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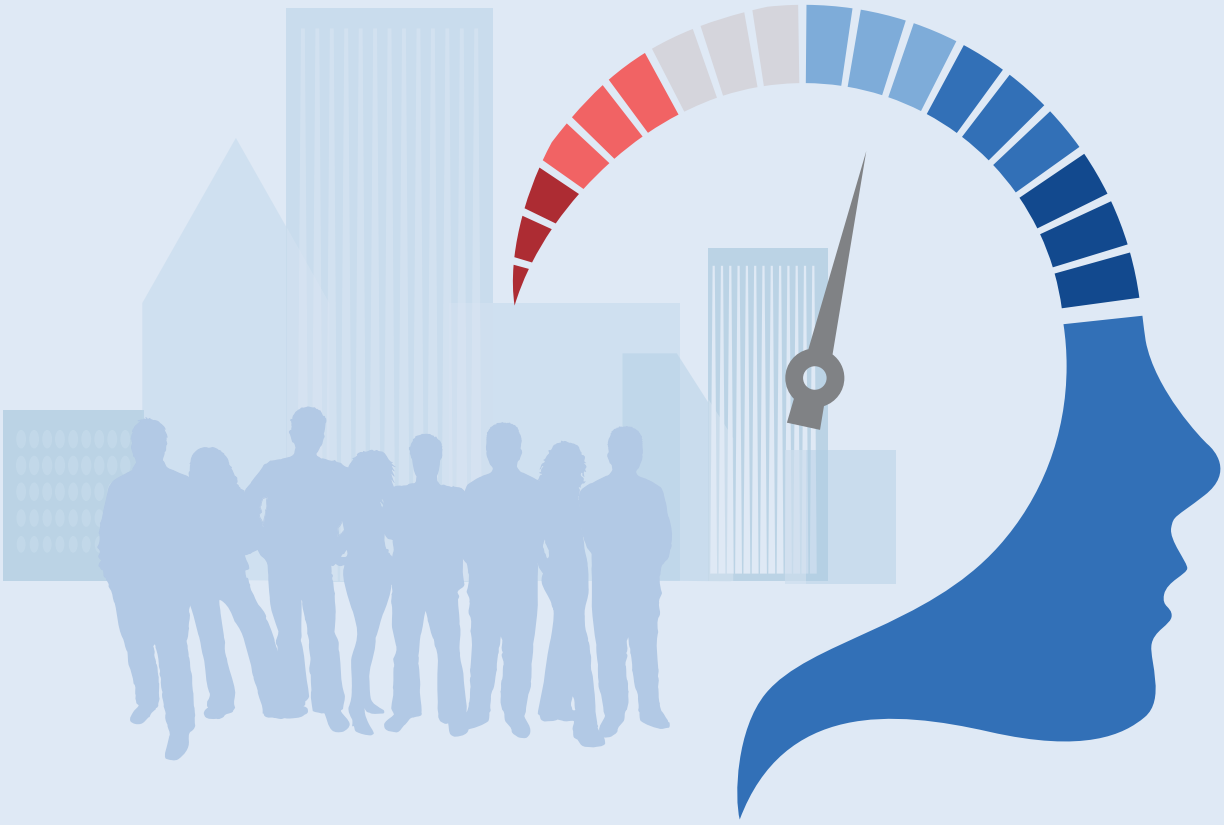


The Deteriorating Social Self in Younger Generations

Rapid Report

Mental Health Million Project

May 2022

Rapid Report

Executive Summary

In our recent Mental State of the World Report (2021), we showed that one of the most alarming trends was an increasing decline in the mental wellbeing of younger generations in the Internet-enabled population of virtually every country around the world. In this Rapid Report, we detail this decline further, and bring into focus the nature of mental health challenges that define it. We show that 16 aspects of mental wellbeing out of 47 elements captured were rated as having a severely negative impact on their ability to function by half or more of those age 18-24. Of these, 14 were substantially worse than older adults (ages 55+) by 2 points or more on the 9-point rating scale suggesting that these are the factors that describe the decline of younger generations. These include growing problems with (in order of magnitude): Unwanted, strange or obsessive thoughts; Feelings of sadness, distress or hopelessness; Suicidal thoughts, Mood swings; feelings of Guilt and self-blame; Confused or slowed thinking; Feelings of being detached from reality; and Avoidance and withdrawal, and conversely diminished Self-image, Self-worth and confidence, Relationships with others, Energy levels, Focus and Concentration and Emotional resilience. Altogether, the range of challenges in young adults point not just to declines in *Mood and Outlook* – as have been typically described – but to a substantial disintegration of the *Social Self*, an aggregate metric of how individuals see themselves and relate to others. We suggest that this diminished Social Self may have developmental origins associated with both a lack of sufficient social engagement and distorted social development arising from the large number of hours spent on the Internet. Altogether, we suggest that this mental health crisis cannot be viewed through the lens of traditional disorder definitions and advocate for a preventative approach that facilitates the healthy development of social behavior in future generations.

