomedicine.

While biomedicine remains the predominant medical system (Zörgö et al., 2018), there is a global prevalence of individuals turning to complementary and alternative medicine (CAM) (Lakshmi et al., 2014). According to the WHO, 80% of residents in developing countries address their most common health issues using CAM. Furthermore, the Pan American Health Organization (PAHO) notes that traditional healers serve as the primary healthcare providers for 80% of the indigenous population in Latin America (Menéndez, 2015). In Argentina, Franco and Pecci reported the utilization of CAM by just over half of the outpatients at the University

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of Buenos Aires General Hospital. These patients were predominantly young women with academic backgrounds, actively engaged in religious practices, had a history of prior professional mental health care or prolonged physical discomfort exceeding six months, and exhibited a degree of skepticism toward biomedicine (Franco & Pecci, 2003).

In North America, the 2012 National Health Interview Survey (NHIS) in the USA reported a 17.5% utilization of non-vitamin dietary supplements in the preceding year.

On a global scale, there is ample evidence indicating the utilization of complementary and alternative medicine. In Denmark, a study revealed that a significant portion of their sample (65.3%) had engaged in one or more alternative or complementary therapies. Furthermore, among individuals experiencing headaches at least once a week, the percentage of those seeking these types of interventions rose to 72.4% (Do et al., 2023).

In Switzerland, oncology patients have reported a lifelong use of CAM at a rate of 54%, with 35% mentioning turning to it following a cancer diagnosis. Additionally, it has been noted that women and university students are more inclined to explore these alternatives. Interestingly, as individuals grow older, their likelihood of using CAM diminishes. The primary motivation behind this use is to enhance physical well-being (48.9%), followed closely by overall well-being (45.8%), and to fortify the body in its fight against cancer (38.9%). A significant portion of these patients also expressed that incorporating some CAM into traditional care seemed to be a beneficial option (Källman et al., 2023).

This data align with other research findings indicating that patients with terminal illnesses often exhibit a high utilization of CAM, with 88.4% reporting CAM use within the last year, primarily for treating musculoskeletal and neurological issues. Similarly, it was noted that family and friends were the most common sources of information about CAM. Surprisingly, more than half of the interviewees had not been inquired by medical personnel regarding their CAM usage, nor had they initiated discussions on this practice. Consequently, it is imperative for healthcare professionals to take into account the frequency of CAM utilization and to foster a trustworthy environment for effective communication concerning CAM use while providing evidence-based information (Lin et al., 2023).

In a recent literature review exploring the utilization of traditional and patent Chinese medicine for depression, findings indicated that these approaches demonstrated antidepressant effects with multiple targets. When used alongside Western medicine, they have the potential to enhance efficacy while minimizing side effects (Zhuang et al., 2023).

The data regarding the utilization and methods of CAM in Mexico remain inconclusive. Various isolated reports exist regarding its application in specific conditions, including type 2 diabetes mellitus, childhood cancer, irritable bowel syndrome, functional dyspepsia, rheumatologic, and hepatic diseases, as well as mental

disorders. Additionally, there have been instances of acupuncture use in certain populations (Argáez-López, et al., 2003; Carmona-Sánchez & Álvarez-Tostado, 2005; Alvarez et al., 2006; Miranda Beltrán, et al. 2005; Saavedra, & Berenzon, 2013; Ruiz Tachiquín, 2002); however, a consensus has yet to be reached, despite the recommendations of international organizations. Since 2013, the WHO, in its “WHO Strategy on Traditional Medicine 2014–2023,” has been advocating for further research into CAM practices. The WHO also emphasizes the necessity for documentation that encompasses multidisciplinary efforts and incorporates the correlation of both quantitative and qualitative methodologies.

Methodology

The information presented in this article is a component of a larger-scale project involving the participation of states in southeastern Mexico, including Chiapas, Yucatan, and Campeche. It's important to note that Campeche hosts the primary research institution for this endeavor at El Colegio de la Frontera Sur (ECOSUR) (Huicochea Gómez et al., 2021). The study encompassed three phases conducted in the mentioned locations, including the one presented here – Mexico City. The initial phase involved engagement with traditional, alternative, or complementary therapists, as well as vendors selling products for illness treatment and health preservation. The second phase encompassed interactions with the general population. The final and third phases centered on regular users of these therapies, services, or products. This report presents the outcomes of the first stage conducted in Mexico City.

Techniques and Procedures

In this qualitative study, designed with a phenomenological approach, semi-structured (focused) interviews were conducted with 89 therapists and storekeepers in Mexico City. To facilitate this, a guide was created, specifically adapted from the original interview guide used in the main project. The data, comprising responses and testimonies, underwent a thorough review and transcription process, which was followed by the organization using condensation and categorization techniques, in alignment with Steinar Kvale's (1996) “categorization of meanings” framework.

The analysis occurred in two stages. A preliminary analysis was carried out during the transcription stage, which informed decisions regarding information saturation or the need for new strategies. Subsequently, we employed discursive analysis, using methods outlined by Kvale, to construct databases that facilitated the review of the collected testimonies.

Participants

We conducted interviews with 81 therapists and 8 elderly residents of CDMX (Mexico City) who did not exhibit any obvious physical or mental conditions that might hinder their understanding of the questions or their ability to provide answers.

To select key informants, therapists and shopkeepers were located throughout CDMX via various advertising methods, including street advertisements, social media, and traditional media such as radio, TV, and newspapers. We personally approached these individuals to introduce the study and invite them to participate. Some agreed to participate, while others who declined referred us to their colleagues. This snowball sampling method allowed us to expand our pool of participants. The total number of interviewees was determined based on the process of information saturation (Bernard, 2012).

Among the therapists who participated, a significant portion practiced therapies associated with herbal medicine. Acupuncture was the second most commonly practiced therapy, and there were also notable numbers of participants in other modalities, including homeopathy (see Table 18.1). In contrast, the shopkeepers offered a range of health products, including Herbalife™, essential oils, and various ointments.

Analysis of Results

Health-Illness Perception

Regarding the significance of the concept of health, our findings indicate that while there was a prevailing view of health as the absence of illness, a majority of participants viewed health as a state of equilibrium. This equilibrium was characterized not only as a balance between body, mind, and spirit but also extended to encompass the environment and the community. Some participants articulated that health equated to “being able to function.” Furthermore, the importance of lifestyle in relation to health was emphasized.

Certainly, expressions related to the concept of health, influenced by the worldview of certain therapies or products, were also evident.

Less common were interpretations of health centered solely on physical aspects, with pain being the most frequently cited element. Similarly, meanings based solely on mental aspects were also less frequent.

The perception of illness aligned with the concept of health. In addition to being seen as the antithesis of health, illness was also perceived as an imbalance between the mind and the body. It was often emphasized that the mind played a pivotal role in determining when this equilibrium was disrupted.

Some individuals expressed the belief that there are specific indicators, such as pain, which manifest when a disease is present. Additionally, lifestyle choices were

Table 18.1 Diversity of alternative and complementary practices practiced by respondents in Mexico City

Type of CAM	Number of interviewees according to the type of CAM they offer
Herbalist	15
Acupuncture	8
“Curanderismo”	6
Herbalife™	5
Homeopathy	4
Physiotherapy/physical therapy and rehabilitation	4
Healing	4
Chiropractic	3
Santeria	2
Essential oils (aromatherapy)	2
Auriculotherapy / auriculopuncture	2
Tarot	2
Naturopathic medicine	2
Reiki	1
Shamanism	1
Witchcraft	1
Electroemotion	1
Universal esotericism	1
Massages	1
Logotherapy	1
Quantum medicine	1
Holistic medicine	1
Metaphysics	1
Music therapy	1
Ozone therapy	1
Biomagnetism	1
Religious group	1
Tijax Cuauhtli (Nahuatl culture)	1
Ointments	1
Bone	1
Chirophysics	1
*Multiple: Acupuncture+herbalism Herbalism+herbalism+chirotherapy Homeopathy/Chiropractic/Orthomolecular Medicine Massage therapy + acupuncture Tarot+shamanism+curanderism	5
Not specified	7
Total	89

*Multiple: Those therapists who offer more than one CAM, regardless of whether they practice them in combination or individually

underscored as a contributing factor to illness. Participants frequently stated that individuals bear responsibility for falling ill, often due to dietary indiscretions or a lack of physical activity, which can lead to conditions like diabetes, obesity, and hypertension. Consequently, there was a prevailing sentiment that diseases are preventable.

Perception of Mental Health: Mental Illness

Mental and emotional facets emerged both organically and deliberately during the interviews. Repeatedly, the participants' interpretations of health and illness underscored the significance of the mind.

Consistent with findings in other studies, traditional and alternative therapists tend to view illness as a complex interplay of physical and mental elements. They often perceive it as a binomial condition in which both aspects coexist and contribute to overall well-being. In fact, some therapists, including a bonesetter and a holistic doctor, explicitly rejected the concept of mental illness.

In spite of the above, and hand in hand with the representation that prevails in our social environment, when asked the intentional question "what came to mind when hearing about mental illness," invariably all the interviewees expressed that mental illness is "madness." This is indicative of the stigma prevalent in most parts of the world, where mental illness is synonymous sine qua non with insanity.

Some interviewees also mentioned specific mental disorders, including depression, anxiety, schizophrenia, personality disorders, and psychoses.

"Feeble-Mindedness"

The gravity of mental illnesses is underscored by the importance participants place on "feeble-mindedness." This perception is closely linked to the severity they associate with mental disorders, which they acknowledge can lead to incapacitation, pose dangers, and be deemed "incurable." Consequently, mental illnesses serve as a basis for referring or recommending individuals to experts in the field of mental health.

In this context, there is a significant inclination toward referring individuals to psychology, with interviewees highlighting the primary benefits of such referrals, including active listening, emotional and mood support, problem-solving assistance, fostering positive thinking, offering advice, providing guidance, and supporting behavioral improvements. Although some interviewees mentioned that these were actions they could provide themselves within their therapy or service, they indicated a willingness to refer individuals to psychology (primarily) and psychiatry when faced with serious issues.

Further considerations arose, such as in cases deemed more severe or when "management extends beyond their capabilities" (e.g., the need for psychotropic medications).

Population Served

The population served by the participants is primarily composed of adults, with the exception of healers who do not treat children. They explained this decision by noting that children are still in the process of development and are delicate, and therapy carries certain risks. Among the patients and clients they receive, there is a notable predominance of women. Interviewees frequently emphasized that while women are often the initial point of contact, as they are typically responsible for family health, they subsequently bring their children and husbands for treatment.

Discomforts that Generally Attend

The therapists and shopkeepers in this study reported that they provide treatment for a wide range of ailments, offering comprehensive care. Some mentioned that they exclusively address “physical health,” particularly those specializing in physiotherapy or chiropractic, focusing on osteoarticular and muscular conditions. Additionally, there are those who offer products geared towards aesthetics and nutrition.

Mental Conditions Treated

Among the participants, 15 individuals specifically mentioned that they focus on the treatment of mental health issues. Those who made this assertion offer treatments in various modalities, including music therapy, tarot readings, metaphysics, healing, logotherapy, reiki, quantum medicine, massage, aromatherapy, as well as some healers and acupuncturists. They primarily address concerns related to anxiety, stress, depression, and various emotional distress such as “nerves,” “hauntings,” and “afflictions.” Less frequently, they provide assistance for conditions like obsessive compulsive disorder, schizophrenia, bipolar disorder, selective mutism, and Alzheimer’s. The treatment approaches for these conditions often involve herbal teas, spices, homeopathy, spiritual practices, prayer, or simply engaging in dialogue.

It’s worth noting that while some participants mentioned treating mental illnesses as part of their practice, some provide only indirect benefits. Within this latter group, there are two distinct subcategories: those who acknowledge that they do not primarily offer mental health care and those who provide indirect benefits but are not consciously aware of them (*refer to the table*). Importantly, they underscored that they do not work with psychiatric patients or individuals requiring hospitalization, with the exception of one healer who does offer care for a wide range of mental disorders, including psychosis. The remaining participants do not handle such cases, which they relate to the seriousness of these conditions.

Addressing Conditions of Vulnerability

The interviewees provide services to a population facing vulnerable conditions, including geriatric patients with mobility issues, individuals with conditions such as “fragility,” Alzheimer’s disease, and diabetic foot, as well as those with negative social relationships or limited support networks. They offer a range of care options, from palliative care to treatments described as the “cure that allopathic medicine has not been able to provide.” Additionally, they offer assistance to individuals dealing with serious illnesses and provide support to those who lack social security or public coverage. Their services extend to individuals in circumstances where allopathic medicine may not be accessible or where cultural customs are not respected.

General Ailments Not Addressed by Respondents: CAM Collaboration with Biomedicine

The interviewees generally refrain from treating certain health conditions, particularly those of a serious nature that necessitate surgical intervention, severe infections, epilepsy, allergies, significant cardiac conditions, and, in some cases, cancer. Notably, some openly expressed that their approach does not involve treating diseases but rather alleviating discomfort or resolving emotional conflicts. Moreover, it was mentioned that they often work in a complementary capacity, exemplified by a physiotherapist who mentioned collaborating in co-therapy with a neurologist.

In terms of formal or allopathic medical treatment, there is a common perception of doctors providing dehumanized care and the potential toxicity of medications. However, it was observed that when a patient or client did not experience improvement, they were often referred to a doctor either by the therapist or the client themselves. Additionally, it was acknowledged that many of the patients seen by the interviewees were cases that Western medicine had been unable to resolve. (See Table 18.2).

Diagnostic Approach by CAM Therapists

The diagnostic approach to physical ailments used by alternative therapists closely resembles that of allopathic medicine. They primarily identify ailing bodies through observable signs and symptoms, often described as the individual appearing unwell or behaving differently from their normal state. Additionally, they rely on patient-reported information gathered during the anamnesis, which involves questioning the patient about discomfort, lifestyle, and determining the “weak link” in their health. Commonly, physical pain and asthenia (tiredness and fatigue) are the predominant symptoms identified.

In contrast, when diagnosing mental illnesses, the pivotal data often centers around the individual’s mood and emotional state, encompassing a range from sadness, anxiety, and stress to feelings of isolation, aggressiveness, and anger.

Table 18.2 Categories of analysis and some of the quotations that exemplify them

Categories	Subcategories	Examples of quotations
Health-illness perception	Health perception	good conditions, not only physically, but also mentally, psychologically, humanly, with the rest of society” [therapist, Physical Therapy and Rehabilitation Pati]. “feeling well in all aspects (bio-psycho-social)” [Therapist, homeopathy]. To be healthy, to have no ailments or pains that prevent us from doing our activities” [therapist, chiropractic].
	Perception of illness	“it’s the opposite of the above” [therapist, Physical Therapy and Rehabilitation Pati]. is an imbalance of any of the above” [therapist, homeopathy]. To be sick is to feel pain in the body, in the organism, not to feel well [therapist, herbalist]. is to be unable to perform all daily activities” [tenant, Herbalife]. It is that there is something that ails us, a wake-up call from our body” [therapist, Herbalist]. “Neglect of ourselves” [therapist, chiropractic].
Perception of mental illnesses and their respective management	Perception of mental health	When there is an emotional balance in all its spheres and also possesses tools at a personal level to face adversities” . [therapist, Physical Therapy and Rehabilitation Pati]. A person is mentally healthy when he behaves well, when he has a behavior appropriate to his age, and to achieve that, you have to eat well” . [therapist, herbalist] take care of yourself, take care of your body, your mind, so you will have a balance of emotions and you will have a very good quality of life” [therapist, curanderismo]. “connecting oneself to the faithful will backed by questioning, self-observation and constructive self-criticism” [locant, essential oils]. “doing constant review with experts in the area, there is good mental concentration” [therapist, Santeria]. “get treatment from a psychologist or a psychiatrist” [tenant, Herbalife]—“get treatment from a psychologist or a psychiatrist” [tenant, Herbalife]. “de-stressing, having therapy, going to someone to talk and release stress and worries” [therapist, chiropractic]. “concentrating with the world around him, getting to know himself, being at ease with nature, people, but most importantly, with himself.” [therapist,] “any symptom that suggests that the individual’s mind or psyche is affected” [therapist, chiropractic]. “distortion and uncontrolled emotions, due to an internal or environmental situation” [therapist, healing].