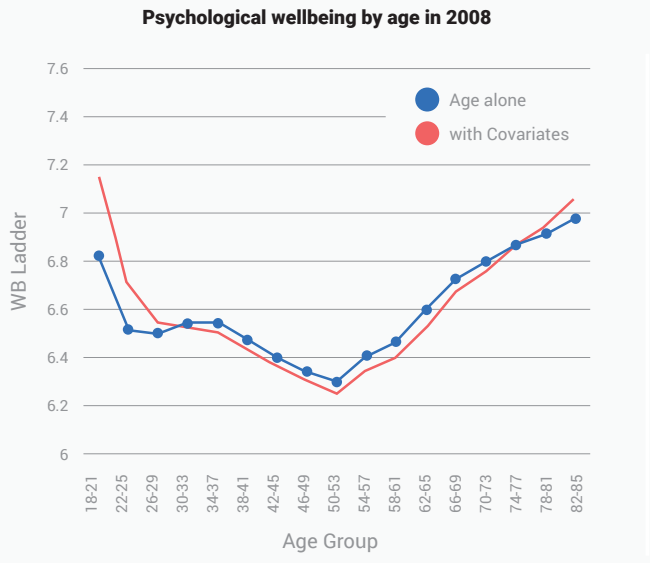
Introduction

In the early part of the twenty-first century, data suggested that adolescents and young adults had strong psychological wellbeing often doing better than the generations immediately above them and about as well as seniors. For example, Stone et al. (2010) reported 2008 data from the United States showing that late teens and young adults were on par with younger seniors in their mental wellbeing and better than those in their forties and fifties, representing a U-shaped curve of psychological wellbeing. However, since then, evidence indicating the beginning of a serious decline in the mental functioning of younger age groups has emerged. For example, Keyes et al. (2019) showed a decline in depression amongst adolescents from 1991 to 2011, but a reversal of that trend by 2018. In a nationally representative sample

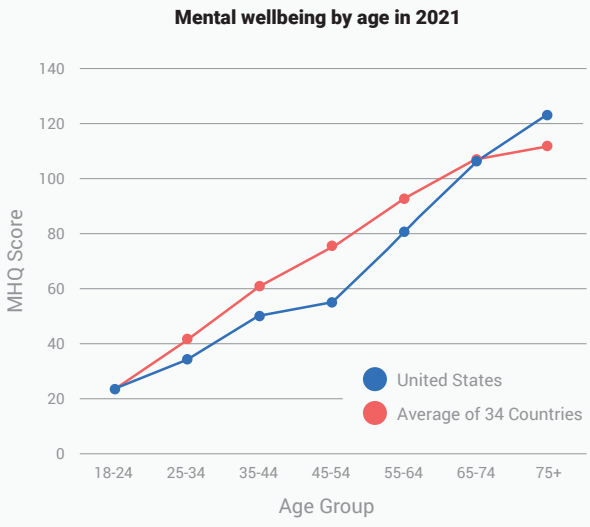
of U.S. adolescents and adults, Twenge et al. (2018a) discovered increasing rates of major depressive episodes from 2009 to 2017 and increased serious psychological distress and suicide-related outcomes from 2008 to 2017 among young adults ages 18 to 25. The authors did not find such increases among adults ages 26 and over. So also, in the recent Mental State of the World Report (2021), based on data from more than 223,000 people across 34 countries, we showed that one of the most alarming trends was an increasing decline in the mental wellbeing of young people in the Internet-enabled population of virtually every region of the world. In this Rapid Report, we detail the pattern of decline in the mental health of younger adults relative to older adults.