(continued)

Table 18.2 (continued)

Categories	Subcategories	Examples of quotations
-	Perception of mental illness	<p>They get sick simultaneously, if the body is sick, so is the mind" [therapist, chiropractic].</p> <p>The separation between the concepts of body and mind is perhaps one of the causes of our imbalances, we are body/mind" [therapist, without naturopathic medicine].</p> <p>Emotional, physical or social discomfort, when something in their sphere is altered (in the person) this in turn affects their general life and physical health as well" [therapist, acupuncture].</p> <p>"The distortion produced in the body or behavior by elements of the mind" [therapist, homeopathy].</p> <p>"Depression, schizophrenia, anxiety, psychosis, a repressed emotion" [therapist, homeopathy].</p>
	Stigmatization of mental illnesses	<p>"A < <weird> > person who is in an insane asylum and who acts out of control" [therapist, herbalist].</p> <p>"Something's not right with their mind, someone not thinking straight or a screw is out of joint" [therapist, herbalist].</p> <p>In psychopaths and madmen" [therapist, auriculopuncture].</p> <p>No [does not recommend psychology], because they are crazier than us" [client, herbalife].</p> <p>No, since he only treats crazy people [psychologist] and tries to talk to them or to put stranger things in their heads" [therapist, herbalist].</p> <p>"According to me it only helps the loquitos [psychiatrist], besides I have been told that they are the ones who fill people with pussy and then leave them worse" [therapist, herbalist].</p>
	Outcome of their "therapy" in cases of mental illnesses	<p>With these I have achieved many things, people who had situations that did not allow them to be calm, with the help of therapy, they move forward and with self-knowledge, they can free themselves from what they did not know was there" [therapist, shamanism].</p> <p>"It is effective when people listen to my advice" [therapist, tarot].</p> <p>"They improve their way of living, they become very reflective, better handling of emotions" [therapist, quantum medicine].</p> <p>I think I help them to be calmer and not to worry so much about their fracture problem, but I don't treat mental illnesses" [tenant, herbalife].</p> <p>I don't think I've dealt with it much, but people are almost always calmer" [therapist, curanderismo].</p> <p>The results are very good, since there are pills that we prescribe and they help people to overcome physical problems such as hypertension, which affects their mood" [therapist, herbalist].</p> <p>If the treating physician requests it, the type of therapy required is given, depending on the pathology. If the patient's mental health is controlled, the corresponding therapy is given to the patient, taking into account his physical condition and an explanation will be given if he becomes somatized". [therapist, acupuncture]</p>

-	<p>Recommendation of psychologists</p>	<p>“yes, there are patients who don’t trust us very much and have another option, but we can take care of them” [therapist, curanderismo].</p> <p>“yes, I don’t feel qualified to treat those cases” [therapist, acupuncture].</p> <p>“Yes, they study the brain, just as we study the body and soul, but they know more” [therapist, curanderismo].</p> <p>“Yes, because there are things that I don’t go into” [therapist, speech therapy].</p> <p>“It does help, we all need one because we all have problems” [therapist, acupuncture].</p> <p>“Yes, because there are problems of the mind that are very dangerous, such as depression” [therapist, physical therapy].</p> <p>“if the patient requires it, yes, I channel it” [therapist, Physical Therapy and Rehabilitation Pati].</p> <p>“No, because they have their own mental illnesses, they cure the behavior and the traditional doctor cures the soul, spirit and energy.” [therapist, “Tijax Cuauhtli”, Nahuatl culture].</p> <p>“Of course yes, it is important to have a team of several specialists” [therapist, physical therapy and rehabilitation].</p> <p>“Yes. The psychologist is like a counselor who helps you if your mood is down, and can help you return to stability to move forward, form habits and change attitudes, I believe that psychology has no special limitations” [therapist, herbalist].</p> <p>Yes. They can find the root of the problem, limitations they can’t prescribe drugs</p> <p>They have to resort to other instances” [therapist, auriculopuncture].</p>
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(continued)

Table 18.2 (continued)

Categories	Subcategories	Examples of quotations
-	Psychiatrists' recommendation	<p>"yes, I would also receive medication" [therapist, homeopathy].</p> <p>sometimes, if necessary only. It helps to improve brain diseases. It is not helped by the price" [therapist, herbalife].</p> <p>Yes, because psychiatrists have a more difficult job, because psychologists work with normal people, but psychiatrists work with people who have lost their conscience and enable people. He helps by giving rehabilitation through medication, but there are people there who have no remedy for their illness and if they do not change their attitude nothing will change in them. If the sick people come out of the psychiatrist and go back to doing what they shouldn't be doing then it's not cured." [therapist, tarot].</p> <p>"yes, when required and a psychologist cannot" [therapist, herbalist].</p> <p>"Yes. It actually diagnoses a mental illness and they give medication to treat it." [therapist, auriculopuncture].</p> <p>Yes, they help sociopaths, in severe mental illness. Their limitations are that they use a lot of drugs, they stop being you, drugs that have drowsy effects, drugs are not the best option sometimes. [therapist, homeopathy]</p> <p>We do not generally recommend drugs, there are some that are necessary, but others that can be avoided. I understand that there are disorders that should be treated by a psychiatrist, in these serious illnesses in which these treatments are necessary, a psychiatrist is definitely the best option, but there are also times when they go directly to medicate the patient without taking into consideration many other factors". [acupuncture therapist]</p> <p>Yes, when it is necessary, of course it is. It solves the problem, in the sense that he knows what he has based on his studies and so he will medicate him correctly. His limitations would be that there are diseases that are not removed, they are only controlled." [therapist, healing]</p> <p>Well, when the mental health treatment is very complicated or is not responding quickly, yes, I do send them. The psychiatrist is a specialist of the mind, he can medicate and knows how to treat the patient. His limitations could be that he could not use medicinal plants, only drugs. [therapist, curanderismo]</p> <p>If necessary, yes, because there are cases in which it is required. He is the only one who can give a diagnosis of any illness of mental origin and knows about the management of specific medications" [therapist, physical therapy and rehabilitation].</p> <p>no, because I think they send a lot of medicines that sometimes also do harm and do not see the feelings of the people" [therapist, curanderismo].</p> <p>No. It is often not advisable because people suffer from dependence on the drugs supplied" [therapist, universal esotericism].</p>

Medical systems and social actors involved	Population served	The women come first and then they bring their husbands and children" [therapist, shamanism]. They are generally adults, the elderly, women who bring their children" [therapist, herbalist].
	Population not served	Except for children because they are very fragile and delicate" [therapist, physical therapy].
	Conditions that in general are attended by	"all diseases" [therapist, acupuncture]. "I attend all, any case" [therapist, Santeria].
	Palliative care provided by	"Curing anxiety and chronic pain in someone terminal slows them down before they die." [therapist, acupuncture]. "Maintain cases such as leukemia with average life expectancy greater than prognoses" [therapist, homeopathy]. "Many people look to us for pain relief, but we also focus on finding the source of the ailment and balancing it. We offer help in the management of these diseases, without replacing the primary care physician. We never say that we are a replacement for it, but we can help in certain aspects in which it is impossible" [therapist, acupuncture]. I don't treat any disease, only symptoms are cured" [therapist, acupuncture]. Because at the end of the day it is complementary, it will never replace" [therapist, auriculopuncture].
	Mental conditions treated	"depression, nerves, anxiety, stress" [therapist, quantum medicine].
	General ailments not addressed by the respondents: CAM collaboration with biomedicine	"Very complex diseases that I for example (or whoever is dedicated to something like me could not cure." [therapist, physical therapy] Those who require a specialist. I channel people with serious problems" [therapist, herbalist]. "Something I see that is not in my hands, I give them other options (not with me or my colleagues), I send them to <<other doctors> > "[therapist, quackery].

(continued)

Table 18.2 (continued)

Categories	Subcategories	Examples of quotations
Structural factors that determine CAM use		In many regimes where allopathic medicine does not reach the population, the population needs these people” [therapist, homeopathy].
		They do not respect our customs” [therapist, Tijax Cuauhtli]. Don’t demonize us for not being doctors” [therapist, chiropractic]. “More institutes and places of official care for the population and more homeopathic practitioners” [therapist, homeopathy]. Advertising by the health ministry, more clinics paid by the government” [therapist, acupuncture]. First the doctors will recommend the therapist appropriately, that the importance of concluding a treatment is disseminated in all the media and that they are properly disseminated with the fundamentals of how the therapies work. And lastly, to raise the salary [of the population] so that they go to their therapist” [therapist, acupuncture]. “that they do not charge taxes” [aromatherapy]. “Working in conjunction with allopathic medicine physicians” [therapist, physical therapy and rehabilitation]. Patients should be channeled from both sides” [therapist, Santerial]. Support to use the tools that are needed (organs, skulls, etc.) and that are normal” [therapist, witchcraft]. Organization of courses” [therapist, quackery “Training support” [therapist, herbalist]. Educate the doctors” [therapist, speech therapy]. “it could be complemented and doctors could use more natural things instead of chemicals” [therapist, herbalist].
Subjective factors that determine CAM use		“It is treated in a global way, taking care of the emotional aspect” [therapist, homeopathy]. “the empathy with the patient, the goals you have and the relationship you establish with the person” [therapist, aromatherapy]. Good conversation regarding what ails the patient both physically and emotionally” [therapist, homeopathy]. “Know how to listen and explain to them what I will do” [therapist, healing]. “For the service, for the effectiveness of the service, the quality” [therapist, tarot]. “They come because they tell me that I treat them well and they trust me” [therapist, curanderismo]. “They come by faith” [therapist, healing]. “They recommend me because I heal them” [therapist, curanderismo].
		In some cases, yes, especially when it is a specialty drug. Because generally the laboratories are not Mexican and a lot is invested in it, research expenses, personnel and the whole chain of people who have to be paid until it reaches the patient” [therapist, physical therapy and rehabilitation]. “Because a lot of pharmacists are foreign and they raise their prices and yes, that’s why people are looking” [therapist, homeopathy]. The use of [CAM] is cheap and easy to get. There is a lot of commoditization and also the process involved in making medications has to be very expensive. That causes people to go to other people who can cure them” [therapist, physical therapy]. “Yes, most of the time. The pharmaceutical industry uses doctors to sell their products and they don’t always cure, patients can’t afford it” [therapist, healing]. “Yes. Yes for all research work and those who control it first seek to benefit” [therapist, metaphysicist].

The next most frequently considered data for identifying this type of disease are bodily and physical symptoms themselves. These are followed by the evaluation of higher mental functions, which encompass aspects such as the structure of thought, language, memory, behavior, as well as orientation and alertness.

To a lesser extent, other indicators include elements related to the therapies they practice, such as the assessment of the energy field and meditation.

Reiterating the delicacy as mentioned earlier, it is important to note that they emphasize that these indicators “are not easily perceived.”

Aspects Considered in CAM to Achieve an Improvement of the Conditions

The therapists and customers primarily attribute the improvement in patients' ailments to the effectiveness of their therapies and products, which are largely of natural origin and perceived as harmless (with no adverse effects).

To achieve this, they prioritize warm and empathetic treatment, engaging in conversations to “help patients find meaning in life.” They also provide guidance and explanations to the patient, both regarding their condition and the use of the recommended products, which promotes strong adherence to the treatment.

Considerations for Achieving CAM Effectiveness

They emphasize that the patient's willingness and faith are of utmost importance for the effectiveness of the therapy. These qualities are crucial for the individual to adhere to the recommended care (as mentioned in the previous category). Consequently, the lack of healing is attributed to various factors, including a lack of faith, disbelief, stigma, mistrust, and undisciplined care. This undisciplined care can manifest as non-compliance with recommendations, a “poor culture of prevention,” inadequate adherence to treatment (whether in terms of timing, follow-up, or the incorrect preparation of remedies), or discontinuation due to reasons such as unpleasant taste or laziness. Some individuals may feel better and discontinue treatment prematurely, or they may become impatient with rest, particularly in the case of physiotherapy and chiropractic.

It's interesting to note that some therapists mention a lack of self-esteem or self-love (particularly among Herbalife clients), while several specify intolerance to frustration as a contributing factor to treatment failure. Additionally, one interviewee added “suffering from a mental illness” as a potential cause of an unfavorable response.

Subjective Causes for CAM Use

According to the interviewees, patients seek their services for reasons such as recognition, acceptance, effectiveness, tangible results, healing, practicality, necessity, positive word-of-mouth from other patients, and recommendations. They believe that their holistic approach, coupled with empathetic and compassionate care, are the factors that lead patients to return for more consultations and choose their services over others. This approach helps build trust and faith in their patients.

The Low Cost of CAM vs. the High Prices of Biomedicine

Patients also seek their services due to the affordability of their therapies, especially in comparison to allopathic medicine, which is often financially out of reach for many people. It's worth noting that most of the interviewees attribute high costs to pharmaceutical laboratories and companies, whom they believe are primarily profit-driven in the realm of medicines and healthcare. While they have some complaints about specialist consultations or visits to general practitioners, these complaints are less frequent, though not entirely absent.

Needs Expressed by CAM Therapists

The interviewees often face a lack of recognition by the government, as well as rejection, censorship, and demonization of their practices. Many of them emphasize the need for greater openness and the proper dissemination of the benefits and advantages of their therapies, along with improved health education for the general population. They also express the need for financial support, primarily for infrastructure development such as clinics, consultation rooms, and material resources. One interviewee even mentioned the need for greenhouses. Additionally, they advocate for their inclusion in official institutes and hospitals, where they can be regarded as a complementary healthcare system.

While some therapies like acupuncture, homeopathy, and Herbalife enjoy legal recognition, the participants mentioned a lack of support. Interestingly, they paradoxically reject the need for support but simultaneously advocate for the ability to work without excessive taxation. This suggests that, instead of seeking formal recognition, they prefer a form of regularization for their trade, akin to small-scale businesses.

Training for CAM Therapists

Some therapists indicated the importance of receiving training or courses related to health and disease. This reflects their voluntary commitment to ongoing learning in the field of health. Additionally, participants frequently mentioned the need to “educate doctors” regarding the use and application of CAM, suggesting a mutual exchange of knowledge and education.

What is described in the Results section is summarized in Fig. 18.1.



Fig. 18.1 Graphic representation of the condensation of the testimonies analyzed

Discussion

The general consensus among the interviewees was that disease prevention through lifestyle choices aligns with previous research (Hunter et al., 2013; Ning, 2013; Baba et al., 2014). This perspective emphasizes individual responsibility and encourages the use of CAM (Ning, 2013). People are increasingly taking an active interest in their health, seeking information and care both preventively and for treating ailments (Zörgő et al., 2018). This trend is particularly prominent among women, as highlighted by the interviewees in our study, corroborating findings in existing literature (Shih et al., 2008; Franco & Pecci, 2003; Berenzon Gorn et al., 2009; Burke et al., 2006; Nelms & Gorski, 2006; Peltzer et al., 2016; Keshet & Simchai, 2014). Women are often recognized as key caregivers for their families (Berenzon-Gorn et al., 2009; Feyisetan et al., 1997), making them a crucial target for health education initiatives.

Although the therapists and residents in this study mentioned that they provide comprehensive care for a wide range of patients and ailments, their attention to vulnerable conditions is particularly notable. They mentioned providing care to geriatric patients with mobility issues, individuals with conditions like “fragility,” Alzheimer’s disease, diabetic foot, and patients facing challenging social circumstances with few support networks. Mental illnesses were also part of their focus. It’s worth noting that the WHO has reported that CAM is often used to treat rheumatic diseases, chronic disorders of the musculoskeletal system, and joint and muscular conditions, which aligns with the pathologies commonly treated by CAM (WHO, 2013).

The importance of addressing conditions that impact both the patient and their environment is evident, with substantial and specific information available on this topic. Researchers who have extensively studied CAM usage in conditions such as cancer, HIV, chronic diseases, and mental illnesses have consistently found that vulnerable conditions are associated with a greater likelihood of seeking CAM interventions (Oh et al., 2010; Gureje et al., 2015; Van den Brink-Muinen & Rijken, 2006; Shih et al., 2008; Lin et al., 2023).

It is intriguing to note that most of our participants acknowledge the limitations of their therapies in addressing profoundly challenging and vulnerable conditions. This aligns with previous studies (Zörgő et al., 2018) and is supported by the WHO, which recognizes that CAM therapists often emphasize improving the quality of life when a complete cure is not possible (WHO, 2013).

This suggests that the demand for CAM services is not solely contingent on achieving a complete cure. Instead, it is associated with other strengths offered by these therapies, as indicated by our study participants. They mentioned that CAM can fulfill various needs, including spiritual, social, palliative care, or simply providing support and companionship—areas where conventional biomedicine may not always meet patients’ needs (Lakshmi et al., 2014; Espinos Cortes et al., 2013).

This finding can be explained by the holistic view of health and illness prevalent among our study’s interviewees. They often conceptualized health as a balance

encompassing the body, mind, spirit, environment, and community—a perspective shared by CAM therapists globally (Zörgö et al., 2018; Gureje et al., 2015; Berenzon-Gorn et al., 2001; Hunter et al., 2013; Espinosa Cortés et al., 2013; Devillard, 1990; Lynch & Medin, 2006). This holistic viewpoint plays a significant role in driving the use of CAM because it closely aligns with patients' comprehensive perceptions of health and illness, effectively addressing their multifaceted needs (Kirmayer, 2004; Zörgö et al., 2018).

However, it's worth noting that in our study, only a few interviewees directly associated their conceptualization of health and illness with physical causes. This is expected in a context where conventional medicine remains dominant. Nonetheless, some CAM therapists did emphasize physical elements like pain in their understanding of health and illness (Lynch & Medin, 2006).

Another aspect related to the perception of health and illness is the enduring stigma associated with psychiatric conditions, a phenomenon that persists worldwide and is not an exception in the accounts of our study participants. This aligns with existing research (Shankar, Saravanan & Jacob, 2006; Mzimkulu & Simbayi, 2006; Mark & Lyons, 2010; Baba et al., 2014).

Interestingly, in the traditional terminology of the populations studied, certain mental ailments are translated from their native languages into Spanish (often adapted from English) as “madness.” This phenomenon might be attributed to the profound influence of spirituality within these respective cultures, including African Aboriginal and Maori traditional therapists.

Participating therapists emphasized the severity of mental illnesses, which they viewed as a crucial factor for referral to mental health experts. While CAM therapists often possess empirical expertise and can identify and intervene in mental illnesses (Shankar, Saravanan & Jacob, 2006), they acknowledge the importance of professional training. Training is necessary not only for managing simple cases but also for recognizing early warning signs that require timely referral, potentially preventing complications, long-term effects, and fatalities (De Andrade & Ross, 2005).

Our interviewees expressed a positive attitude toward combining biomedical and complementary approaches (Ramadurai et al., 2016). They were even open to learning diagnostic techniques commonly used by conventional physicians, such as instrumented physical examinations. Moreover, they showed a willingness to receive clinical or theoretical training (De Andrade & Ross, 2005; Lakshmi et al., 2014). This approach has already been implemented in countries like China, India (Thirthalli et al., 2016), Cuba (Lakshmi et al., 2014), Sweden, and Colombia (Pinto & Ruiz, 2012).

Conversely, the interviewees also proposed a two-way learning process, where biomedical doctors would receive education in psychosocial knowledge, communication skills, and natural remedies. This suggestion aligns with the proposal of Thirthalli et al. (2016) and is notably already implemented in Cuban education, where CAM knowledge is incorporated into the early years of undergraduate biomedical training (Lakshmi et al., 2014). This cross-training would help doctors recognize the pharmacodynamic effects of prescribed medical treatments involving

natural remedies. Furthermore, it would facilitate better alignment with patients' perceived needs, enhancing their satisfaction with healthcare. In our study, CAM therapists emphasized that patient satisfaction is a response to their treatment, which is characterized by empathy, guidance, active listening, and clear explanations of medical conditions. This differs from conventional physicians' approaches, highlighting the importance of incorporating communication skills and human warmth into biomedical education (Nortje et al., 2016; Van den Brink-Muinen & Rijken, 2006; Pinto & Ruiz, 2012; Berenzon-Gorn et al., 2001).

Another factor influencing the use of CAM, as indicated by our interviewees, is the cost-effectiveness of CAM therapies and the limited accessibility to conventional medicine. This can be understood when considering the prevalent socioeconomic conditions in Mexico, which are often characterized by limited financial resources, residing in remote rural areas, or even isolated locations, and sometimes lacking the income needed for private medical care and its associated treatments (Espinosa Cortes et al., 2013; Berenzon-Gorn et al., 2013). In these situations, CAM serves as a viable solution for addressing healthcare needs, given its generally affordable nature, especially in terms of infrastructure and, in some cases, financial aspects. This aligns with findings in other reports (WHO, 2013; Pinto-Barrero & Ruiz-Díaz, 2012; Gyasi et al., 2011; Burke et al., 2015).

However, it's important to note that in some developed countries, CAM is predominantly sought after by individuals in higher and middle-income brackets, which contrasts with the notion of CAM being primarily chosen for its cost-effectiveness (Gureje et al., 2015).

CAM practices have endured and continue to be a part of the sociocultural fabric of societies worldwide. Despite the dominance of Western thought and biomedicine in a globalized world, CAM therapies remain relevant and are often resorted to as alternatives or complements to conventional healthcare methods. This is particularly evident in contexts where healthcare systems face structural and logistical challenges, leading to inadequacies in meeting the healthcare needs of the population. Such situations have been documented in various developing communities, including those in the Amazon, India, and Ghana (Herndon et al., 2009; Mark & Lyons, 2010; Gyasi et al., 2011).

Throughout the world, and especially in developing societies, certain health conditions are profoundly influenced by sociocultural factors. These conditions are often underestimated, normalized, or disregarded by Western healthcare providers who may approach them with a lack of empathy and humanity (Browne, 2017; Pinto-Barrero & Ruiz-Díaz, 2012; Zörgő et al., 2018). To address these complex healthcare needs effectively, it is essential for contemporary healthcare systems to examine the experiences of countries that have successfully integrated formal and informal healthcare. Acknowledging the existence of CAM as a legitimate healthcare option allows individuals to access therapists and CAM products in a formal and safe manner. This is especially relevant in the field of mental health, where demand often outstrips supply, and stigma and perceptions about mental health conditions drive people to seek a variety of formal and informal healthcare resources. As highlighted by the interviewees, CAM practitioners themselves recognize the

need for complementarity with biomedicine, given the intricate nature of health and mental illness (Thirthalli et al., 2016).

There is much work to be done, and achieving collaboration in this field is not an easy task. However, studies like this one strive to amplify the voices of those engaged in healthcare through complementary and alternative approaches. They serve as a reminder of the many unresolved issues in legislation and healthcare organization.

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Chapter 19

The Initiative for Computerized Global Psychopathology (CGP) Model



Ahmed Aboraya

'Our unusual professional identity, sitting at the crossroads of biomedicine, the social sciences, and the humanities.'

Kenneth Kendler

Introduction

Around 12,000 years ago, the agricultural revolution began as humans settled in geographic areas to spend time cultivating plants and raising animals (Harari, 2015). A group of individuals in a geographic location, such as a country, create a culture that reflects the collective identity of the group based on history, language, religion, customs, and other characteristics of the group. Culture affects how people understand, perceive, and experience mental disorders. Today, cultural psychiatry is a “discipline” of psychiatry that has emerged over the past 50 years with the development of clear cultural formulation components (Bhugra & Bhui, 2018).

Contrary to the settlement practices that have developed cultures, humans throughout history have also migrated from one location to another, as prompted by many factors. The human mind is creative and seeks to explore the unknown in remote locations. Many travelers like Marco Polo, Ibn Battutah, and others explored many countries and continents in their lives. Economic factors drive people to travel and settle in other countries with more opportunities, which we see exemplified in the Americas, Europe, and other places. Sadly, human history has also been mired

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with wars and conflict, which has also prompted mass migrations. Before Amr Ibn al-As's conquest of Egypt in 640 AD, Egypt's population was predominantly Christian. Over centuries later and aided by outside migration, Egypt has transformed into a predominantly Muslim culture with a preserved Christian minority culture. With the invention of more modes of travel, migration across countries has increased. The movement of people, goods, and resources created the concept of globalization defined as "a cumulative set of processes which deal with the social, economic, political and cultural exchange of ideas." (Bhugra & Bhui, 2018). Globalization is not a new concept. In the eleventh century, a copy of a book written by Avicenna in Central Asia could be sold in Marrakech, Morocco, less than a year later. Rather, the acceleration of migration and spread of knowledge across the globe in the last two centuries has never before reached such magnitude in the history of mankind (Bhugra & Bhui, 2018). Thanks to innovations in transportation and information technology, globalization has become a new force that affects mental health across the globe in both positive and negative ways.

Globalization has increased one's sense of being a citizen of the world, as evident by the increased accessibility of global news. For instance, news of an earthquake in a country can travel the world in seconds, allowing other countries to offer aid to address the physical and psychological damage of the earthquake. "Accelerated globalization" over the past two centuries from advancements in transportation and information technology has accelerated the way of life for most humans (Bhugra & Bhui, 2018). Humans are expected to compete, work more, and sleep less, which may cause increases in stress, anxiety, depression, and other mental disorders. Recent studies show increased rates of depressive disorders among adolescents and adults (Fombonne, 1994; Klerman, 1988; Klerman & Weissman, 1989). The recent COVID-19 pandemic has shown the connection between infection and mental health problems, as research shows that the pandemic increased the risk of mental health problems such as anxiety, fear, stress, and depression in previously healthy people and in those with preexisting mental health disorders (Moreno et al., 2020; Usher et al., 2020).

The last two centuries have also witnessed shifts within different disciplines of psychiatry. Biological psychiatry was founded by German neurologist and psychiatrist Wilhelm Griesinger (1817–1868), who declared that mental illnesses are disorders of the nerves and brain and stem from abnormalities of brain cells. Alois Alzheimer (1864–1915) is another German psychiatrist who discovered the senile plaques and neurofibrillary tangles of dementia. The lack of discovering physical evidence of mental disorders in the nineteenth century (apart from dementia and traumatic brain injury) led to frustration among biological psychiatrists and paved the way for the emergence of another discipline of psychiatry: psychodynamic psychiatry (Lieberman, 2016). Psychoanalysis was founded by Sigmund Freud (1856–1939) and his followers, who concluded that all forms of mental illnesses, including neurosis and psychosis, were manifestations of inner psychological conflicts. Notably, the psychoanalysts did not provide scientific evidence for their claims. Psychoanalysis dominated American psychiatry in the 1940s and 1950s, and by 1960, most major university positions were occupied by psychoanalysts

(Lieberman, 2016). Frustration with the failure of psychoanalysts to really treat patients with serious mental disorders such as schizophrenia, bipolar, depression, and autism grew, which led to the emergence of efforts to reliably classify mental disorders. Hence, another generation of biological psychiatrists emerged in the USA and across the globe.

The development of brain imaging techniques including the computed tomography (CT) scan in 1971, magnetic resonance imaging (MRI) in 1977, and others such as diffusion tensor imaging (DTI), functional MRI (fMRI), positron emission tomography (PET), single photon emission tomography (SPECT), PET and SPECT receptor studies, magnetic resonance spectroscopy (MRS) allowed biological psychiatrists and neuroscientists to view the human brain with detail that were never available before. These developments prompted calls to reclassify mental disorders based on neuroscience (Insel et al., 2010; Nasrallah, 2013, 2020). Social and community psychiatry as a discipline emerged in 1960s and 1970s, and their advocates theorized that mental illness is caused by social and community factors (Bebbington, 1991; Shorter, 1997). Social psychiatry was well-established in the UK for decades and has since transformed into cultural psychiatry (Bhugra & Bhui, 2018). More recently, computational psychiatry is emerging as a novel approach to investigating neural circuit mechanisms underlying the cognitive and behavioral features of mental disorders (Wang & Krystal, 2014).

Presentations of mental disorders are similar across cultures, with some differences caused by social, cultural, educational, and environmental factors. For instance, consider four patients who may present to mental health professionals in different parts of the world. Scenario 1: A 25-year-old female teacher in Basel, Switzerland sees a psychiatrist because she is feeling very sad, hopeless, and contemplates a plan to overdose and end her life. Scenario 2: A 32-year-old male engineer in Tehran (Iran) is referred by his primary care physician to see a psychiatrist because he feels sad, hopeless, and struggles to perform and concentrate on his job. The patient is so worried about his ability to continue supporting his family that he wishes to be dead. Scenario 3: A 45-year-old male patient of Christian faith in Montreal, Canada, reports to his psychiatrist that the Lord Jesus speaks to him directly and grants him the power to revive humans after they die. Sadly, the patient also drowned his mother in the river and he believed he could bring her back to life. For this crime, the patient ended up in a mental institution. Scenario 4: A 30-year-old male in Cairo, Egypt, was found to be standing in the middle of heavy and dangerous traffic in downtown Cairo because he believed that God Allah told him to stop the cars and preach God's teachings. Sadly, the patient was hit by a car, but survived and ended up in a mental institution.

This chapter proposes a new computerized global psychopathology (CGP) model that encompasses the different "disciplines" or "schools" of psychiatry under one scientific model. The model welcomes all psychiatry disciplines as long as scientific methods support the proposed theories and prove the efficacy of treatments provided to patients. The model also meets the challenges of accelerated globalization, including its impact on mental health problems, and facilitates data collection and

research across the globe. First, I will describe the Standard for Clinicians' Interview in Psychiatry (SCIP) project that led to the development of the SCIP glossary and the SCIP scales. Second, I will detail the tenets of the CGP model and finally discuss the strengths and limitations of the CGP model.

The Standard for Clinicians' Interview in Psychiatry (SCIP) Project

After I finished my master's and doctoral degrees at Johns Hopkins University in 1991, I started my psychiatry residency training with an aim of using psychiatric measures in clinical settings. After ten years of trying to use almost all the relevant existing scales and standardized diagnostic interviews for adult psychiatric disorders, I concluded that most existing measures were not practical for use in real psychiatric practice. Consequently, I embarked on developing the Standard for Clinicians' Interview in Psychiatry (SCIP) as a new assessment tool designed to diagnose and measure the severity of mental disorders. The SCIP project was implemented in an international multisite study in three countries (USA, Canada, and Egypt) at the following six sites (1. William R. Sharpe, Jr. Hospital, Weston, West Virginia, 2. Chestnut Ridge Center (inpatient and outpatient), Morgantown, West Virginia, 3. Ain Shams University Hospital, Cairo, Egypt, 4. Mansoura University Hospital, Mansoura, Egypt, 5. Fairmont Physician Office, Fairmont, West Virginia, 6. Rothbart Center, Toronto, Canada). Data were collected between 2000 and 2020. The total sample size across all sites was 1064 subjects. The SCIP project is therefore the largest validity and reliability study of a diagnostic interview in the field of psychiatry (Aboraya, [2015](#), [2016](#); Aboraya et al., [2014](#)).

The Main Outcomes of the SCIP Project

Development of reliable psychopathology items

Prior to the development of the SCIP, research on the reliability of individual psychopathology items was limited (Rodgers & Mann, [1986](#)). Renowned researchers such as Nancy Andreasen have stressed the importance of establishing reliability at the level of individual symptoms and signs. In the past, the absence of valid and reliable symptoms was the main factor limiting the creation of dimensional measures (Andreasen et al., [1992](#)). The SCIP study removed this major obstacle by creating reliable symptoms and signs for 30 screening items and 200 psychopathology items, which facilitated the creation of reliable and valid SCIP dimensions and scales.

Development of reliable and valid SCIP dimensions and scales for adult psychiatric disorders

Based on 230 psychopathology items, reliable dimensions of main adult psychopathologies were created and published in our previous manuscript (Aboraya et al., 2014). The SCIP dimensions were used to create short and efficient SCIP scales. The initial items of the SCIP dimensions were formulated based on the diagnostic and statistical manual (DSM) and international classification of diseases (ICD) criteria and experts' opinions. The sensitivity and specificity of the initial dimensions were calculated against the psychiatric diagnoses as determined by the psychiatrists who treated patients from admission to discharge at William R. Sharpe Jr. Hospital and Chestnut Ridge Center. Selection rules for the final SCIP dimensions included removing items with low prevalence, low sensitivity, or low item-rest correlations (< 0.4). The reliability and validity of the remaining items were recalculated with repetitive iterations. The sensitivity and specificity of the final dimensions were approximately equal to the sensitivity and specificity of the initial dimensions. For example, the initial depression dimension included 19 symptoms and signs of depression. Three items not covered in the DSM-5 (crying when depressed, feeling hopeless, and reduced sexual desire) were included in the initial depression dimension because they have been recommended and used by experts and clinicians even before the existence of the DSM. The sensitivity and specificity of the initial depression dimension were 93.24% and 74.15% respectively. Following selection rules, the final SCIP core depression scale has 10 items with sensitivity of 93.24% and specificity of 72.32% (Aboraya et al., 2018).

Based on the 230 psychopathology items and reliable SCIP dimensions, the SCIP is the only instrument that includes 18 clinician-administered scales covering most adult symptom domains: anxiety, obsessions, compulsions, posttraumatic stress, depression, mania, delusions, hallucinations, disorganized thoughts, aggression, negative symptoms, alcohol use, drug use, attention deficit, hyperactivity, anorexia, binge-eating, and bulimia. Self-administered versions of the SCIP scales were developed (15 self-administered scales to be completed by the patients) covering anxiety, obsessions, compulsions, posttraumatic stress, depression, mania, delusions, hallucinations, alcohol use, drug use, attention deficit, hyperactivity, anorexia, binge-eating, and bulimia.

Development of the SCIP glossary of Psychiatric Symptoms and Signs

The SCIP glossary includes 30 screening items and 200 psychopathology items. Each item has a glossary code, a personalized medicine in psychiatry code, a title/subtitle, a definition, a question (unless it is a sign to be observed), and a Kappa. Table 19.1 shows the first 12 items of the SCIP glossary as published in the SCIP manual (Aboraya, 2022b).

Of the 200 Psychopathology items in the SCIP, there are 192 unique items because the following five items are repeated again in another diagnostic cluster of symptoms: item # 10 (Poor Concentration) is repeated 4 times in items # 39, 48, 116, and 181; item # 34 (Diminished Social Interest) is repeated again in item #115; item # 46 (Anhedonia) is repeated again in item #112; item # 49 (Psychomotor

Table 19.1 The SCIP glossary (panic, phobia, and anxiety)

Glossary codes (*PMP codes)	Item titles	Item definitions	Item questions	# of cases	K	SE
1_PAN (P_A1)	Panic attacks	The patient suddenly becomes anxious and frightened for a short period of time (up to 60 minutes). During that time, the patient feels that the heart is racing or pounding, or he/she is shaking or sweating, or choking.	<i>Did you have a panic attack, when you suddenly become anxious and frightened for a short period of time (up to 60 minutes)? During that time, did you feel that your heart was racing or pounding, or did you start shaking or sweating, or did you feel you were choking?</i> 0 Patient had no panic attacks. 1 Patient had panic attacks. Not sure or Not applicable or Missing.	30	0.92	0.06
2_PAN_ WORRY (P_A2)	Worry about having another panic attack	After a panic attack, the patient worries about having another attack. The patient worries about its effects (e.g., losing control, having a heart attack or going crazy).	<i>After a panic attack, did you worry about having another attack? Did you worry about its effects (e.g., losing control, having a heart attack or going crazy)?</i> 0 After a panic attack, patient did not worry about having another one. 1 After a panic attack, patient worried about having another one or its effects. Not sure or Not applicable or Missing.	25	0.81	0.04

(continued)

Table 19.1 (continued)

Glossary codes (*PMP codes)	Item titles	Item definitions	Item questions	# of cases	K	SE
3_PAN_END (P_A3)	Action to end or prevent panic attacks	The patient does something to end the attack, like leaving a store, calling someone, taking deep breaths. The patient does something to prevent attacks (like avoiding places that trigger the panic attacks).	<i>Did you have to do something to end the attack, like leaving a store, calling someone, taking deep breaths?</i> <i>Do you do anything to prevent attacks (like avoiding places that trigger the panic attacks)?</i> 0 After a panic attack, patient does nothing to end or prevent another panic attack. 1 After a panic attack, patient does something to end or prevent another panic attack. Not sure <i>or</i> Not applicable <i>or</i> Missing.	26	0.87	0.04
4_SOC_PHOB (P_A4)	Social phobia	The patient becomes afraid and anxious when he/she does things in front of people, such as eating or speaking in public. The patient avoids social situations or endures them with intense fear.	<i>Have you been afraid and anxious when you do things in front of people, such as eating or speaking in public?</i> <i>Do you avoid social situations or endure them with intense fear?</i> 0 Patient had no social phobia. 1 Patient had social phobia. Not sure <i>or</i> Not applicable <i>or</i> Missing.	22	0.51	0.05

(continued)

Table 19.1 (continued)

Glossary codes (*PMP codes)	Item titles	Item definitions	Item questions	# of cases	K	SE
5_ AGORAPHOB (P_A5)	Agoraphobia	The patient is afraid of being alone (at home or outside of home), traveling in a car, train or plane, being in an open space (e.g., park) or being in a closed space (e.g., store), or being in crowds. The patient avoids these situations, or requires a companion, or endures with intense fear.	<i>Have you been afraid of being alone (at home or outside of home), traveling in a car, train or plane, being in an open space (e.g., park) or being in a closed space (e.g., store), or being in crowds? Do you avoid these situations, or require a companion, or endure with intense fear?</i> 0 Patient had no agoraphobia. 1 Patient had agoraphobia. Not sure or Not applicable or Missing.	26	0.52	0.05
6_GEN_ANX (P_A6)	Generalized anxiety	The patient has excessive worry and anxiety for long periods (hours each day lasting several months), not just during panic attacks. The patient has difficulty controlling the anxiety.	<i>Have you had excessive worry and anxiety for long periods (hours each day lasting several months), not just during panic attacks? Is it difficult to control the anxiety?</i> 0 Patient has no generalized anxiety. 1 Patient has generalized anxiety. Not sure or Not applicable or Missing.	25	0.84	0.04

(continued)

Table 19.1 (continued)

Glossary codes (*PMP codes)	Item titles	Item definitions	Item questions	# of cases	K	SE
7_RESTLESS (P_A7)	Restlessness with anxiety	The patient feels restless, keyed up or on edge.	<i>Did you feel restless, keyed up or on edge?</i> 0 No. 1 Yes. Not sure or Not applicable or Missing.	26	0.74	0.04
8_TENSION (P_A8)	Tension with anxiety	The patient feels tense in muscles.	<i>Did you feel tense in your muscles?</i> 0 No. 1 Yes. Not sure or Not applicable or Missing.	22	0.77	0.04
9_ EXHAUSION (P_A9)	Exhaustion with anxiety	The patient feels tired, or easily exhausted even without work.	<i>Did you feel tired, or easily exhausted even without work?</i> 0 No. 1 Yes. Not sure or Not applicable or Missing.	22	0.79	0.05
10_POOR_ CONC (P_A10) (*)	Poor concentration with anxiety	The patient has difficulty paying attention and concentrating when reading an article, watching a TV show or a movie, or doing work or school assignments due to anxiety.	<i>Did you have difficulty concentrating when anxious?</i> 0 No. 1 Yes. Not sure or Not applicable or Missing.	27	0.76	0.05
11_IRRITAB (P_A11)	Irritability with anxiety	The patient feels irritable when anxious.	<i>Did you feel irritable when anxious?</i> 0 No. 1 Yes. Not sure or Not applicable or Missing.	28	0.83	0.04

(continued)

Table 19.1 (continued)

Glossary codes (*PMP codes)	Item titles	Item definitions	Item questions	# of cases	K	SE
12_ INSOMNIA (P_A12)	Insomnia with anxiety	The patient has difficulty falling asleep or staying asleep when anxious.	<i>Did you have difficulty falling asleep or staying asleep when anxious?</i> 0 No. 1 Yes. Not sure or Not applicable or Missing.	25	0.82	0.05

*PMP Personalized Medicine in Psychiatry

(*) The item is repeated again in different contexts (PTSD item # 39, depression item # 48, negative symptom item # 116, ADHD item # 181)

Slowing) is repeated again in item #117; item # 72 (Distraction) is repeated again in item #187. The 192 unique psychopathology items are the basis for experimental psychopathology research as will be explained in the tenets of the CGP model.