We show in Figure 1 a comparison of the global trends that we have outlined in the recent Mental State of the World Report (2021) along with a comparison of psychological wellbeing by age described in the United States in 2010 by Stone et al. The difference is stark. Where once young adults reported the best psychological wellbeing, primarily along dimensions of happiness and optimism, today they have a much darker mental wellbeing profile, substantially lower than every other age group across a multitude of dimensions.

Figure1: **A changing pattern of mental wellbeing by age**



Reproduced from Stone AA et al PNAS, 2010



* Note that the MHQ Scale goes from -100 to +200 where negative scores reflect a negative impact on life function.

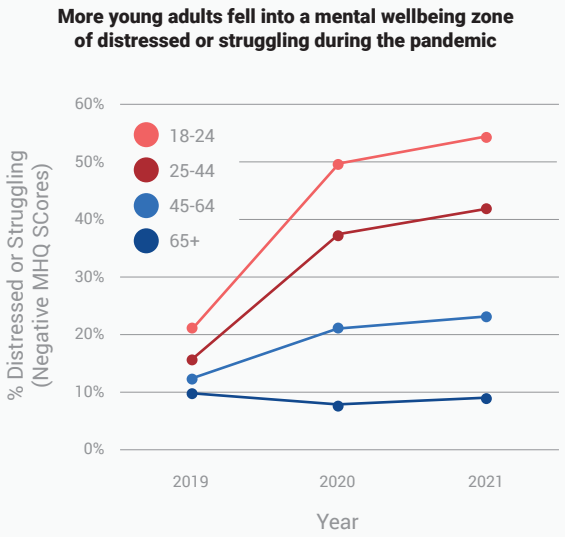
Here we outline the nature of the mental health factors that have seen the most substantial declines and are most significantly different compared to older adults. Altogether, in addition to challenges of Mood and Outlook our findings paint a picture of a disintegrating ***Social Self*** in young adults that includes a diminishing sense of self and increasing dissociation from our social fabric.

Key Results

The decline of mental wellbeing in young adults over the years

The Mental Health Million Project commenced in 2019 with a sample of a few thousand people across four major English-speaking countries (US, Canada, UK and India), growing to 223,000 across 34 countries in 2021. In 2019, prior to the COVID-19 pandemic, the fraction of young adults 18 to 24 who were struggling with their mental health in the four countries measured was 21%, already almost twice as high as those aged 45 and above (Figure 2). The onset of the pandemic dramatically amplified this difference with a huge increase from 21% to 50% among this cohort in 2020, followed by a smaller increase from 50% to 54% in 2021. In contrast, older adults 45 to 64 saw a smaller though still substantial increase, while those age 65 and older stayed fairly stable. Altogether this data shows a mental wellbeing gap between younger and older generations, already prevalent in 2019, that has been amplified by the pandemic.

Figure 2: **Change in mental wellbeing by age since 2019**



The major elements of mental health challenges in young adults

Aggregating across 48,033 responses in 2021 from young adults age 18-24 across 34 countries, in Figure 3.1, we show those factors rated by over half as problems that had an impact on their ability to function (median ratings >5 on the 9-point problem rating scale where 5 refers to ***Sometimes causes me difficulties or distress but I can manage*** and 9 is ***Has a constant and severe impact on my ability to function***). These included - in order of severity - ***Fear and anxiety***; ***Unwanted strange or obsessive thoughts***; ***Avoidance and withdrawal***; ***Guilt and self-blame***; ***Feelings of sadness, distress and hopelessness***; ***Mood swings;*** and ***a Sense of being detached from reality***. Conversely, aspects such as ***Hallucinations***, ***Aggression***, ***Physical health issues*** and ***Addictions*** were least problematic for young adults, with median ratings less than 3. Interestingly, only physical health issues were rated better by young adults compared to older adults.

Similarly, Figure 3.2 shows other factors rated on a spectrum scale that most young adults rated as detracting from their ability to function (median rating of <5 on the 9-point spectrum scale where 1 is ***A real challenge and impacts my ability to function effectively,*** 5 is ***Sometimes I wish it was better but it's OK,*** and 9 is ***It's a real asset to my life and my performance***). These include ***Sleep quality, Appetite regulation, Self-worth and confidence, Self-image*** and ***Focus and Concentration.*** In contrast, older adults generally rated these as OK or positive assets to their functioning (median ratings >5). Conversely, most

young adults rated their *Ability to learn* and *Empathy* as among the most positive to their functioning (median rating >6).