Mental Health Codes

The 230 items of the SCIP glossary were the basis for creating the SCIP scales. With the development of the 33 clinician-administered (CA) and self-administered (SA) scales, there are 322 variables that were created to cover adult psychopathology. Table 19.2 shows the 322 variables and the mental health codes (MHC) of each variable. There are 5 main mental health codes: glossary codes (GC), personalized medicine in psychiatry codes (PMPC), scale codes (SC), research codes (RC), and variable codes (VC). The mental health codes (MHC) of the 322 variables are the basis of the SCIP software as will be explained in the tenets of the CGP model.

Psychometric Properties of the SCIP

Reliability

SCIP items Inter-rater reliability was measured for the 230 SCIP items: among the 30 screening items, 19 items (63%) have good reliability (Kappa >0.7) and 11 items (37%) have fair reliability (Kappa ranges from 0.5 to 0.7). Among the 200 psychopathology items, 7 items (3.5%) have poor reliability (Kappa <0.5), 24 items (12%) have fair reliability (Kappa ranges from 0.5 to 0.7) and 169 items (84.5%) have good reliability (Kappa >0.7) (Aboraya, 2022e).

SCIP dimensions Cronbach's alpha measured internal consistency reliability for the SCIP dimensions: anxiety, posttraumatic stress, depression, mania, hallucinations, Schneider first-rank symptoms, delusions, disorganized thoughts, disorganized

Table 19.2 Mental health codes

<i>Screening Section</i>						
Glossary codes	*PMP codes	Item title/ label	Scale codes	Scale rating	Research codes	Research rating
S1_ANX	P_S1	Generalized anxiety	S_GAD	0,1	S_GAD_R	0,1
S2_PANIC	P_S2	Panic attacks	S_PAN	0,1	S_PAN_R	0,1
S3_SOC_PHOB	P_S3	Social phobia	S_PHOB1	0,1	S_PHOB1_R	0,1
S4_AGORAPHOB	P_S4	Agoraphobia	S_PHOB4	0,1	S_PHOB4_R	0,1
S5_OBS	P_S5	Screen obsessions	S_OBS	0,1	S_OBS_R	0,1
S6_COMP	P_S6	Screen compulsions	S_COMP	0,1	S_COMP_R	0,1
S7_TRAUMA	P_S7	Witness trauma	S_PTSD1	0,1,2	S_PTSD1_R	0,1,2
S8_RE_EXP	P_S8	Re-experience trauma	S_PTSD2	0,1	S_PTSD2_R	0,1
S9_DEP	P_S9	Depressed mood	S_DEP1	0,1	S_DEP1_R	0,1
S10_ANHED	P_S10	Anhedonia	S_Dep2	0,1	S_Dep2_R	0,1
S11_SUICID	P_S11	Suicidality	S_SUICIDAL	0,1,2,3,4	S_SUICIDAL_R	0,1,2,3,4
S12_MUTIL	P_S12	Self-mutilation	S_SELF_MUT	0,1	S_SELF_MUT_R	0,1
S13_ELATED	P_S13	Elated mood	S_Man1	0,1	S_Man1_R	0,1
S14_IRRITAB	P_S14	Irritable mood	S_Man2	0,1	S_Man2_R	0,1
S15_MIXED	P_S15	Mixed mood	S_Man3	0,1	S_Man3_R	0,1
S16_PARANOID	P_S16	Paranoid delusions	S_PARANOID	0,1	S_PARANOID_R	0,1
S17_DEL	P_S17	Other delusions	S_DELUSIONS	0,1	S_DELUSIONS_R	0,1
S18_AUDH	P_S18	Auditory hallucinations	S_AUDH	0,1	S_AUDH_R	0,1
S19_VISH	P_S19	Visual hallucinations	S_VISH	0,1	S_VISH_R	0,1
S20_VIOL	P_S20	Violence	S_VIOL	0,1,2,3	S_VIOL_R	0,1,2,3

(continued)

Table 19.2 (continued)

Screening Section						
Glossary codes	*PMP codes	Item title/label	Scale codes	Scale rating	Research codes	Research rating
						**V codes
S21_DISBHV	P_S21	Disorganized behavior	S_DIS_BH	0,1	S_DIS_BEH_R	0,1
S22_DISTHOT	P_S22	Disorganized thoughts	S_DIS_TH	0,1	S_DIS_TH_R	0,1
S23_ALCP	P_S23	Alcohol problems	S_ALC_PROB	0,1	S_ALC_PROB_R	0,1
S24_DRGP	P_S24	Drug problems	S_DRUG_PROB	0,1	S_DRUG_PROB_R	0,1
S25_SOMS	P_S25	Somatic symptoms	S_SOM_SX	0,1	S_SOM_SX_R	0,1
S26_PAINS	P_S26	Pain symptoms	S_PAIN	0,1	S_PAIN_R	0,1
S27_WTGAIN	P_S27	Worry about weight	S_ANOREXIA	0,1	S_ANOREXIA_R	0,1
S28_BINGE	P_S28	Binge eating	S_BINGE	0,1	S_BINGE_R	0,1
S29_SUST_ATT	P_S29	Sustained attention impairment	S_SUS_ATT	0,1	S_SUS_ATT_R	0,1
S30_FIDGETY	P_S30	Fidgety	S_FIDGETY	0,1	S_FIDGETY_R	0,1
Psychopathology Section						
Glossary codes	PMP codes	Item title/label	Scale codes	Scale rating	Research codes	Research rating
						V codes
1_PAN	P_A1	Panic attacks	PAN1	0,1	PAN1_R	0,1
		Frequency of panic/week	PAN2	#	PAN2_R	#
2_PAN_WORRY	P_A2	Worry about panic	PAN3	0,1	PAN3_R	0,1
3_PAN_END	P_A3	Action to end panic	PAN4	0,1	PAN4_R	0,1
		Somatic symptoms with panic	PAN5	0-16		
		Breathing			PAN5a_R	0,1
		Chest pain			PAN5b_R	0,1
		Choking			PAN5c_R	0,1
		Heart pounding			PAN5d_R	0,1
		Dizzy			PAN5e_R	0,1
		Numbness			PAN5f_R	0,1
		Dry mouth			PAN5g_R	0,1

		Nausea			PAN5h_R	0,1	V13
		Shaking			PAN5i_R	0,1	V14
		Sweating			PAN5j_R	0,1	V15
		Cold			PAN5k_R	0,1	V16
		Hot flushes			PAN5l_R	0,1	V17
		Fear of dying			PAN5m_R	0,1	V18
		Fear of craziness			PAN5n_R	0,1	V19
		Things not real			PAN5o_R	0,1	V20
		People not real			PAN5p_R	0,1	V21
		PAN_SCORE		PAN_SCORE	#		V22
4_SOC_PHOB	P_A4	Social phobia		PHOB1	0,1	PHOB1_R	0,1
		Panic with social phobia		PHOB2	0,1,2	PHOB2_R	0,1,2
		Somatic symptoms with panic		PHOB3	0-16		V25
		Breathing				PHOB3a_R	0,1
		Chest pain				PHOB3b_R	0,1
		Choking				PHOB3c_R	0,1
		Heart pounding				PHOB3d_R	0,1
		Dizzy				PHOB3e_R	0,1
		Numbness				PHOB3f_R	0,1
		Dry mouth				PHOB3g_R	0,1
		Nausea				PHOB3h_R	0,1
		Shaking				PHOB3i_R	0,1
		Sweating				PHOB3j_R	0,1
		Cold				PHOB3k_R	0,1

(continued)

Table 19.2 (continued)

Psychopathology Section							
Glossary codes	PMP codes	Item title/label	Scale codes	Scale rating	Research codes	Research rating	V codes
		Hot flushes			PHOB3l_R	0,1	V37
		Fear of dying			PHOB3m_R	0,1	V38
		Fear of craziness			PHOB3n_R	0,1	V39
		Things not real			PHOB3o_R	0,1	V40
		People not real			PHOB3p_R	0,1	V41
		SOC_PHOB_SCORE	SOC_PHOB_SCORE	#			V42
5_AGORAPHOB	P_A5	Agoraphobia	PHOB4	0,1	PHOB4_R	0,1	V43
		Panic with agoraphobia	PHOB5	0,1,2	PHOB5_R	0,1,2	V44
		Somatic symptoms with panic	PHOB6	0-16			V45
		Breathing			PHOB6a_R	0,1	V46
		Chest pain			PHOB6b_R	0,1	V47
		Choking			PHOB6c_R	0,1	V48
		Heart pounding			PHOB6d_R	0,1	V49
		Dizzy			PHOB6e_R	0,1	V50
		Numbness			PHOB6f_R	0,1	V51
		Dry mouth			PHOB6g_R	0,1	V52
		Nausea			PHOB6h_R	0,1	V53
		Shaking			PHOB6i_R	0,1	V54
		Sweating			PHOB6j_R	0,1	V55
		Cold			PHOB6k_R	0,1	V56
		Hot flushes			PHOB6l_R	0,1	V57
		Fear of dying			PHOB6m_R	0,1	V58

		Fear of craziness				PHOB6n_R	0,1	V59
		Things not real				PHOB6o_R	0,1	V60
		People not real				PHOB6p_R	0,1	V61
		AGO_PHOB_SCORE		AGO_PHOB_SCORE	#			V62
		Specific phobia		PHOB7	0,1	PHOB7_R	0,1	V63
		Panic with specific phobia		PHOB8	0,1,2	PHOB8_R	0,1,2	V64
		Somatic symptoms with panic		PHOB9	0-16			V65
		Breathing				PHOB9a_R	0,1	V66
		Chest pain				PHOB9b_R	0,1	V67
		Choking				PHOB9c_R	0,1	V68
		Heart pounding				PHOB9d_R	0,1	V69
		Dizzy				PHOB9e_R	0,1	V70
		Numbness				PHOB9f_R	0,1	V71
		Dry mouth				PHOB9g_R	0,1	V72
		Nausea				PHOB9h_R	0,1	V73
		Shaking				PHOB9i_R	0,1	V74
		Sweating				PHOB9j_R	0,1	V75
		Cold				PHOB9k_R	0,1	V76
		Hot flushes				PHOB9l_R	0,1	V77
		Fear of dying				PHOB9m_R	0,1	V78
		Fear of craziness				PHOB9n_R	0,1	V79
		Things not real				PHOB9o_R	0,1	V80
		People not real				PHOB9p_R	0,1	V81
		SP_PHOB_SCORE		SP_PHOB_SCORE	#			V82
6_GEN_ANX	P_A6	Generalized anxiety		GAD1	0,1	GAD1_R	0,1	V83
7_RESTLESS	P_A7	Restlessness with anxiety		GAD2	0,1	GAD2_R	0,1	V84

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Table 19.2 (continued)

Psychopathology Section							
Glossary codes	PMP codes	Item title/label	Scale codes	Scale rating	Research codes	Research rating	V codes
8_TENSION	P_A8	Tension with anxiety	GAD3	0,1	GAD3_R	0,1	V85
9_EXHAUSTION	P_A9	Exhaustion with anxiety	GAD4	0,1	GAD4_R	0,1	V86
10_POOR_CONC	P_A10	Poor concentration with anxiety	GAD5	0,1	GAD5_R	0,1	V87_RPT_A1
11_IRRITAB	P_A11	Irritability with anxiety	GAD6	0,1	GAD6_R	0,1	V88
12_INSOMNIA	P_A12	Insomnia with anxiety	GAD7	0,1	GAD7_R	0,1	V89
13_OBS	P_OBS13	GAD_SCORE Obsessions	GAD_SCORE OBS1	# 0,1,2,3			V90
14_OBS_AGGRESS	P_OBS14	Duration Obsessions Aggressive obsessions	OBS2 OBS3	0-7 0,1	OBS1_R OBS2_R OBS3_R	0,1,2,3 0-7 0,1	V91 V92 V93
15_OBS_CONTAM	P_OBS15	Contamination obsessions	OBS4	0,1	OBS4_R	0,1	V94
16_OBS_SEX	P_OBS16	Sexual obsessions	OBS5	0,1	OBS5_R	0,1	V95
17_OBS_RELIG	P_OBS17	Religious obsessions	OBS6	0,1	OBS6_R	0,1	V96
18_OBS_SOMAT	P_OBS18	Somatic obsessions	OBS7	0,1	OBS7_R	0,1	V97
19_OBS_APPEAR	P_OBS19	Appearance obsessions	OBS8	0,1	OBS8_R	0,1	V98
		Other obsessions	OBS9	0,1	OBS9_R	0,1	V99
20_COMP	P_COM20	OBS_SCORE Compulsions	OBS_SCORE COMP1	# 0,1,2,3			V100
		Duration Compulsions	COMP2	0-7	COMP1_R COMP2_R	0,1,2,3 0-7	V101 V102
21_COMP_CHECK	P_COM21	Checking compulsions	COMP3	0,1	COMP3_R	0,1	V103
22_COMP_CLEAN	P_COM22	Cleaning compulsions	COMP4	0,1	COMP4_R	0,1	V104
23_COMP_REPEAT	P_COM23	Repeating compulsions	COMP5	0,1	COMP5_R	0,1	V105

24_COMP_ORDER	P_COM24	Ordering compulsions	COMP6		0,1	COMP6_R	0,1	V106
25_COMP_HOARD	P_COM25	Hoarding compulsions	COMP7		0,1	COMP7_R	0,1	V107
26_COMP_MENTAL	P_COM26	Mental compulsions	COMP8		0,1	COMP8_R	0,1	V108
		Other compulsions	COMP9		0,1	COMP9_R	0,1	V109
		COMP_SCORE	COMP_SCORE		#			V110
27_TRAUMA	P_PTSD27	Witness trauma	PTSD1		0,1,2	PTSD1_R	0,1,2	V111
28_TRAUMA_DISTRESS	P_PTSD28	Distressing recollection	PTSD2		0,1	PTSD2_R	0,1	V112
29_TRAUMA_NIGHTMARE	P_PTSD29	Bad dreams or nightmares	PTSD3		0,1	PTSD3_R	0,1	V113
30_TRAUMA_FLASH	P_PTSD30	Flashbacks	PTSD4		0,1	PTSD4_R	0,1	V114
31_TRAUMA_AVOIDTH	P_PTSD31	Avoidance of thoughts	PTSD5		0,1	PTSD5_R	0,1	V115
32_TAUMA_AVOIDPLE	P_PTSD32	Avoidance of people	PTSD6		0,1	PTSD6_R	0,1	V116
33_TRAUMA_AMNESIA	P_PTSD33	Amnesia	PTSD7		0,1	PTSD7_R	0,1	V117
34_TRAUMA_ASOCIAL	P_PTSD34	Diminished social interest	PTSD8		0,1	PTSD8_R	0,1	V118_RPT_B1
35_TRAUMA_DETACH	P_PTSD35	Detachment and isolation	PTSD9		0,1	PTSD9_R	0,1	V119
36_TRAUMA_NUMB	P_PTSD36	Diminished emotional feelings	PTSD10		0,1	PTSD10_R	0,1	V120
37_TRAUMA_INSOMNIA	P_PTSD37	Insomnia	PTSD11		0,1	PTSD11_R	0,1	V121
38_TAUMA_ANGER	P_PTSD38	Anger	PTSD12		0,1	PTSD12_R	0,1	V122
39_TRAUMA_POOR_CONC	P_PTSD39	Attention impairment	PTSD13		0,1	PTSD13_R	0,1	V123_RPT_A2
40_TRAUMA_VIGIL	P_PTSD40	Hypervigilance	PTSD14		0,1	PTSD14_R	0,1	V124

(continued)

Table 19.2 (continued)

Psychopathology Section							
Glossary codes	PMP codes	Item title/label	Scale codes	Scale rating	Research codes	Research rating	V codes
41_TRAUMA_STARTLE	P_PTSD41	Startle response	PTSD15	0,1	PTSD15_R	0,1	V125
		Other PTSD symptoms	PTSD16	0,1	PTSD16_R	0,1	V126
		PTSD_SCORE	PTSD_SCORE	#			V127
42_TRAUMA_EMOTION	P_PTSD42	Psychological distress			PTSD17_R	0,1	V128
43_TRAUMA_PHYSICAL	P_PTSD43	Physical reactions			PTSD18_R	0,1	V129
44_TRAUMA_DAZE	P_PTSD44	Daze			PTSD19_R	0,1	V130
45_DEP	P_DEP45	Depressed mood	Dep1	0,1,2	Dep1_R	0,1,2	V131
		Duration Depression	Dep1a	#	Dep1a_R	#	V132
46_ANHEDONIA	P_DEP46	Anhedonia	Dep2	0,1,2	Dep2_R	0,1,2	V133_RPT_C1
		Duration Anhedonia	Dep2a	#	Dep2a_R	#	V134
47_HOPELESSNESS	P_DEP47	Hopelessness	Dep3	0,1,2	Dep3_R	0,1,2	V135
48_POOR_CONC	P_DEP48	Attention impairment	Dep4	0,1,2	Dep4_R	0,1,2	V136_RPT_A3
49_PSYCHOM_SLOW	P_DEP49	Psychomotor retardation	Dep5	0,1,2	Dep5_R	0,1,2	V137_RPT_D1
50_WORTHLESS	P_DEP50	Worthlessness/low self esteem	Dep6	0,1,2	Dep6_R	0,1,2	V138
51_GUILT	P_DEP51	Guilt	Dep7	0,1,2	Dep7_R	0,1,2	V139
		Other Depression	Dep8	0,1	Dep8_R	0,1	V140
52_SUICIDALITY1	P_DEP52A	Suicidal Ideation	Dep9	0,1	Dep9_R	0,1	V141
52_SUICIDALITY2	P_DEP52B	Suicidal Intention	Dep10	0,1	Dep10_R	0,1	V142
52_SUICIDALITY3	P_DEP52C	Suicidal Plans	Dep11	0,1	Dep11_R	0,1	V143