Figure 3.1: **Mental health challenges experienced by over 50% of young adults 18-24**

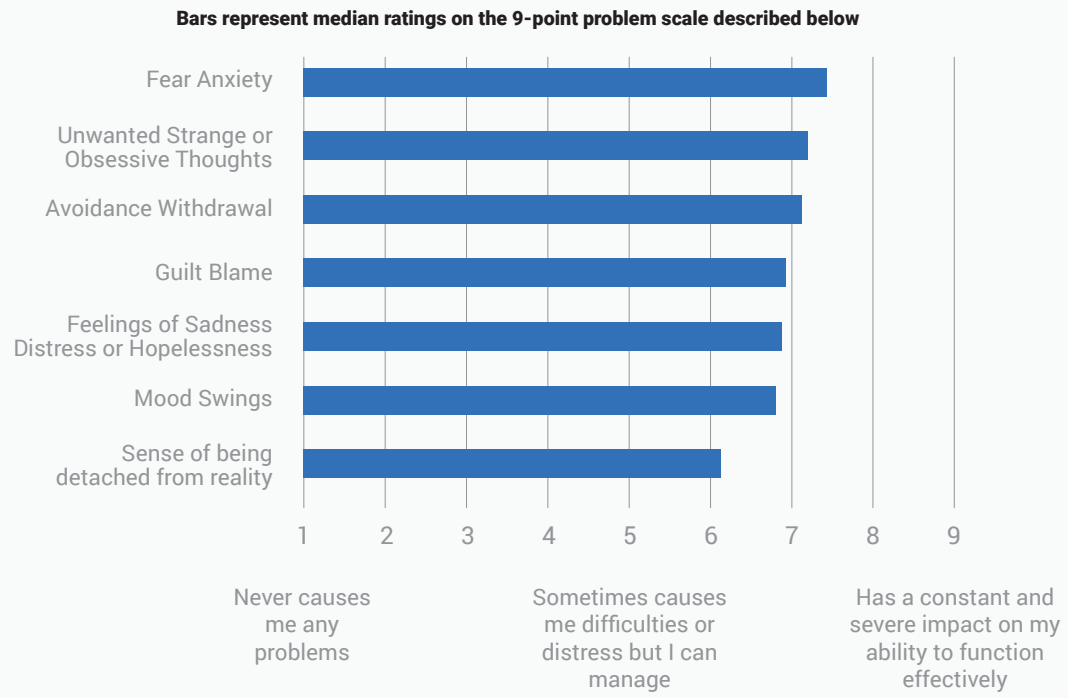
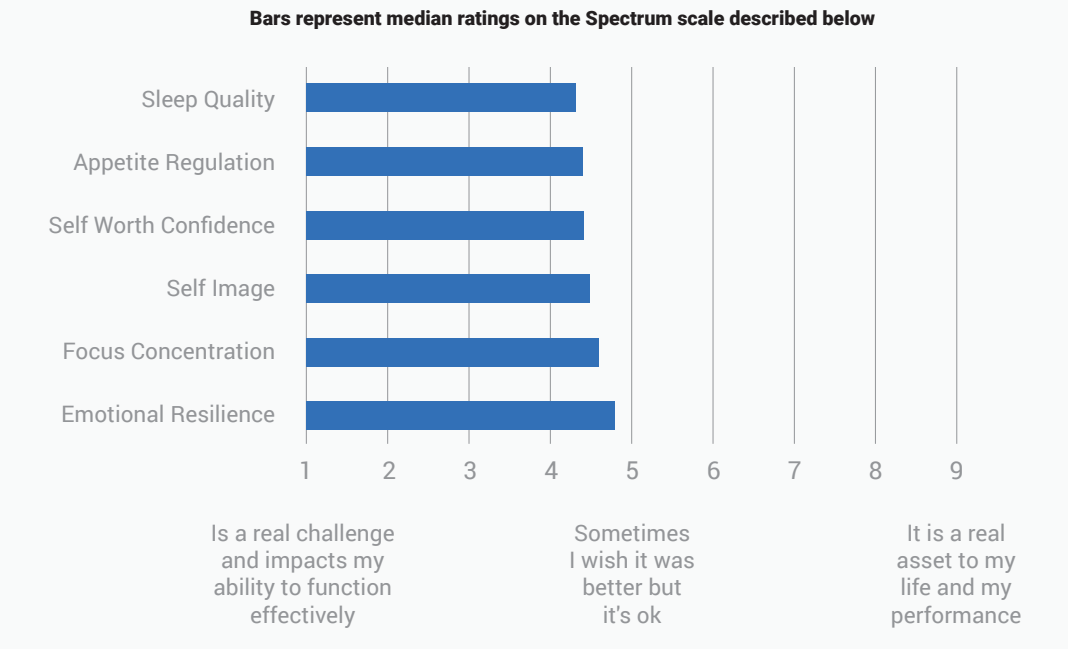


Figure 3.2 : **Diminished mental health assets in over 50% of young adults 18-24**



Mental health challenges most amplified relative to older generations

What are those factors that are most compromised in younger adults relative to their parents generation and older?

Figure 4.1: **Growing problems in younger adults relative to older generations**

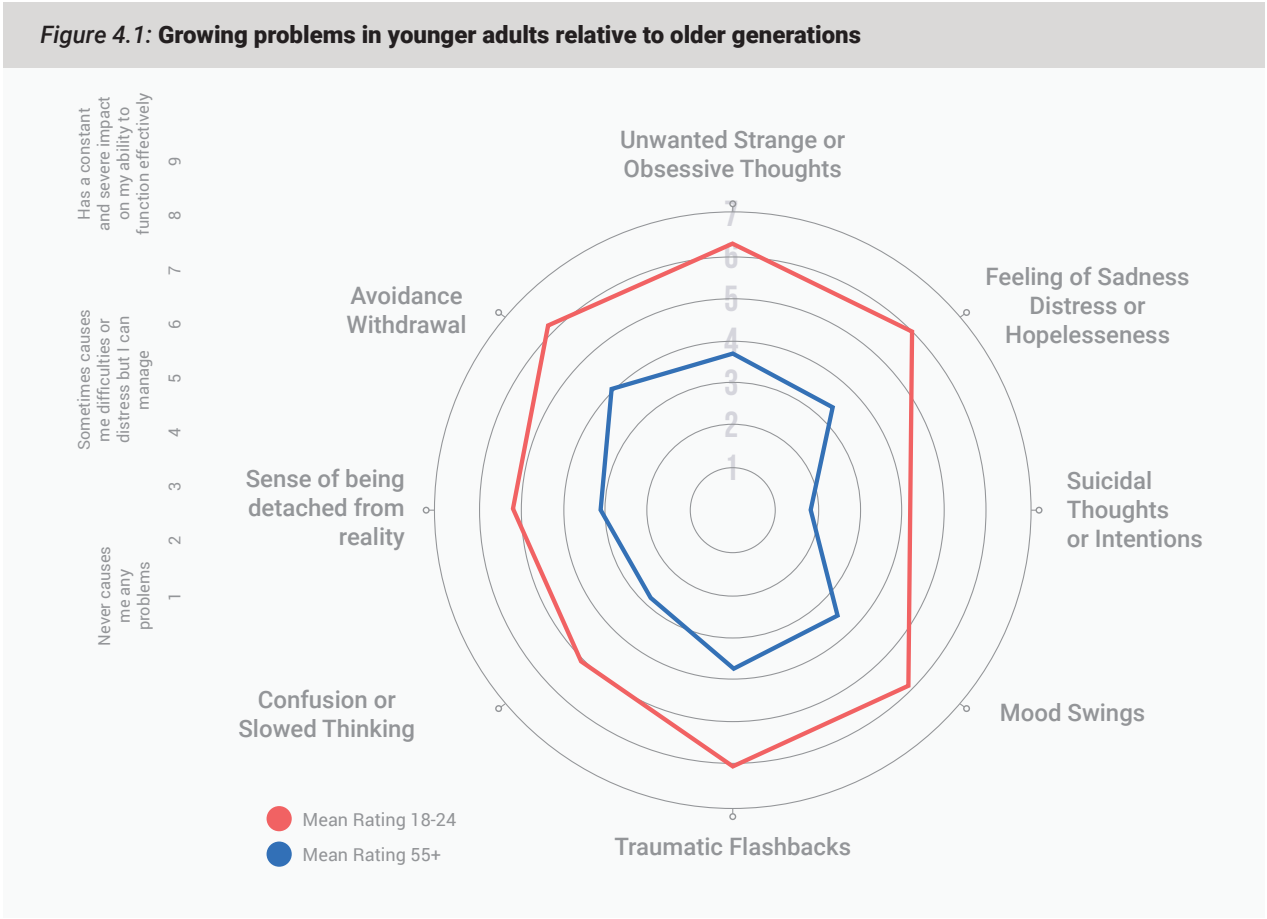
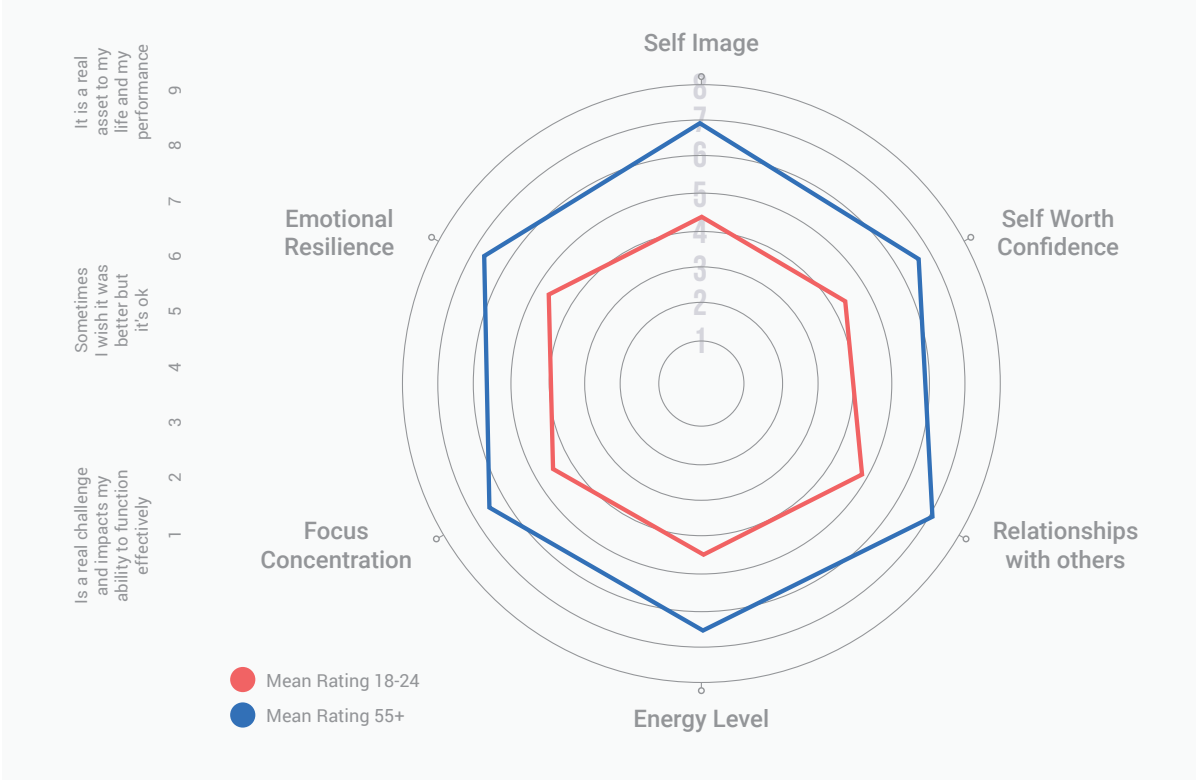


Figure 4.1 shows the mean or average ratings for those problems most amplified in young adults relative to older adults (ages 55+). In order of the magnitude of difference, these were ***Unwanted, strange or obsessive thoughts***; ***Feelings of sadness, distress, or hopelessness***; ***Suicidal thoughts***; ***Mood swings***; ***Guilt and self-blame***; ***Confusion or slowed thinking***, ***a Sense of being detached from reality;*** and ***Avoidance and withdrawal***. All of these had median ratings on the problem scale that were higher by 2 points or more in young adults relative to older adults. While many of these also represented aspects that were most problematic for the majority of young people (as shown in Figure 3.1), others such as ***Suicidal thoughts*** and ***Confused or slowed thinking*** were not rated as problematic by the majority of young adults but nonetheless were substantially higher for younger adults.