52_SUICDALITY4	P_DEP52D	Suicidal Attempts	Dep12	0,1,2	Dep12_R	0,1,2	V144
		Delusions associated with depression	Dep13	0,1	Dep13_R	0,1	V145
		Hallucinations associated with depression	Dep14	0,1	Dep14_R	0,1	V146
		DEP_SCORE	DEP_SCORE	#			V147
53_CRY_DEP	P_DEP53	Crying when depressed			Dep15_R	0,1,2	V148
54_FATIGUE	P_DEP54	Fatigue and low energy			Dep16_R	0,1,2	V149
55_APPT_LOSS	P_DEP55	Poor appetite			Dep17_R	0,1,2	V150
56_APPT_INCREASE	P_DEP56	Increased appetite			Dep18_R	0,1,2	V151
57_WT_LOSS	P_DEP57	Weight loss			Dep19_R	0,1,2	V152
58_WT_GAIN	P_DEP58	Weight gain			Dep20_R	0,1,2	V153
59_INIT_INSOMNIA	P_DEP59	Initial insomnia			Dep21_R	0,1	V154
60_MID_INSOMNIA	P_DEP60	Middle insomnia			Dep22_R	0,1	V155
61_LATE_INSOMNIA	P_DEP61	Late insomnia			Dep23_R	0,1	V156
62_HYPER_SOMNIA	P_DEP62	Hypersomnia			Dep24_R	0,1	V157
63_DECREASED_LIBIDO	P_DEP63	Decreased libido			Dep25_R	0,1	V158
64_ELATED_MOOD	P_MAN64	Elated (euphoric) mood	Man1	0,1,2	Man1_R	0,1,2	V159
		Duration mania	Man1a	#	Man1a_R	#	V160
65_IRRIT_MOOD	P_MAN65	Irritable mood	Man2	0,1,2	Man2_R	0,1,2	V161
		Duration irritability	Man2a	#	Man2a_R	#	V162
66_MIXED_MOOD	P_MAN66	Mixed mood (mood lability)	Man3	0,1,2	Man3_R	0,1,2	V163
		Duration mixed mood	Man3a	#	Man3a_R	#	V164
67_RACING_THOT	P_MAN67	Racing thoughts	Man4	0,1,2	Man4_R	0,1,2	V165
68_PRESS_SPEECH	P_MAN68	Pressured speech	Man5	0,1,2	Man5_R	0,1,2	V166
69_FLIGHT_IDEAS	P_MAN69	Flight of ideas			FOI_R	0,1	V167

(continued)

Table 19.2 (continued)

Psychopathology Section							
Glossary codes	PMP codes	Item title/label	Scale codes	Scale rating	Research codes	Research rating	V codes
70_MORE_ACTIVE	P_MAN70	Increased activities	Man6	0,1,2	Man6_R	0,1,2	V168
71_LESS_SLEEP	P_MAN71	Decreased sleep	Man7	0,1	Man7_R	0,1	V169
72_DISTRACTION	P_MAN72	Distraction	Man8	0,1,2	Man8_R	0,1,2	V170 _RPT_EI
73_GRANDIOSE	P_MAN73	Grandiosity	Man9	0,1	Man9_R	0,1	V171
74_OVERSPENDING	P_MAN74	Overspending (poor judgment)	Man10	0,1	Man10_R	0,1	V172
		Other Mania	Man11	0,1	Man11_R	0,1	V173
75_HYPERSEXUAL	P_MAN75	Hypersexuality			Hyper_sex_R	0,1	V174
76_CLANG	P_MAN76	Clanging			Clanging_R	0,1,2,3,4	V175
		Delusions associated with mania	Man12	0,1	Man12_R	0,1	V176
		Hallucinations associated with mania	Man13	0,1	Man13_R	0,1	V177
		MAN_SCORE	MAN_SCOR	#			V178
77_AUD_HAL	P_HAL77	Auditory hallucinations	HAL1	0,1,2	HAL1_R	0,1,2	V179
78_FREQ_AUDH	P_HAL78	Hallucinations frequency	HAL2	0,1,2,3	HAL2_R	0,1,2,3	V180
79_DURATION_AUDH	P_HAL79	Hallucinations duration	HAL3	0,1,2,3	HAL3_R	0,1,2,3	V181
80_AUD_THOT	P_HAL80	Audible thoughts	HAL4	0,1	HAL4_R	0,1	V182
81_VOICES_ARGUE	P_HAL81	Voices arguing	HAL5	0,1	HAL5_R	0,1	V183
82_VOICES_COMMENT	P_HAL82	Voices commenting	HAL6	0,1	HAL6_R	0,1	V184
83_INT_HAL	P_HAL83	Internal hallucinations			INT_HAL_R	0,1,2,3	V185
84_2X3HAL	P_HAL84	Second/third hallucinations			2X3HAL_R	0,1,2,3	V186
85_OBS_HAL	P_HAL85	Observed hallucinations	HAL7	0,1	HAL7_R	0,1	V187

86_VIS_HAL	P_HAL86	Visual hallucinations	HAL8	0,1	HAL8_R	0,1	V188
		Other Hallucinations	HAL9	0,1	HAL9_R	0,1	V189
		HAL_SCORE	HAL_SCORE	#			V190
87_OLF_HAL	P_HAL87	Olfactory hallucinations			HAL10_R	0,1	V191
88_TACT_HAL	P_HAL88	Tactile hallucinations			HAL11_R	0,1	V192
		Gustatory hallucinations			HAL12_R	0,1	V193
89_SOM_PASSIVITY	P_DEL89	Somatic passivity	DEL1	0,1	DEL1_R	0,1	V194
90_THOT_INSERT	P_DEL90	Thought insertion	DEL2	0,1	DEL2_R	0,1	V195
91_THOT_WITHDR	P_DEL91	Thought withdrawal	DEL3	0,1	DEL3_R	0,1	V196
92_THOT_BROADCAST	P_DEL92	Thought broadcasting	DEL4	0,1	DEL4_R	0,1	V197
93_PARAND_DEL	P_DEL93	Paranoid delusions	DEL5	0,1,2	DEL5_R	0,1,2	V198
94_CONSP_DEL	P_DEL94	Conspiracy delusions	DEL6	0,1,2	DEL6_R	0,1,2	V199
95_REF_DEL	P_DEL95	Delusions of reference	DEL7	0,1,2	DEL7_R	0,1,2	V200
96_READ_DEL	P_DEL96	Delusions of reading thoughts			DEL_7a_R	0,1	V201
97_RELIG_DEL	P_DEL97	Religious delusions			DEL_7b_R	0,1,2	V202
98_GRAND_DEL	P_DEL98	Grandiose delusions			DEL_7c_R	0,1,2	V203
99_CONTRL_DEL	P_DEL99	Delusions of control			DEL_7d_R	0,1	V204
100_OTHER_DEL	P_DEL100	Other delusions	DEL8	0,1	DEL8_R	0,1	V205
101_BIZAR_DEL	P_DEL101	Bizarreness of delusions	DEL9	0,1	DEL9_R	0,1	V206
		DEL_SCORE	DEL_SCORE	#			V207
102_DERAIL	P_DIS102	Derailment (loose associations)	DIS1	0,1,2	DIS1_R	0,1,2	V208
103_TANGENT	P_DIS103	Tangentiality	DIS2	0,1,2	DIS2_R	0,1,2	V209
104_INCOHER_SP	P_DIS104	Incoherent speech	DIS3	0,1	DIS3_R	0,1	V210
105_ILLOG_SP	P_DIS105	Illogical speech	DIS4	0,1	DIS4_R	0,1	V211
106_WORD_SALAD	P_DIS106	Word salad	DIS5	0,1	DIS5_R	0,1	V212

(continued)

Table 19.2 (continued)

Psychopathology Section							
Glossary codes	PMP codes	Item title/label	Scale codes	Scale rating	Research codes	Research rating	V codes
		DIS_SCORE	DIS_SCORE	#			V213
107A_AGITATION	P_BEH107A	Verbal agitation	AG1	0,1	AG1_R	0,1	V214
107B_AGITATION	P_BEH107B	Verbal aggression	AG2	0,1	AG2_R	0,1	V215
107C_AGITATION	P_BEH107C	Physical agitation	AG3	0,1	AG3_R	0,1	V216
107D_AGITATION	P_BEH107D	Destruction to objects	AG4	0,1	AG4_R	0,1	V217
108_VIOLENCE	P_BEH108	Violence towards others	AG5	0,1,2	AG5_R	0,1,2	V218
		Violence frequency	AG6	0,1,2,3,4	AG6_R	0,1,2,3,4	V219
		AGGR_SCORE	AGGR_SCORE	#			V220
109_ODD_APPEAR	P_BEH109	Odd appearance			ODD_APP_R	0,1	V221
110_INAPPRO_AFFECT	P_BEH110	Inappropriate affect			INAPP_AFF_R	0,1	V222
111_ALOGIA	P_NEG111	Alogia	Neg1	0,1,2	Neg1_R	0,1,2	V223
112_ANHEDONIA	P_NEG112	Anhedonia	Neg2	0,1,2	Neg2_R	0,1,2	V224_RPT_C2
113_FLAT_AFFECT	P_NEG113	Blunted/flat affect	Neg3	0,1,2	Neg3_R	0,1,2	V225
114_AVOLITION	P_NEG114	Avolition (decreased activities)	Neg4	0,1,2	Neg4_R	0,1,2	V226
115_ASOCIAL	P_NEG115	Diminished social interest	Neg5	0,1	Neg5_R	0,1	V227_RPT_B2
116_POOR_CONC	P_NEG116	Attention impairment	Neg6	0,1,2	Neg6_R	0,1,2	V228_RPT_A4
117_PSYCHOM_SLOW	P_NEG117	Psychomotor retardation	Neg7	0,1,2	Neg7_R	0,1,2	V229_RPT_D2

118_POOR_CARE	P_NEG118	Poor self-care	Neg8		0,1,2	Neg8_R	0,1,2	V230
		NEG_SCORE	NEG_SCORE		#			V231
119_ALC_TOL	P_ALC119	Alcohol tolerance	Alc1		0,1	Alc1_R	0,1	V232
120_ALC_WITHDR	P_ALC120	Alcohol withdrawal	Alc2		0,1	Alc2_R	0,1	V233
121_ALC_AVOIDW	P_ALC121	Drinking to avoid withdrawal				Alc2a_R	0,1	V234
122_UNABLE_CTRL_A	P_ALC122	Unable to control				Alc2b_R	0,1	V235
123_UNABLE_REDUCE_A	P_ALC123	Unable to reduce alcohol				Alc2c_R	0,1	V236
124_TIME_ALC	P_ALC124	Time spent to drink				Alc2d_R	0,1	V237
125_FAIL_OBLIG	P_ALC125	Failure to fulfil obligations	Alc3		0,1	Alc3_R	0,1	V238
126_REDUCE_SOCIAL	P_ALC126	Social/personal problems	Alc4		0,1	Alc4_R	0,1	V239
127_LESS_WORK	P_ALC127	Less time working				Alc4a_R	0,1	V240
128_WORK_PROB	P_ALC128	Alcohol-related work problems				Alc4b_R	0,1	V241
129_FIGHT_ALC	P_ALC129	Fighting when intoxicated				Alc4c_R	0,1	V242
130_FAMILY_PROBLEM	P_ALC130	Alcohol-related family problems				Alc4d_R	0,1	V243
131_LEGAL_PROBLEM	P_ALC131	Alcohol-related legal problems				Alc4e_R	0,1	V244
132_MED_PROBLEM	P_ALC132	Alcohol-induced medical problems				Alc4f_R	0,1	V245
133_EMOTION_PROBLEM	P_ALC133	Alcohol-induced emotional problems				Alc4g_R	0,1	V246
134_CONTIN_ALC	P_ALC134	Alcohol use with problems	Alc5		0,1	Alc5_R	0,1	V247
135_ALC_HAZARD	P_ALC135	Alcohol use in hazards	Alc6		0,1	Alc6_R	0,1	V248
136_ALC_BINGE	P_ALC136	Alcohol binge				Alc6a_R	0,1	V249
137_ALC_BLACKOUT	P_ALC137	Alcohol blackout	Alc7		0,1	Alc7_R	0,1	V250
		Other_Problems	Alc8		0,1	Alc8_R	0,1	V251

(continued)

Table 19.2 (continued)

Psychopathology Section							
Glossary codes	PMP codes	Item title/label	Scale codes	Scale rating #	Research codes	Research rating	V codes
		ALC_SCORE	ALC_SCORE				V252
138_DRG_TOL	P_DRG_138	Drug tolerance	Drug1	0,1	Drug1_R	0,1	V253
139_DRG_WITHDR	P_DRG_139	Drug withdrawal	Drug2	0,1	Drug2_R	0,1	V254
140_DRG_AVOIDW	P_DRG_140	Drug to avoid withdrawal			Drug2a_R	0,1	V255
141_UNABLE_CTRL_D	P_DRG_141	Unable to control drug			Drug2b_R	0,1	V256
142_UNABLE_REDUCE_D	P_DRG_142	Unable to reduce drug			Drug2c_R	0,1	V257
143_TIME_DRG	P_DRG_143	Time spent for drug			Drug2d_R	0,1	V258
144_FAIL_OBLIG	P_DRG_144	Failure to fulfil obligations	Drug3	0,1	Drug3_R	0,1	V259
145_REDUCE_SOCIAL	P_DRG_145	Social/personal problems	Drug4	0,1	Drug4_R	0,1	V260
146_LESS_WORK	P_DRG_146	Less time working			Drug4a_R	0,1	V261
147_WORK_PROBLEM	P_DRG_147	Drug-related work problems			Drug4b_R	0,1	V262
148_FIGHT_DRG	P_DRG_148	Fighting when using drug			Drug4c_R	0,1	V263
149_FAMILY_PROBLEM	P_DRG_149	Drug-related family problems			Drug4d_R	0,1	V264

150_LEGAL_PROBLEM	P_DRG_150	Drug-related legal problems			Drug4e_R	0,1	V265
151_MOOD_PROBLEM	P_DRG_151	Drug-induced mood problems			Drug4f_R	0,1	V266
152_PSYCHOSIS_PROBLEM	P_DRG_152	Drug-induced psychosis			Drug4g_R	0,1	V267
153_CONTIN_DRUG	P_DRG_153	Drug use with problems	Drug5	0,1	Drug5_R	0,1	V268
154_DRG_HAZARD	P_DRG_154	Drug use in hazards	Drug6	0,1	Drug6_R	0,1	V269
		Other_Problems	Drug7	0,1	Drug7_R	0,1	V270
		DRUG_SCORE	DRUG_SCORE	#			V271
155_UNDER_WT	P_EAT155	Being underweight	Anorex1	0,1	Anorex1_R	0,1	V272
156_WT_FEELING	P_EAT156	Weight affects feelings	Anorex2	0,1	Anorex2_R	0,1	V273
157_FEAR_WT_GAIN	P_EAT157	Fear of weight gain	Anorex3	0,1	Anorex3_R	0,1	V274
158_FASTING	P_EAT158	Losing weight by fasting	Anorex4	0,1	Anorex4_R	0,1	V275
159_EXERCISE	P_EAT159	Losing weight by exercise	Anorex5	0,1	Anorex5_R	0,1	V276
160_DIET_PILLS	P_EAT160	Losing weight by diet pills	Anorex6	0,1	Anorex6_R	0,1	V277
161_VOMIT	P_EAT161	Losing weight by vomiting	Anorex7	0,1	Anorex7_R	0,1	V278
162_LAXATIVE	P_EAT162	Losing weight by laxatives	Anorex8	0,1	Anorex8_R	0,1	V279
163_OTHER_METHOD	P_EAT163	Losing weight by other methods	Anorex9	0,1	Anorex9_R	0,1	V280
		ANOREXIA_SCORE	ANOREXIA_SCORE	#			V281
164_BINGE	P_EAT164	Binge eating	BNG_BLM1	0,1	BNG_BLM1_R	0,1	V282
165_BINGE_FREQ	P_EAT165	Binge eating frequency	BNG_BLM2	0,1,2	BNG_BLM2_R	0,1,2	V283

(continued)

Table 19.2 (continued)

Psychopathology Section							
Glossary codes	PMP codes	Item title/label	Scale codes	Scale rating	Research codes	Research rating	V codes
166_LOSE_CONTRL	P_EAT166	Losing control with binge	BNG_BLM3	0,1	BNG_BLM3_R	0,1	V284
167_EAT_FAST	P_EAT167	Eating fast during binge	BNG_BLM4	0,1	BNG_BLM4_R	0,1	V285
168_EAT_FULLL	P_EAT168	Eating until full during binge	BNG_BLM5	0,1	BNG_BLM5_R	0,1	V286
169_EAT_NOT_HUNGRY	P_EAT169	Eating when not hungry	BNG_BLM6	0,1	BNG_BLM6_R	0,1	V287
170_EAT_ALONE	P_EAT170	Eating alone during binge	BNG_BLM7	0,1	BNG_BLM7_R	0,1	V288
171_EAT_DISGUSTED	P_EAT171	Feeling disgusted and guilty	BNG_BLM8	0,1	BNG_BLM8_R	0,1	V289
172_EAT_DISTRESSED	P_EAT172	Distressed by overeating	BNG_BLM9	0,1	BNG_BLM9_R	0,1	V290
		BINGE_SCORE	BINGE_SCORE	#			V291
173_FASTING_B	P_EAT173	Fasting after binge	BNG_BLM10	0,1	BNG_BLM10_R	0,1	V292
174_EXERCISE_B	P_EAT174	Exercise after binge	BNG_BLM11	0,1	BNG_BLM11_R	0,1	V293
175_DIET_PILLS_B	P_EAT175	Using pills after binge	BNG_BLM12	0,1	BNG_BLM12_R	0,1	V294
176_VOMIT_B	P_EAT176	Vomiting after binge	BNG_BLM13	0,1	BNG_BLM13_R	0,1	V295
177_LAXATIVE_B	P_EAT177	Laxatives after binge	BNG_BLM14	0,1	BNG_BLM14_R	0,1	V296