Similarly, those factors on the spectrum-scale where ratings were substantially worse or diminished in young adults compared to older adults (a difference of >2 points on the 9-point scale) were ***Self-***

Figure 4.2: **Diminishing capabilities and assets in younger adults relative to older generations**



image, *Self-worth and confidence*, *Relationships with others*, *Energy level*, *Focus and concentration,* and *Emotional resilience*. These same factors were also the greatest challenges for the majority of young people. In contrast the majority of older adults rated these factors positively, as being an asset.

A breakdown of the Social Self in young adults

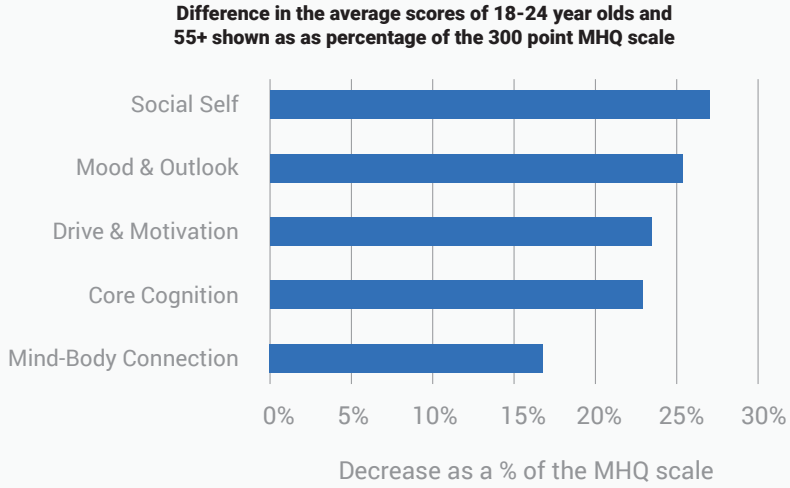
Altogether, across the 47 elements of the MHQ, many of those that were the greatest challenge to the majority of young adults, concerned how people see themselves in relation to others and how they feel about where they belong within the social fabric. Correspondingly, the *Social Self* score, an aggregate metric that describes how we see ourselves and interact with others, was lowest compared to all other dimensions of mental wellbeing (Figure 5.1). The *Social Self* dimension also showed the biggest decline relative to older generations ages 55+, at 27% lower down on the MHQ scale (Figure 5.2). We note that this was also the dimension that declined most substantially over the pandemic. A close second was the dimension of *Mood and Outlook*, where scores were only a few points higher than *Social Self* with a decline of 25% compared to older generations.

In contrast, young adults fared better on the dimensions of *Drive & Motivation*, *Cognition*, and *Mind Body Connection*, although they still scored lower on these than did older adults. The decline relative to older adults was least for *Mind Body Connection* (17%), a dimension that aggregates the physical problems that often manifest with mental health challenges.

Figure 5.1: **Dimensional scores in young adults 18-24**

* All dimensional scores are on a scale from -100 to +200 where negative scores represent a significant negative impact on life function

Figure 5.2: **Differences in mental wellbeing dimensions of young adults relative to older adults**



Putting these findings in perspective

Beyond Depression and Anxiety

For at least the last five years, there has been a deterioration of the mental health of successively younger generations. However, previous studies have largely focused on depression and anxiety, which neglects some of the most significant symptoms experienced by this population. The constellation of serious symptoms experienced by young adults do not, in the aggregate, map to any one disorder as defined by the DSM. Instead, they represent symptoms associated with many disorders (e.g., Obsessive, strange, and unwanted thoughts can be associated with anxiety disorders, psychotic disorders, PTSD, etc.). It is therefore misleading to conceptualize the problem in terms of these diagnostic categories. One significant advantage of the MHQ is that it provides a comprehensive view of the various elements of mental function and goes beyond specific diagnostic criteria to provide a dimensional view. This data shows that in addition to challenges of depression and anxiety (the dimension of ***Mood & Outlook***), many of the challenges that dominate young adults relate to how they see themselves in relation to others and how they relate to others, i.e. the ***Social Self***. Correspondingly, the ***Social Self*** metric was most compromised in young adults age 18 to 24 relative to older generations in a trend present already by 2019 but amplified during the pandemic in correlation with the stringency of lockdowns and the corresponding social isolation (Newson JJ et al, 2022). These findings suggest that the decline of mental health in younger generations may reflect an increasing failure of young people to develop a strong Social Self.

Understanding the Social Self

Social functioning is correlated with various aspects of mental and physical health (e.g., Cruwys et al., 2014; Holt-Lunstad et al., 2010; Kawachi & Berkman, 2001; Maher et al., 2017; Perkins et al., 2015; Segrin, 2019). More importantly, the ability to relate to and interact with others effectively has been crucial for human cooperation and the building of our modern world. The breakdown of this capability such that it is seriously impaired in over half of young adults across the world therefore has serious consequences for the future of society.

Social interaction involves a complex set of functions: reading facial expressions and body language to assess intent, learning to respond appropriately within social norms, regulating one's emotions and more. While the capacity for social behavior may be an innate human trait, as is the capacity for language, it requires practice to get to a place where we are confident in our ability to handle social situations of all kinds. It is also only through repeated interactions with others that we build the friendships and other relationships that establish our place in the social fabric. From feeling detached from reality to avoidance and withdrawal and suicidal thoughts, these symptoms represent the extreme of disconnection from or a failure to integrate into the social fabric.

The Internet and the Social Self

Why would the *Social Self* be in such decline? A big part of the answer is likely the Internet, which has seen a meteoric rise along with smart phones since 2010. Data now shows that around the world people spend 7 to 10 hours a day on the Internet. This leaves little time for in-person social interaction with friends and family. Where once children spent several hours a day engaged in in-person social interaction, adding up to, in our estimation, 10,000 to 25,000 hours by the time they reached adulthood, for generations growing up in the Internet world that number is likely closer to 5,000 and for some, even as low as 1,500. The lack of sufficient social engagement may even have neurobiological consequences. In rhesus macaque monkeys for instance, the size of specific brain structures increases with more direct affiliative social connections (Testard et al., 2022).

There is also the distortion of social perceptions by the Internet where adolescents compare themselves to a virtual reality that does not match our physical reality. Furthermore, the virtual medium may not effectively engage the neurobiological systems designed for pro-social behavior. The human mirror neuron system, thought to support the learning and development of social behavior by enabling brain-brain dyads of observational learning and imitation may not function effectively, if at all, in the virtual environment (Dickerson et al., 2017). For example, adults demonstrate poor emotional fluency while using video-based communication systems compared to in-person behavior.

Indeed, several studies with adolescents and young adults have shown the amount of time spent on a digital device (i.e., screen time) is correlated with poorer social skills (e.g., Kelly et al., 2018; Twenge et al.,

2018). Furthermore, consistent with what we show here, these same studies have also found that more social media use was associated with poor sleep, poor body-image, and low self-esteem, lower self-control, more distractibility, more difficulty making friends, less emotional stability, being more difficult to care for, and inability to finish tasks. Twenge et al. (2018b) also found that increases in adolescent depression and suicide rates between 2010 and 2015 were greatest for those who were most active on "new media" (e.g., social media and electronic devices such as smartphones) and that adolescents who were on social media at least 7 hours a day were more than twice as likely than those who used social media less often to have been diagnosed with depression and/or anxiety in the past year. Many studies of young adults have also shown significant positive associations between frequency of social media use and mental health issues, including depression and anxiety (Lin et al., 2016; Primack et al., 2017; Shensa et al., 2017).

Tackling the source with a preventative approach

While there is substantial momentum around reducing stigma and increasing access to psychiatric treatment and counseling services, the scale and profile of mental health deterioration calls for a more long-term preventative approach. If indeed the deterioration of the Social Self reflects both a developmental deficit and/or distortion of the development of social behavior, it will not be easily solved with medication or therapy. While acute challenges or episodes may be managed in this way, the scale of the challenge and the consequences for society are too significant to manage or solve post facto. Rather, solving the crisis will require enabling the social environment and engagement required for proper development of the Social Self. This could include things such as restricting the use of smart phones during school hours, facilitating Internet-free forums for young people to engage with one another, as well as providing early education on how to appropriately navigate and manage one's behavior on the Internet.

While we acknowledge that much still needs to be understood, the urgency and pace of the generational deterioration of the *Social Self* and mental wellbeing in general calls for rapid action. Altogether, we suggest that this mental health crisis cannot be viewed through the lens of traditional disorder definitions, and advocate for both research and regulatory attention to understanding and facilitating the healthy development of the *Social Self* in future generations.

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