178_OTHER_METHOD_B	P_EAT178	Other losing weight methods	BNG_BLM15	0,1	BNG_BLM15_R	0,1	V297
179_BINGE_BHV_FREQ	P_EAT179	Binge compensatory behaviors frequency	BNG_BLM16	0,1,2	BNG_BLM16_R	0,1	V298
180_OTHER_EATING	P_EAT180	Other eating behaviors	BNG_BLM17	0,1	BNG_BLM17_R	0,1	V299
181_POOR_CONC	P_ADHD181	BULIMIA_SCORE Attention impairment	BULIMIA_SCORE ATT1	0,1	ATT1_R	0,1	V300
182_SUST_ATTEN_IMPAIR	P_ADHD182	Sustained attention impairment	ATT2	0,1	ATT2_R	0,1	V301 _RPT_A5 V302
183_AVOID_TASKS	P_ADHD183	Avoiding sustained attention tasks	ATT3	0,1	ATT3_R	0,1	V303
184_ATTEN_SPOKEN	P_ADHD184	Attention when spoken to	ATT4	0,1	ATT4_R	0,1	V304
185_MANAGE_TIME	P_ADHD185	Organization and meeting deadlines	ATT5	0,1	ATT5_R	0,1	V305
186_CHANGE_ACTIVITY	P_ADHD186	Changing activities	ATT6	0,1	ATT6_R	0,1	V306
187_DISTRACTION	P_ADHD187	Distraction	ATT7	0,1	ATT7_R	0,1	V307 _RPT_E2 V308
188_MISPLACE_THINGS	P_ADHD188	Misplacing things	ATT8	0,1	ATT8_R	0,1	V309
189_FORGET_ACTIVITY	P_ADHD189	Forgetting daily activities	ATT9	0,1	ATT9_R	0,1	V310
190_LOSE_TRACK	P_ADHD190	Losing track	ATT10	0,1	ATT10_R	0,1	

(continued)

Table 19.2 (continued)

Psychopathology Section									
Glossary codes	PMP codes	Item title/label	Scale codes	Scale rating	Research codes	Research rating	V codes		
		ATTENTION_SCORE	ATTENTION_SCORE	#			V311		
191_FIDGETY	P_ADHD191	Fidgety	HYP1	0,1	HYP1_R	0,1	V312		
192_LEAVE_SEAT	P_ADHD192	Leaving seats	HYP2	0,1	HYP2_R	0,1	V313		
193_GETUP_MOVE	P_ADHD193	Restlessness and moving	HYP3	0,1	HYP3_R	0,1	V314		
194_HYPERACTIVE	P_ADHD194	Hyperactivity	HYP4	0,1	HYP4_R	0,1	V315		
195_WAIT_LINE	P_ADHD195	Waiting in line	HYP5	0,1	HYP5_R	0,1	V316		
196_TALK_ALOT	P_ADHD196	Talking too much	HYP6	0,1	HYP6_R	0,1	V317		
197_LOUD_NOISY	P_ADHD197	Loud and noisy	HYP7	0,1	HYP7_R	0,1	V318		
198_IMPULSIVE	P_ADHD198	Impulsivity	HYP8	0,1	HYP8_R	0,1	V319		
199_DISTURB_OTHERS	P_ADHD199	Disturbing others	HYP9	0,1	HYP9_R	0,1	V320		
200_BLURT_OUT	P_ADHD200	Blurt out answers	HYP10	0,1	HYP10_R	0,1	V321		
		HYPER_ACTIVITY_SCORE	HYPER_ACTIVITY_SCORE	#			V322		

*PMP Personalized Medicine in Psychiatry
** V Variable

behavior, negative symptoms, alcohol addiction, drug addiction, attention and hyperactivity. All of the SCIP dimensions had high Cronbach's alpha values (>0.7), with the exception of disorganized thoughts (Cronbach's alpha = 0.375) (Aboraya et al., 2014).

SCIP clinician-administered scales Cronbach's alpha values of the SCIP clinician-administered scales ranged from 0.6939 (Aggression scale) to 0.9666 (Binge eating scale). Overall, the SCIP clinician-administered scales have good internal consistency reliability (Aboraya et al., 2018).

SCIP self-administered scales Cronbach's alpha values of the SCIP self-administered scales ranged from 0.7720 (delusions scale) to 0.9873 (drug use scale). Overall, the SCIP self-administered scales have good internal consistency reliability (Aboraya, 2022a).

Validity

Validity of the SCIP diagnoses

Validity was measured by assessing the agreement between the SCIP diagnoses and the gold standard diagnoses using the Kappa statistic. Kappa was fair to good (greater than 0.5) for 10 diagnoses: generalized anxiety, posttraumatic stress, major depression, bipolar I, schizophrenia, alcohol, cannabis, cocaine, opioid, and sedative use disorders. Kappa was poor (less than 0.5) for three diagnoses: panic (0.45), bipolar I, mixed (0.3), and schizoaffective disorders (0.46). Sensitivities and specificities of the SCIP diagnoses against the gold standard diagnoses were good (greater than 70%) for 73.00% of the items, fair (between 50% and 70%) for 19.0%, and poor (less than 50%) for 8% (Aboraya, 2015).

Validity of the SCIP screening items

The sensitivities and specificities of the 16 SCIP core screening items (CSI) were measured against the psychiatric diagnoses: sensitivities and specificities were good (greater than 70%) for 66% of the items, fair (between 50% and 70%) for 19% of the items, and poor (less than 50%) for 15% of the items. In sum, 85% (27 out of 32) of the sensitivities and specificities of the SCIP 16 core screening items were fair to good (Aboraya, 2022c).

Validity of the SCIP clinician-administered scales

The sensitivities and specificities of the SCIP clinician-administered scales were measured for the main psychiatric diagnoses with the exception of obsessive-compulsive and eating disorders. The sensitivities of the SCIP clinician-administered scales were $> 70\%$ except for the panic and phobia scales (63%) and the drug use disorder scale (60%). The specificities of all the clinician-administered scales were $> 70\%$ (Aboraya et al., 2018).

Criterion validity of the SCIP self-administered scales

Criterion validity of the SCIP self-administered scales was measured against the SCIP clinician-administered scales and showed good criterion validity, except for the hallucinations and delusions scales.

Convergent and Discriminant Validity of the SCIP self-administered scales

Convergent validity evidence was found through examining correlations between scales of the same construct (self-administered versus clinician-administered). Correlations were high (>0.90) for all scales, except for the hallucinations and delusions scales (0.5626 and 0.6353 respectively). The correlations between scales of different constructs were low or even negatively correlated, which provides evidence of discriminant validity (Aboraya, 2022a). In sum, the SCIP instrument was validated at three levels: diagnoses, core screening items, and scales. Therefore, the SCIP can be considered one of the most well-validated instruments in the literature to date.

Tenets of the Computerized Global Psychopathology (CGP) Model***Clinical Start Point***

The field of mental health, including psychology and psychiatry, starts with individuals who have “behavioral” issues that impact their functioning and quality of life. Individuals may seek mental health services on their own, such as in scenarios 1 and 2, or other individuals may bring them to mental health professionals, such as in scenarios 3 and 4. Any model proposed to provide mental health care to patients starts here and the hope is that the endpoint of care is an improvement of the patient’s quality of life and function, i.e., the clinical endpoint. In Chap. 11 of my book, I outlined the clinical start point by Descriptive Psychopathology Codes (DPCs) and Descriptive Psychopathology Maps (DPMs) (Aboraya, 2022d). A *Descriptive Psychopathology Code (DPC)* is a comprehensive psychological assessment (symptoms, signs, and dimensions) of an individual at one point in time using the 230 SCIP items. A *Descriptive Psychopathology Map (DPM)* is two or more descriptive psychopathology codes (DPCs) for the same patient obtained over time, as rated by either the same or different clinicians.

Universality of Psychopathology

Symptoms and signs of psychopathology are mostly universal among humans across the globe. The form of psychopathology is more important than the content, which is shaped by cultural and educational factors (Taylor & Vaidya, 2009; Tseng,

2001). As seen in the previously described scenarios, the form psychopathology is the same: auditory hallucinations are the presence of voices in the absence of external stimuli. Culture shapes the manifestations of psychopathology. The patient in scenario 3, who was Christian, identified how Lord Jesus spoke with him and granted certain powers, while the other patient in scenario 4, who was Muslim, described hallucinations as God Allah instructed him to stand in traffic and preach. A successful treatment for both patients with the right antipsychotic medication would treat the hallucinations described by the patient as Jesus or Allah. Diagnostic systems (DSM, ICD) change over time, but descriptive psychopathology remains constant (Andreasen, 1985). The 192 unique psychopathology items of the SCIP glossary are therefore stable and do not change. Psychiatric diagnoses increase, decrease, or remain stable based on what version of the DSM and what combinations of items make up the diagnoses. The DSM-I includes 106 mental disorders which increased to 182 in DSM-II, 265 in DSM-III, 292 in DSM-III-R, 297 in DSM-IV, and nearly 300 in DSM-5 (Keshavan et al., 2013; Lieberman, 2016).

Experimental Psychopathology

With new advances in neuroimaging techniques and neurosciences, experimental psychopathology (the correlation between psychopathology and objective measures) is emerging as an important research methodology with the potential of explaining the brain changes associated with different symptoms and signs manifested in mental disorders (Barta et al., 1990; Frankle et al., 2015; Jardri et al., 2011; Kindler et al., 2015; Nozaki et al., 2009; Oertel-Knochel et al., 2013; Padmanabhan et al., 2015; Palaniyappan et al., 2012; Sharafi, 2005; Shenton et al., 1992).

The unique 192 psychopathology items of the SCIP can be used in experimental psychopathology research. I propose starting with one individual item, followed by a sequence of carefully selected groups of items.

1. *One-item experimental psychopathology*: For a case of psychosis, researchers begin with patients who present with only one symptom, such as auditory hallucinations, and examine the correlation between auditory hallucinations and brain changes.
2. *Selected two-item experimental psychopathology*: Researchers can select patients who present with two symptoms simultaneously (e.g., auditory hallucination and visual hallucination) and examine their correlations with brain changes.
3. *Selected multiple-item experimental psychopathology*: After performing adequate one-item and two-item experiments, researchers may decide to examine brain changes in patients who present with several symptoms such as tangentiality, delusions, and auditory hallucinations.

Plurality of Etiology of Mental Disorders

Definite etiopathy (DE) is a factor that is determined to cause a disorder. With the exception of a few mental disorders with known definite etiologies such as general paresis of the insane (GPI), Pellagra, Alzheimer's dementia, phenylketonuria (PKU), and drug-induced psychosis, most major psychiatric disorders are caused by factors contributing to manifestations of mental disorders (FCM_MD). These contributing factors (genetic, biological, cultural, environmental, social, developmental, or others) play a part in contributing to the manifestations of the illness, but they stop short of being definite etiopathies. These contributing factors are very important in case formulation, differential diagnosis, and treatment decisions. Decades of research on the etiology of mental disorders including the most recent advances in neuroimaging techniques point to the fact that causes of mental disorders are multifactorial (multicausal) (Kendler, 2014, 2019).

Information Technology

The use of information technology to create a software that includes the 230 items of the SCIP glossary, the 33 clinician-administered (CA) and self-administered (SA) scales, and the 322 variables in Table 19.2 is currently under evaluation. The CGP software will facilitate research across the globe in different ways:

1. Clinicians who see patients in inpatient or outpatient settings can use the SCIP scales as they evaluate patients and generate data instead of essays and progress notes.
2. Researchers can use the SCIP research scales as they have more time to study and investigate more variables that they need for their research projects.
3. Experimental psychopathology research will be enhanced as reliable psychopathology items are available with descriptions of the items and how to rate them.
4. Telepsychiatry refers to the use of videoconference and other communication technologies to provide mental health assessment and treatment at a distance. Telepsychiatry has been used for clinical care, education, research, and administration (Hilty et al., 2004). Research on telepsychiatry has advanced recently and can improve care access, especially in remote and underserved populations and decrease care cost (Hilty et al., 2013). Telepsychiatry is an integral part of the CGP software where patients can be interviewed remotely and the data can be collected and integrated with other data across the globe.
5. The CGP software has the potential of collecting huge data on patients or even healthy individuals from different clinics and hospitals, different research institutions, and different countries across the globe.

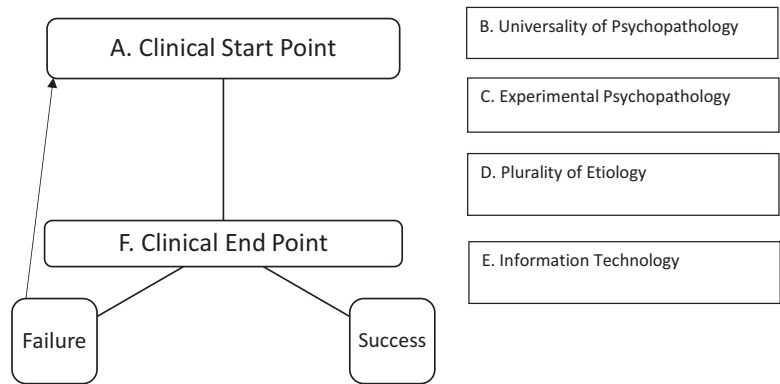


Fig. 19.1 Tenets of CGP model

Clinical Endpoint

The clinical endpoints are variables that reflect how the patient “feels, functions, or survives” (Group, 2001). Clinical endpoints reflect the success or failure of the treatment provided to the patient. A patient may start with many symptoms at the clinical start point and the end of treatment, the patient may improve significantly. That is a success and both the patient and the provider are satisfied. On the other hand, if the patient’s condition does not improve or gets worse, then something went wrong and the provider will need to reassess and reevaluate the patient.

Figure 19.1 shows the CGP model stages: A,B,C,D, and F.

Discussion

The human brain is composed of nearly a hundred billion neurons connected in nearly a hundred trillion ways. The brain’s neurons and their connections are influenced by innumerable inherited and environmental factors (Williams, 2022). The mind is the expression of the brain’s operations such as thinking, making decisions, imagination, memory, senses, pleasure, pain, beliefs, desires, intentions, emotions, and many other operations that make humans behave the way they are, regardless whether we label an individual as having “a good behavior” vs. “a bad behavior” or having a mental disorder or not. Recent research has shown that the mind and the brain are inseparable and understanding mental disorders should include biological, psychological, and environmental factors (Kandel, 1979, 2013; Kendler, 2014). As described by J. Lieberman, the history of psychiatry taught us that any narrow perspective on mental illness usually proves to inadequately account for the complexity

of mental illness: “The field of psychiatry as a whole has come to realize that the best way to understand and treat mental illness is by simultaneously addressing the mind *and* the brain” (Lieberman, 2016).

Although tenet D of the CGP model advocates for the pluralistic model of etiology (multicausal disease model), scientific evidence is the final arbitrator. For instance, researchers may well discover in the future that “schizophrenia spectrum” is caused by a single unknown living organism (monocausal model), similar to the *Treponema Pallidum* causing GPI. *At the end, the CGP model follows what scientific evidence leads to.*

All psychiatry “disciplines” or “schools” are part of the CGP model and their formulations of causality of mental illness are valuable, as long as they provide scientific evidence. For example, textbooks of psychiatry and cultural psychiatry historically described Pibloktoq or Arctic hysteria as “culture-bound syndrome.” “Piblokto is a culture-specific syndrome seen in Eskimos, usually women. The affected person screams, cries, and runs naked through the snow, sometimes with suicidal or homicidal tendencies” (Kaplan, 1980). However, careful review of the cases of Pibloktoq showed no evidence of a discrete culture-bound syndrome. The disturbance characterized by Pibloktoq was thought to result from the exploitation of Eskimo women by Admiral Peary’s men (Bhugra & Bhui, 2018). *Ultimately, the CGP model refutes theories that lack scientific evidence.*

One of the major limitations of the CGP model is that it is mainly a theoretical framework and practical applications have not yet been developed. The project of developing and testing the CGP software is underway. The feasibility of implementing the CGP model and using the new software across countries needs to be seen. Another challenge is the need to translate the SCIP glossary and scales to different languages. Perhaps, in the near future, another manuscript or a new chapter can describe the implementation of the CGP model.

In sum, our understanding of the complex human mind and brain will be guided by scientific evidence, advances in neuroimaging techniques, and mega data on thousands or even millions of individuals.

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Chapter 20

Can Complexity Theory Help Us to Understand Mental Health Policy?



Sonja Blignaut and Ray MacNeil

Introduction

In the late 1970s, Canadian researcher Dr. Bruce Alexander was studying the role of social influences on addiction in the now-famous “Rat Park” experiments (Alexander et al., 1981). Prior research had shown that when rats were placed in solitary confinement and offered two water bottles – one filled with water and the other with morphine water – they would repeatedly drink from the drug-laced bottle until they overdosed and died, suggesting that possibly their confinement had influenced their consumption of drug-laced water.

To further test the role of environmental influences on drug consumption, he created “Rat Parks”; spaces where rats were free to socialize, play and mate with others. Given the same access to either plain or morphine water, he found that the Rat Park rats preferred the plain water and only drank the morphine water intermittently and not to excess.

While his work was not without criticisms, it nonetheless set off an enduring controversy concerning the role of social influences in drug addiction. For these authors this early finding suggested, rightly we believe, that one’s community connectedness and subsequently one’s mental health are inextricably entangled with one’s addictions. If this is so, then the question remains, why do our treatment systems not yet reflect this entangledness? One of the main goals of this chapter is to

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speak to this complexity and perhaps suggest ways for mental health and addiction service providers to think and act within this entangledness.

In the 1980s, the US army, faced with a disruptive post-Cold War context, was looking for approaches and ways of seeing that would respond to these conditions of volatility, uncertainty, complexity and ambiguity (VUCA). In the last two decades, this description has become ubiquitous, as many other organizations, including in health care, experienced increased ambiguity and uncertainty in their environment. The rise of this language has, in part, mirrored a rise both in the increasing complexity of our world as well as the theoretical base which scholars are developing to understand it. In the last 50 years, growth in the field of complex adaptive systems (CAS) theory has provided researchers and practitioners with a helpful lens through which to view individual and collective human behaviour. Complex, from the root word “plex”, means braided or tangled. This notion of entanglement accurately describes our experience of complexity; metaphorically, intentionally pulling on one part of the entanglement causes unintended tugging in another part, and it is impossible to think about each braid as independent. As the world becomes more interconnected, dynamic variables or threads are added to the entanglement, introducing more uncertainty, ambiguity and volatility. We experience this increasing complexity in all spheres of life, yet our ways of thinking and organizing remain rooted in the dualistic and mechanistic Cartesian worldview that has dominated much of science since the seventeenth century.

In this chapter, we explore the implications of emerging complexity theory for mental health systems. More specifically, we will explore mental health systems from an anthro-complexity perspective, which provides a focus on the complexity of human systems in particular. Anthro-complexity is “an associated body of theory and practice which draws on natural science-informed philosophical thinking. It aims to bring together anthropology, cognitive neuroscience and complexity science into a new discipline that can learn from traditional complex adaptive systems theory but isn’t bound by it” (Cynefin Company, [n.d.](#)). Anthro-complexity seeks to understand the complex patterns that arise as humans make sense of and act in a complex world.

It is essential to consider an individual’s mental health from a non-reductionist perspective if one is to better understand the dynamic interactions of people with and within the systems they engage, their limitations and frailties, and the interpretations and paradoxes of human interaction. Looking at mental health services through an anthro-complexity lens allows for just such a deeper exploration of these intricacies.

One could argue that mental health services and treatment are the epitome of complexity (Hannigan & Coffey, [2011](#)). It is from this belief that we offer insights into ways of thinking and acting within the mental health system that we hope will allow for one to embrace rather than fear system complexity. Beyond this brief introduction, we will first bring a perspective on how reductionism became the historical context of mental health services. That will be followed by a description of several epochs of treatment paradigms, again, unfortunately, founded largely on

reductionist views. Finally, we will offer suggestions as to ways of thinking and acting that are complexity-informed.

Context Matters

We interact with many different types of systems daily. To act effectively, it is critical to understand the nature, particularly from a causal perspective, of the system(s) we are engaged with and the tasks and problems we face. For example, when there is a direct relationship between cause and effect, or where that relationship is at least knowable, we think of them, predominantly, as ordered. When there is a relationship between the cause and effect of a problem, but that relationship is only knowable in retrospect, we refer to that situation as complex.

Decision-makers commonly mistake complex systems for simply complicated ones and look for solutions without realizing that “learning to dance” with a complex system is definitely different from “solving” the problems arising from it. (Poli, 2013)

Humans are complex beings embedded in complex relationships and interacting with open, complex adaptive systems. Humans are uniquely able to create order, a skill that has led to much social and economic progress. These ordered systems we create exist like pockets of order surrounded by larger complex systems. As soon as people enter these systems, they introduce additional complexity. As an example, think of an automobile, an example of an ordered or complicated system. There is a 1:1 relationship between its parts. The automobile can be disassembled into its constituent parts and those parts can be repaired or replaced, put back together and it will run as well as, or better, than it did previously. This is the nature of an ordered system. All parts have a specific role to play, and that role will not change over time. However, when a human gets behind the wheel, they introduce complexity. This complexity increases if there are passengers interacting with each other and the driver. As soon as the car is on the road, it becomes part of nested and entangled complexity: complex traffic patterns, governed by complex traffic governance systems and embedded in complex social systems like cities or towns, within larger complex systems such as governments and even ecosystems. We are, therefore, always interacting within entangled complex systems, as well as the pockets of complicated (knowable) or even simple (known) order within them. Roberto Poli (2013) articulates the difference between complicated and complex as follows:

Complicated problems originate from causes that can be individually distinguished; they can be addressed piece by piece; for each input to the system, there is a proportionate output; the relevant systems can be controlled and the problems they present admit permanent solutions.

On the other hand, complex problems and systems result from networks of multiple interacting causes that cannot be individually distinguished; must be addressed as entire systems; that is, they cannot be addressed in a piecemeal way; they are such that small inputs may result in disproportionate effects; the problems they present cannot be solved once and

forever, but require to be systematically managed and typically any intervention merges into new problems as a result of the interventions dealing with them; and the relevant systems cannot be controlled — the best one can do is to influence them, or learn to “dance with them” as Donella Meadows rightly said.

Not everything is complex, and importantly, not everything is ordered. When decision-makers come to believe that they are dealing with complicated systems, they will assume that they are able to control outcomes and find permanent solutions, much like a mechanic repairing the car in our previous example. As a result of this intention, precious time and resources are wasted working to optimize or cure “parts” and ignore complex interconnectedness and emergence of the whole.

A helpful framework to utilize for decision-making in context is the Cynefin framework (Snowden & Boone, 2007). The framework helps distinguish between three different kinds of contexts or problems: ordered where cause and effect are linearly related (Clear, Complicated); complex where causal relationships are entangled and non-linear, and chaotic where no causal relationships are discernable (Fig. 20.1).

So, while we exist as complex beings, surrounded by complex interactions it is also true that not every situation we face is complex. For example, a hospital is a complex system; however, tasks such as ordering supplies typically require an ordered response. This might become complex, or even chaotic in the context of a



Fig. 20.1 Cynefin framework. (Image credit: Sue Borchardt)

pandemic when supplies are in short supply as we saw with ventilators and masks during the covid-19 pandemic. The context of an operating theatre is very ordered and structured. Here there are clear tasks such as counting the number of instruments at the start and end of the procedure. Ritualized constraints and clear roles remove some of the complexity from the dynamics between the surgical teams. However, the human body on the table remains complex and therefore even simple procedures can unexpectedly become complicated or complex.

These ideas present important implications for mental health systems. Complex systems are path-dependent and sensitive to starting conditions. According to Turner and Baker (2019), path-dependent systems are “sensitive to their initial conditions so that the same force might affect seemingly similar organizations [systems] differently based on their histories”.

It is, therefore, critical for us to understand the growth, histories and initial conditions of mental health and addiction systems if we are to understand present-day dynamics.

Historical Perspectives

Dualism, promoted by René Descartes in the seventeenth century, defines the mind and the body as separate. A radical deviation from the non-dichotomic worldview of Aristotle and Thomas Aquinas that was dominant up to that point. Known as the Cartesian split it has led to the separation of the treatment of mental and physical health. Cartesian dualism defines the physical body as a material object that is “publicly observable...[and] amenable to public scrutiny, measurement, and analysis”. (Ward, 2008) In contrast, the mind is an immaterial substance that “consists of consciousness (immediate awareness of some object), it has the character of feeling (pleasure in or aversion to the object of awareness), it involves thought (the ability to identify objects and consider possible states as well as actual ones), and it involves goals or purposes (envisioned possible states that would give pleasure)”. In this view, mind and body interact to create a unified whole, but their properties are mutually exclusive.

Along with dualism, a new model of modern medicine was emerging where “under the authoritative eye of the physician, humans were best understood as biological organisms composed of constituent systems or parts, which were subject to the laws of physics and biochemistry. Separation of the mind from the body permits both materialism and reductionism to be invoked” (Tyler, 2018).

Reductionism, popularized by Taylor, has been a dominant mindset in human endeavour since the Industrial Age. Reductionism assumes that all problems or systems can be reduced to their basic parts; each of those parts can be worked on, optimized or, in the case of the human body, treated separately and then brought back together to function more effectively as a whole. While true that a reductionist view can be appropriate at times, it has proven to be largely ineffective (and

counterproductive) in more complex aspects of human endeavour, particularly in the fields of health care.

However, health care, and particularly mental health, has long been influenced by reductionist ways of thinking, some of which originate as far back as the fifth century BCE. Hippocrates, the Greek philosopher widely regarded as the father of Western medicine, emphasized the importance of understanding individual body parts to understand the whole. While we have come to understand the many complex interactions between various organs and other systems in the human body, this reductionist approach is still reflected in our education systems, practice structures and treatments.

Historically, medicine seems to ignore mental illness, even though, according to the National Alliance for Mental Illness (US), the most common symptoms that physicians deal with are related to mental disorders (Smith, 2018). Reductionist methods of research, education and care have led to a fragmented understanding of health and illness, making it difficult to develop holistic treatments and approaches that address complex interactions of mind, body and society.

It was only at the end of WWII that mental health care became part of a broader set of healthcare services when it was recognized that soldiers returning from the war were afflicted with serious conditions that prevented them from re-entering society (Goodman, 2006). However, not unlike other human endeavours in the twentieth century, mental health treatment aspired to “reductionist simplicity” (Fried & Robinaugh, 2020). While it may be true that humans aspire to order, it’s not true that all systems can be, or even should be, reduced to such simplicity. In the twentieth century, the rise of molecular biology and genetics further reinforced the reductionist approach by focusing on understanding the individual components of cells and DNA to understand how living organisms function.

Along with context, the history of an organization co-determines its nature. Two similar-looking organizations with different histories are not the same. Such histories do not only consist of the recounting of several specific, significant events. The history of an organization is contained in all the individual, sometimes tiny, interactions that take place continually, distributed throughout the system. The history of an organization is important, not because history might repeat itself, as some believe, but because it defines those boundaries of action and thinking within the organization that serve to distinguish the organization.

Therefore, a practice or “solution” in one organization may not work in another organization of similar size, scope and industry. For example, in Johannesburg three of South Africa’s big banks are situated within less than a kilometre of each other. Even though they share geography and industry, they are very different organizations with very different cultural dispositions. Assuming a practice that works in one will work in the other is dangerous, never mind assuming it would work in the insurance company down the road. The unique starting conditions and evolutionary trajectory of each organization determines its current state and current evolutionary path, we need to honour this unique context when we engage with them.

Contemporary States

Paradoxically perhaps, while we have come to understand that certain aspects of our lives are complex (child-rearing as an example), we continue efforts to bring order to other phenomena in our world. These efforts are often not helpful. The provision of mental health services is intensely complex. The notion of “mental health”, in and of itself, conjures up a sense of complex dynamics not directly available to clinical evaluation and, as a result, significant assumptions are necessary. There was a time when experts believed that diagnosis and treatment were undertaken to “solve” mental health as much as one could solve a math problem. If we set aside this continual effort to bring order for a moment, complexity science gives us the language and contrast between open and closed systems that may aid our understanding and practice.

Open systems, including mental health treatment, are those in which the boundaries of the system are not clearly defined and whose dependencies are largely unknowable. In this case, for example, while statements of “mission” and “vision” are sometimes attempts to better define borders and bring order, it may work to the detriment of the organization if taken too literally. A vital organization is very much the product of its interactions with the environment and other organizations. In that sense, no organization can be understood independently of its context.

The same is true for people and roles, we simply can never ignore context, whether inside or outside of perceived boundaries. Roles co-evolve during interaction between an individual and a system, and the same is true for organizations that also play a certain role within, for example, an industry or broader social or economic context. Making sense of identity boundaries and the exchanges across those boundaries are therefore critical in our understanding of the current state of any level of the system.

In our efforts historically, to bring order and understanding to the nature of mental health, we have concomitantly also created services that rely on assumptions of order, the thinking being that much as the mechanic repairs an automobile, certain aspects of mental health could be treated “over here” while other aspects of one’s mental health (or addiction) could be treated “over there”. Internationally, mental health services continue, largely, to be disjointed and poorly coordinated across disciplines and units within the healthcare system (Ellis et al., 2017) and this includes the policies of separating mental health and addictions treatment. Current approaches continue to create increased costs while at the same time providing limited improvements to a patient’s condition. When unintended consequences manifest, yesterday’s solution becomes today’s problem, creating a new phenomenon that requires treatment, and the cycle begins anew. This pattern is consistent with efforts to treat complex issues as if they were ordered.

Todd Leader (2016), in his recent book exploring mental health system transformation in Canada, concludes with the following observation. “[T]his book is not a critique of psychiatrists, psychologists, social workers, therapists or administrators.

The problems we are experiencing across Canada are caused by the system and the paradigm, not the people. Our problem is one of history and culture within that system. All the people and professions are merely doing the job they were trained and hired to do. They are working within the norms of this field. They're simply seeing the programs, the clients and the priorities the way they've been taught to see them". This is a recognition of the importance of history and culture when working in such a complex system and at the same time recognizing possibilities for positive movement and change.

As healthcare leaders struggle with the increasing complexity of healthcare provision, one can argue that mental health (including addiction treatment) services have been slowly moving towards a more complexity-informed model of care. While earlier efforts (post-WWII) were clearly not informed in this manner, in the late 1970s, the biopsychosocial approach came into being. This influenced not only mental health services but also many aspects of health care. The approach prioritized the interaction between the biology, psychology and environment of an individual and that this interaction is important to consider when planning treatment. As a more holistic approach beyond more cause-and-effect theories of mental health, this was almost certainly an improvement. However, in the end, it didn't go far enough. More recently, and in response to recognition of the complexity and entangled-ness of mental health and addiction symptoms and treatment, attempts have been made to undertake "parallel" treatment services (addictions and mental health treatment concurrently). These efforts, again while an improvement under some conditions have had challenges with the effort required by the client and the unknown interactions of the treatment protocols offered by the (separate) mental health and addictions clinicians.

Experts continue to explore the relationship between mental health and addictions. The challenge in looking for causal relationships is that there likely is not one specific and repeatable way in which they interact. The reality is that, while many clients present as co-morbid, it is true that addictions can cause mental health issues and vice-versa. This "both-and" feature is typical of complex systems. Mental health and addictions systems also have historical issues that prevent a more integrated view of a co-morbid client. Not only did these two systems begin at different times (mental health much earlier than addictions) but ideologically clinicians saw their roles quite differently; mental health as a brain disorder and addiction as a social disorder. So, while there are efforts underway to create a more integrated, holistic approach to mental health and addictions it's been challenging. These are systems that are operated by "professionals with differing approaches, cultures, internalized principles" (Ellis et al., 2017).

If one takes the perspective that the human body is a complex adaptive system that cannot be reduced to its parts, and further that consciousness is distributed and embedded not only in the body but in other complex social systems, then there are multiple implications for systems that still largely reflect their Cartesian roots. For example, recent research has identified a relationship between the gut biome, its related bacteria and one's mental health and suggests a much more entangled relationship than previously perceived between mental health and other functions

(Clapp et al., 2017). To understand these implications, it's helpful to understand the characteristics of complex systems, and in particular, the complexity of human systems.

Learning to Dance

Given remarks to this point, if the reader agrees, then we have made a very brief case that (a) mental health services have arisen in the last century, as with many other human services, in a reductionist, ordered context; (b) it would be helpful for mental health, as a complex phenomenon, to be addressed through a complex systems, non-reductionist lens; and (c) the poorly coordinated manner in which mental health and addictions treatment services are generally organized exacerbates the situation for those experiencing co-morbidity and seeking help in both the mental health and addiction treatment systems. A closer examination and contrast of ordered and complex systems may support moving beyond this current context. So, in the section below we compare and contrast complex and complicated system approaches in more detail and make suggestions of implications, and how we might learn to “dance with the complexity” (Poli, 2013).

Linear Causality

Complicated: Linear cause-and-effect pathways allow us to identify individual causes for observed effects. Furthermore, there is a linear relationship between cause and effect i.e. Newtonian physics applies so that every output of the system has a proportionate input. This linear view on cause-and-effect relationships means that every problem has discoverable root causes. And that specific goals and strategies can provide predictable future outcomes.

Complex: Because we are dealing with patterns arising from networks of multiple interacting (and interconnected) causes, there are no clearly distinguishable cause-and-effect pathways. Outputs are not proportional or linearly related to inputs; small changes in one part of the system can cause sudden and unexpected outputs in other parts of the system or even system-wide reorganization.

Implications: A complexity-based approach would help us understand that mental health is not a static construct with single identifiable root causes. It invites us to consider the interconnectedness of the mind, body and social factors in understanding and treating mental health issues. This could lead to a more holistic approach to treatment that addresses the entangled dimensions of mental health and well-being.

Emergent patterns arising from the multitude of relationships and interactions in a complex system mean that there are no single root causes to be discovered, and problems rarely permit permanent solutions.

Unpredictable and novel characteristics may emerge from the interactions and entanglements in the system. These may or may not be desirable, but they are not by definition an indication of malfunctioning.

The emergent nature of complex adaptive systems often manifests in unintended consequences or behaviours that seem irrational. Carefully designed future states, however well-intentioned very seldom realise, and similarly carefully crafted strategies seldom get implemented as planned. In complex systems, one must embrace provisionality and be open to adapting plans and designs as new paths emerge. Remaining open to emergence, and holding plans lightly, remain challenging in organizations used to rigid structures and directive leadership styles.

Because of the nonlinearity of the interactions, small causes can have large effects. The reverse is, of course, also true. The point is that the magnitude of the outcome is not only determined by the size of the cause but also by the context and the history of the system. This is another way of saying that we should be prepared for the unexpected. It also implies that we must be very careful. Something we may think to be insignificant (a casual remark, a joke, a tone of voice) may change everything. Conversely, the grand five-year plan, the result of huge effort, may retrospectively turn out to be meaningless. This is not an argument against proper planning; we have to plan and, however, we need to hold those plans more lightly.

Reducibility

Complicated: We can decompose the system into its structural parts and fully understand the functional relationships between these parts in a piecemeal way.

Complex: One cannot assume that one structure has one function as the structural parts of the system are multifunctional i.e. the same function can be performed by different structural parts. These parts are also richly interrelated i.e. they change one another in unexpected ways as they interact. We can therefore never fully understand these inter-relationships.

Implications: A complexity-based approach would necessitate collaboration between different disciplines; psychiatry, psychology, sociology and neuroscience, to understand the complex interactions that contribute to mental health problems. This would necessitate a new approach to education as well as how we structure our institutions. Furthermore, it highlights the absurdity of the traditional and artificial boundaries created between the fields of mental health and addiction. Given the current research.

A complexity-based approach would require a systemic change in the way mental health systems are designed and implemented. Instead of focusing on a narrow set of solutions, and siloed approaches, a complexity-based approach would require the

spanning of traditional speciality and disciplinary boundaries and shaping organizations that reflect that. Additionally, such a shift might require a new language. Language is a core part of our human existence, it enables communication and connection; however, it can also constrain thinking and limit options in ways that we often remain unaware of. For example, many of our modern, western languages are “noun forward” i.e. we perpetuate categories and false boundaries through the nouns we use to describe ourselves and our systems. For example, a human being is labeled as a patient, an addict, or a schizophrenic. Once labeled, it becomes very difficult to see beyond those labels. This creates what Whitehead (1929) calls “the fallacy of misplaced concreteness”: abstracting and disconnecting the individual from the process they are part of and problematizing them at the same time. It might serve the field to investigate languages that are “verb-forward”, typically found in indigenous communities, that describe a world in context and in movement. A practical suggestion made by Matthew Johnson is to practice turning the abstract categories with which English speakers habitually frame “problems” into complete sentences with verbs and objects. Terms like “Freedom” are slippery and even dangerous in the wrong hands. A sentence like “Appalachians are freeing themselves from the hold of mining interests” brings this abstract signifier down to earth. The world comes alive again in verbal thinking.

Controllability and Solvability

Complicated: Systemic contexts and interactions can be controlled, and the problems they present can be diagnosed and permanently solved.

Complex: Complex problems present as emergent patterns resulting from dynamic interactions between multiple non-linearly connected parts. In these systems, we’re rarely able to distinguish the real problem, and even small and well-intentioned interventions may result in disproportionate and unintended consequences.

Implications: A complexity-based approach would place a greater emphasis on preventative measures to address the entangled influences that play a role in the emergence of mental health problems, rather than just treating symptoms as they arise.

It also invites one to consider the unique characteristics of each individual and their context and would aim to develop personalized treatment plans, not one-size-fits-all solutions, and might reduce the use of “fad” approaches. The approach is one less akin to goal setting and planning, probably best described by the term wayfinding.

Wayfinding involves a responsive, detailed and disciplined engagement with an unfolding and continuously changing environment. (Spiller et al., 2015)

Wayfinding cannot be done from a distance, one needs to be close to the system in order to observe and respond to signals and shifts in the system. A key question that emerges then is how we might shift from directive leadership and linear problem-solution thinking towards potentially messy, continuous collective continuous wayfinding.

Constraint (Openness)

Complicated: Complicated systems are created by the imposition of governing constraints that allow the system to interact only with selected or approved types of systems. These constraints are such that they bring predictability, certainty and controllability, for example, climate control systems in operating theatres. This allows for “one structure-one function” as “functions can be delimited either by closing the system (no interaction) or closing its environment (limited or constrained interactions)”. (Poli, 2013).

Complex: Complex systems are open systems, to the extent that it is often impossible to determine where one system ends, and another starts. Complex systems are also nested; they are part of larger-scale complex systems, e.g. an organization within an industry within an economy. It is therefore impossible to separate the system from its context. It is important to reiterate here that the ordered systems are always embedded in larger complex systems, i.e. their closed boundaries are always somewhat vulnerable. Complexity is not unconstrained, enabling constraints are at play that create and shape the conditions for emergence. For example, strong social connections and support can be seen as a constraint that enables healthier mental states and mitigates against loneliness which is a contributing factor to addiction among other things.

Implications: A complexity-based approach would recognize that mental health is not just the result of an individual’s biology or psychology, but also the result of their environment and the interactions between potentially unknown variables. For example, an individual’s mental health can be influenced by the interactions between their environment, social support and personal experiences. By understanding how these elements come together and change over time, we can develop better interventions to support an individual’s mental well-being.

This would require approaches that go beyond the medical profession and involve the whole society and community. Furthermore, complex organizations are open systems. This means that a great deal of energy and information flows through them and that *a stable state is not desirable*.

In a world that has come to see stability, certainty and predictability as normal and change as something that needs to be controlled and managed, this implication of complexity creates a lot of anxiety. The fact is though that organizations and cultures, like water, become stagnant and unhealthy without continuous movement and change.

Conclusion

This chapter provided a very brief introduction to the use of anthro-complexity theory in exploring the provision of complex mental health and addiction services. Our intent was to start a conversation and ask questions that might catalyse new ways of thinking, and create an openness and appreciation for human system complexity. At the same time, we hope that we have improved a reader's understanding of several things:

1. Mental health and addiction treatment systems suffer from their histories. Current approaches and practices are hard to break. This is the nature of complex human systems. An organization's history is important, not because history will repeat itself, but because in a complex system, its trajectory is defined by its initial starting conditions.
2. Moving forward, more integrated views of physical health, mental health and addictions must be favoured.

We end with this quote (and invitation) by poet David Whyte (Schuessler, 2001).

Stop trying to change reality by attempting to eliminate complexity.

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Index

A

Academic, 39, 93, 111, 118, 130, 194, 208, 223, 239, 268
 Acceptance and commitment therapy (ACT), 83, 84, 93–100
 Addiction, 13, 163, 169, 170, 237, 319, 329, 330, 333, 335–338, 340, 341
 Adjustment disorders, 144, 145, 148, 149, 151
 Administration, 222, 223, 226–230, 322
 Adolescents, 1, 5, 6, 8–10, 19, 60–62, 68, 71, 78, 83, 85, 97, 98, 109, 111, 117, 121, 128–131, 134, 136, 137, 191–196, 236, 292
 Aggressive behavior, 99, 178
 Alcohol dependence, 155, 169–172
 Al-Nakba, 177
 Aloneness, 10, 12–15, 68
 Alternative, 52, 128, 129, 137, 171, 182, 201, 241, 267–287
 Anhedonia, 62, 142, 149, 295, 301, 308, 312
 Anthro-complexity, 330, 341
 Anti-mattering, 59, 60, 63, 64, 67–69, 72
 Anxiety, 2, 4, 6, 7, 39, 41, 42, 52, 67, 77, 81, 82, 94, 97, 98, 100, 107, 109, 119, 120, 135, 145, 147–152, 162, 164, 179, 180, 192, 199, 209, 222, 238–240, 242, 272–274, 276, 279, 292, 295–301, 305, 306, 319, 340
 Anxiety disorders, 77, 145, 146, 148, 149, 151, 155, 199
 Apathetic, 208, 209, 214
 Art therapy, 111
 Assessments, 4, 7, 18, 39, 47, 57, 58, 70–72, 81–82, 84, 88, 143, 149, 155–157,

161–163, 168, 188, 212, 213, 215, 229, 281, 294, 320, 322

Asthenia, 142, 143, 145, 147, 150, 274

Attendance, 136, 212, 213, 216

Automatic Thoughts Questionnaire, 15, 16

B

Barriers, 41, 87, 107, 110, 179, 181, 187–197, 210, 240, 244
 Bipolar disorder (BD), 154–156, 273
 Black youth, 240
 Blended/hybrid models, 211
 Bomb attack, 177, 180

C

Cartesian worldview, 330
 Climacteric syndrome, 143
 Cognitive defusion, 95
 Cognitive-behavioral therapy (CBT), 83–85, 93, 94, 97, 98, 100, 109, 111
 Collective trauma, vi
 Community, 29, 41, 58, 77, 94, 105, 201, 208, 236, 250, 270, 293, 329
 Community engagement, 112, 113, 202
 Complementary, 267–287
 Complex adaptive systems (CAS) theory, 330
 Computerized global psychopathology (CGP) Model, 291–324
 Connectedness, 193–195, 242, 329
 Consumer model, 214
 Consumption, 130, 132, 169, 170, 254, 257–259, 329

Cope, 12, 39, 40, 50, 107, 117–119, 122, 143, 147, 180–182, 209, 221, 236, 239, 241
 Costs, 2–7, 10, 20, 282, 322, 335
 COVID-19, 1, 39–42, 44–52, 69, 105, 122, 207–210, 212, 214, 226, 235–244, 250, 260, 292
 Criminal justice, 199
 Cultural adaptations, 109
 Curriculum planning and dissemination, 212, 213

D

Dementia, 4, 29, 34, 143, 292, 322
 Depression, 2, 5–9, 12–16, 19, 28, 29, 31–35, 39, 43, 52, 58, 60–63, 81, 82, 85, 94, 97, 98, 100, 109, 119, 120, 141, 142, 151, 154, 155, 178–181, 195, 200, 209, 222, 238–240, 268, 272, 273, 276, 277, 279, 292, 293, 295, 300, 308, 309, 319
 Descriptive Psychopathology Codes (DPCs), 320
 Despair, 27, 39, 66
 Development, 2, 30, 60, 78, 80, 81, 83, 85, 99, 106, 109, 110, 112, 117, 119, 142, 152, 153, 156, 158, 160, 161, 164, 167, 168, 170, 171, 187–191, 193, 194, 196, 197, 202, 213, 228, 237, 238, 240, 243, 250, 251, 259, 273, 282, 291, 293–300
 Developmental disabilities, 99
 Diagnostic and statistical manual (DSM), 295, 321
 Discrimination, 79, 80, 88, 107
 Disengage, 18
 Dispositional self-criticism, 8

E

E-cigarette, 127–129, 133, 136, 137
 Economic, 3, 80, 94, 105, 133, 171, 178–181, 189, 193, 196, 238–240, 250, 255, 258–260, 291, 292, 331, 335
 Education, 6, 29, 32, 39–43, 88, 93, 95, 98, 109, 110, 117, 119–121, 144, 158, 163, 169, 171, 181, 188, 189, 199, 202, 204, 210, 215, 216, 228, 230, 236, 237, 240, 242, 244, 251, 254, 257, 282, 284–286, 322, 334, 338
 Emerging adults, 3, 6, 8, 62, 235, 237–244
 Emotionally abused, 65
 Emotionally neglected, 65
 Emotional support, 61, 212, 213, 239
 Employment, 64, 79, 144, 187, 194, 196, 199, 236, 240

Engagement, 5, 40, 41, 49, 112, 118, 119, 122, 180, 181, 188–192, 194–197, 202, 203, 207, 225, 269, 339
 Epidemic, 1, 3, 43
 Equity, 208, 214, 236
 Etiology, 322, 324
 Externalizing, 18, 98, 121, 199
 Eye movement desensitization, 109

F

Faculty, 39, 50, 51, 207–213, 215, 216
 Family, 13, 35, 40, 43, 46, 49, 50, 52, 60–63, 77, 80, 82, 83, 85, 94, 105–113, 122, 142, 143, 147, 149, 153, 155, 160, 162, 163, 165–172, 178–180, 182, 193, 202, 204, 212, 222, 225, 226, 237, 241, 242, 268, 273, 284, 293, 313, 314
 Fear, 11, 12, 19, 60, 94, 105, 107, 112, 142, 147, 150, 152, 177, 180, 192, 194, 196, 224, 226, 292, 297, 298, 303–305, 315, 330
 Feminized, 201
 Financial, 27, 32, 57, 79, 193, 225–226, 228, 229, 238–240, 254, 282, 286

G

Gaming addiction, 2
 Gender-based, 193
 Gender-based violence (GBV), 178–179, 182
 General Mattering Scale, 60, 62–64, 72
 Global Burden of Disease (GBD), 77, 78, 249

H

Happiness index, 251
 Health expenditure, 249
 Health policies, 4, 249, 329–341
 Health status-resources (HSR), 250
 Higher education, 27, 40, 50, 207–209, 211–216
 High school students, 98, 128, 131, 132, 134–138
 Holistic health, 237
 Home invasions, 178, 180
 Hope, 2, 5, 18, 69, 83, 85, 111, 118, 119, 121, 122, 202, 204, 243, 320, 330, 341
 Hormonal changes, 142, 147, 151, 154
 Humiliated and tortured, 177
 Hypersensitivity, 65
 Hypothymia, 142, 146, 147

I

Identity, 4, 7–11, 27, 65, 70, 291
 Identity development, 236
 Indigenous, 240, 267, 339
 Inner-city youth, 189
 Insecurity, 8, 13, 60, 107, 178
 Instability, 142, 145, 154, 236
 Institutional philosophies and practices,
 209, 213–214
 Interfamilial, 110
 International classification of diseases (ICD),
 295, 321
 Intervention, 2–4, 7, 11, 15, 17–20, 28, 30, 31,
 33–36, 71, 72, 80, 81, 83–86, 93–95,
 97–100, 105–113, 120–122, 137, 142,
 143, 161, 167, 182, 187–189, 191, 193,
 194, 196, 197, 201, 207, 227, 235, 237,
 238, 241–244, 260, 268, 274, 284, 332,
 339, 340
 Intimate partner violence (IPV), 178–179, 181

J

Job-related stress, vii

L

Life expectancy (LE), 199, 249–260, 279
 Life-story book creation, 27–36
 Lockdowns, 1, 39, 40, 43, 207, 209, 214, 226, 239
 Loneliness, v, vii, 1–20, 40, 43, 64, 67, 68,
 107, 143, 238, 242, 340
 Loneliness scale, 6, 14
 Loss, 13, 40, 62, 64, 105, 107, 111, 137, 138,
 147, 149, 150, 159, 164, 170, 178, 225,
 238, 240, 309

M

Macroeconomic (ME), 79, 155, 250,
 252–254, 256–260
 Male, 3, 31–33, 45, 47, 78, 79, 130, 132, 133,
 137, 159, 163, 165, 172, 181, 189, 192,
 193, 199–204, 222, 224, 227, 254, 255,
 257, 293
 Management, 81–88, 134, 137, 156, 167,
 226–227, 272, 275, 278, 279
 Marketing, 128–130, 134, 136, 137
 Masculine norms, 200
 Mastery, 58, 59, 119
 Mattering, 6, 8, 16–18
 Mattering Index, 62
 Menopausal transition, 142, 154, 156

Mental health, 2, 39, 57, 77, 93, 105, 118, 160,
 178, 187, 199, 207, 222, 235, 272,
 292, 329
 Mental health care, 113, 178, 241, 267–287,
 320, 334
 Mental health services, 107, 108, 110, 112,
 113, 182, 201, 237, 239, 243, 244, 320,
 330, 335–337
 Mental ill-health, 235, 237, 238, 240, 242, 243
 Metabolic syndrome, 156, 157, 160
 Mindfulness, 71, 97–100, 121, 122, 228
 Motivation, 40–42, 49, 96, 122, 134, 137, 145,
 146, 152, 225, 229, 268

N

Negative self-view, 10, 12, 65

O

Occupation-related violence, 181
 Older people, 1, 3, 28, 36, 71
 On-campus, 207–216
 Online learning, 39–52, 210
 Online suicide community, 64

P

Pandemic, 1, 2, 16, 39–44, 47, 49, 50, 52, 69,
 105, 122, 207–209, 214–216, 226,
 235–244, 250, 292, 333
 Participatory action research (PAR),
 187–189, 191
 Pedagogical, 211, 212, 215
 Perceived control, 27
 Perfectionism, 10, 58, 63
 Personality, 4, 8, 19, 148, 150, 151, 155,
 160–162, 199, 222, 272
 Pessimistic, 42, 142–148
 Physical health and safety, 209, 210, 215
 Play therapy, 109
 Policy, 17–19, 87, 88, 130, 137, 178, 203, 207,
 210, 213, 215, 216, 225, 237, 238, 241,
 243, 244, 250, 260, 335
 Positive psychology, 95, 98, 117, 120, 121, 123
 Postmenopausal, 141, 142, 144, 148
 Post-secondary, 207, 208, 214–216, 241, 242
 Post-traumatic stress disorder (PTSD), 109,
 111, 178–181, 300, 308
 Prevention, 2–4, 7, 11, 17–20, 57–72, 77–88,
 106, 132, 137, 159, 160, 187, 193, 194,
 196, 201, 202, 204, 207, 235, 249,
 281, 284

Productivity, 153, 214, 222, 250, 259
 Protective factors, 41, 43, 79–82, 86, 87, 107,
 119, 180, 187, 189, 191, 195, 221,
 237, 242
 Psychache, 11, 16, 17, 58, 64–69
 Psychache Scale, 67
 Psychiatry, 272, 291–294, 320, 323, 324, 338
 Psychological flexibility, 93, 95, 96, 98–100
 Psychological pain, 4, 6, 11–13, 16, 58, 60,
 67–69, 71
 Psychosocial, 12, 27, 35, 82–84, 109, 111,
 117, 121, 142, 180, 187, 189, 193, 225,
 228, 229, 285
 Psychosomatic, 27, 119, 149
 Psychotraumatic, 149, 150
 Public health crisis, 1, 249

Q

Quality of life, 2, 36, 93, 148, 154, 168, 172,
 178, 180, 238, 275, 284, 320

R

Racialized, 192–194, 240, 241
 Refugee youth, 105–113
 Regulatory, 130
 Relapse, 80, 161, 162, 165, 168
 Relational mattering, 59, 60
 Reprocessing therapy, 109
 Resilience, 18, 39–45, 47–52, 58, 70, 71, 77,
 80, 81, 88, 94, 107, 118, 120, 122, 180,
 182, 188, 236, 241–243
 Risk factors, 6, 63, 81, 82, 86–88, 107, 154,
 156, 158, 168, 188, 189, 191, 193, 201,
 221, 222
 Rumination, 8, 9, 15

S

Safety, 79, 84, 85, 107, 128, 192, 196, 207,
 210, 215
 School, 8, 60, 79, 93, 106, 117, 128, 192, 201,
 209, 222, 240, 251, 293
 School-based mental health, 98, 110, 111
 Self, 3, 59, 96, 119, 193, 202, 236
 Self-blame, 9
 Self-criticism, 8, 16, 17, 58, 165, 166, 275
 Self-efficacy, 8, 17, 40–52, 80, 81, 193
 Self-esteem, 8, 16, 58, 61, 62, 85, 107, 152,
 179, 195, 221, 281, 308
 Self-focus, 236
 Self-harm, 77, 78, 84

Self-image, 8
 Self-regulated learning, 41
 Sex discrepancies, 199
 Silent crisis
 Six-Factor Model, 118
 Sleep, 2, 4, 141, 142, 146, 228, 292, 310
 Smoking cessation, 128, 130
 Social adaptation, 154–156
 Social-cognitive construct, 59
 Social comparison, 18, 65, 70, 122
 Social isolation, 88, 188, 189, 236, 242
 Social position, 27
 Social restrictions, 1
 Social support, 27, 39–52, 58, 79, 81, 82, 110,
 111, 169, 180, 182, 251, 340
 Socio-economic, 187–189, 191
 Somatoform disorders, 143, 144, 148, 150, 151
 Standard for Clinicians' Interview in
 Psychiatry (SCIP), 293–322, 324
 Stigma, 19, 20, 79, 80, 87–88, 108, 112, 122,
 201, 281, 285, 286
 Strengths, 41, 50, 107, 110, 117, 119, 121,
 131, 193, 204, 284, 294
 Stressors, 87, 110, 117, 118, 180, 221–230,
 237–240, 242–244
 Student learning, 40, 41, 48, 112, 222,
 227, 228
 Subjective well-being, 27, 98, 118, 143,
 147, 148
 Suicide, 6, 7, 11, 77–88, 142, 188, 199
 Suicide behaviors, 63, 82
 Suicide motivation, 63
 Suicide preparation, 63

T

Teacher, 41, 44, 49, 51, 83, 85, 93, 99, 100,
 112, 119, 120, 122, 123, 131, 172, 209,
 212, 213, 221–230, 293
 Teaching and learning, 207–216
 Teaching practices, 209, 211–213, 216
 Technology, 42, 49, 50, 211, 214, 215, 252,
 292, 322
 Traditional medicine, 267, 269
 Transcultural psychiatry, 113
 Trauma, 61, 106–113, 180, 182, 201, 301, 307
 Treatment, 7, 9, 15, 17, 58, 61, 66, 68, 70–72,
 77, 78, 80, 83, 86–88, 97, 98, 108, 109,
 111, 143, 144, 150–154, 156–160,
 164–166, 168–171, 201, 204, 226, 237,
 269, 273–275, 278, 280, 281, 285, 286,
 293, 321–323, 329, 330, 333–337,
 339, 341

U

Universal psychological need, 67

V

Vaping, 127–138

Vulnerable, 15, 19, 58, 65, 67, 71, 72, 80, 106,
107, 168, 188, 194, 195, 215, 240, 241,
274, 284, 340

W

Waitlist control (WLC), 97

War, 177–182, 250, 330, 334

Well-being, 2, 27, 60, 77, 93, 106, 117, 143,
178, 187, 201, 207, 221, 235, 268, 337

Withdrawal, 130, 154, 169, 170, 311, 313, 314

Women, 35, 78, 129, 141, 178, 187, 199, 236,
251, 268, 324

Workload, 209, 213, 214, 216, 222, 225,
226, 230

Workplace, 81, 226

Y

Young black, 187–197

Youth, 57, 62, 93–100, 105–112, 117, 118,
122, 128–130, 132, 133, 187–197, 238,
239, 243, 251