SPOTLIGHT 3.1

The decline in young people's mental wellbeing in some parts of the world

Human Development Report Office; David G. Blanchflower, *Dartmouth College;* **Alex Bryson,** *University College London;* **Tara Thiagarajan,** *Sapien Labs;* **Jennifer Newson,** *Sapien Labs*

Until recently, one of the well-established empirical regularities in the social sciences was that subjective measures of wellbeing (such as happiness) followed a U-shaped pattern with age: younger and older people reported higher wellbeing than those in middle age (late 40s to early 50s).[1] Conversely, illbeing (such as despair) followed an inverted-U pattern with age. This empirical regularity was reported in more than 600 published papers documenting its presence in about 145 countries at all income levels.[2]

But around the end of the first decade of the 21st century, this empirical regularity started to unravel, according to a variety of metrics in some parts of the world—particularly in very high Human Development Index (HDI) countries.[3] In the United States wellbeing, measured by life satisfaction, now increases continuously with age (top panel of figure S3.1.1), and reported despair is higher among young people (bottom panel of figure S3.1.1).[4]

Another important change is the difference in the rate of deterioration in wellbeing between young women and young men. While young women have historically reported higher despair than young men in the United States and both groups have reported increased despair since around 2010, the rate of increase has been higher for younger women (figure S3.1.2).

Although results depend, in part, on the types of questions and survey methods,[5] the decline in young people's mental wellbeing does not appear to be universal. For example, there is little evidence that the age structure of wellbeing has changed in Africa over the past decade.[6]

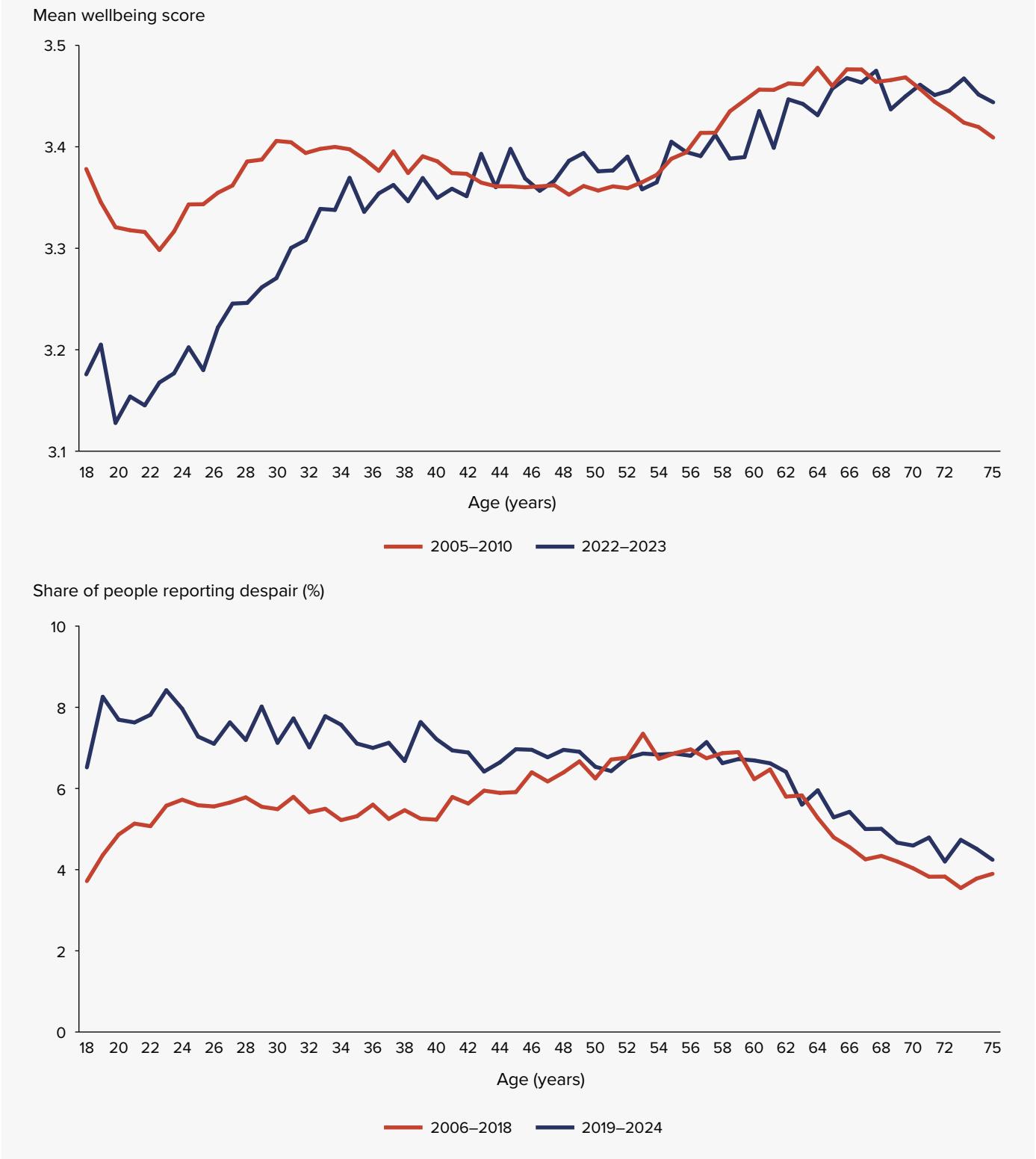
Researchers and policymakers are still trying to determine the reasons behind the changes in some countries and the seeming lack thereof in others. The figures below show that where changes in the wellbeing curve have occurred, they parallel greater smartphone use, leading to hypotheses that some of the documented negative effects of excessive social media use could be driving increases in anxiety, depression and loneliness.[7] Intense smartphone use and deteriorating wellbeing among young people could be linked through a range of mechanisms (box S3.1.1), including constant social comparison[8] and cyberbullying.[9] Poor sleep quality, driven by addictive features, can further impair wellbeing, and the shift from in-person to digital interactions seems to have delayed social and emotional development, increasing feelings of isolation.[10] Also under investigation is whether something intrinsic to social media use is harmful or whether harms emanate from the recommender systems in digital platforms optimized for engagement.[11] Other factors might have also contributed to this dramatic change. A better understanding of mental health issues has led to less stigma, more use of mental health services and thus higher reporting rates.[12] Reduced independence and free play have weakened coping skills,[13] while overprotection and the rise of "safetyism" are making young people more vulnerable to distress.[14]

Smartphones came to prominence in many countries around the time that mental wellbeing among young people began to decline.[15] The rise in poor mental health among young people precedes the Covid-19 pandemic by some years, though the pandemic may have exacerbated the trend.[16] Some studies suggest the trend goes all the way back to the late 1990s,[17] whereas other studies emphasize the uptick in mental illbeing from around 2011.[18]

How widespread is this change, and is it really caused by excessive smartphone use?

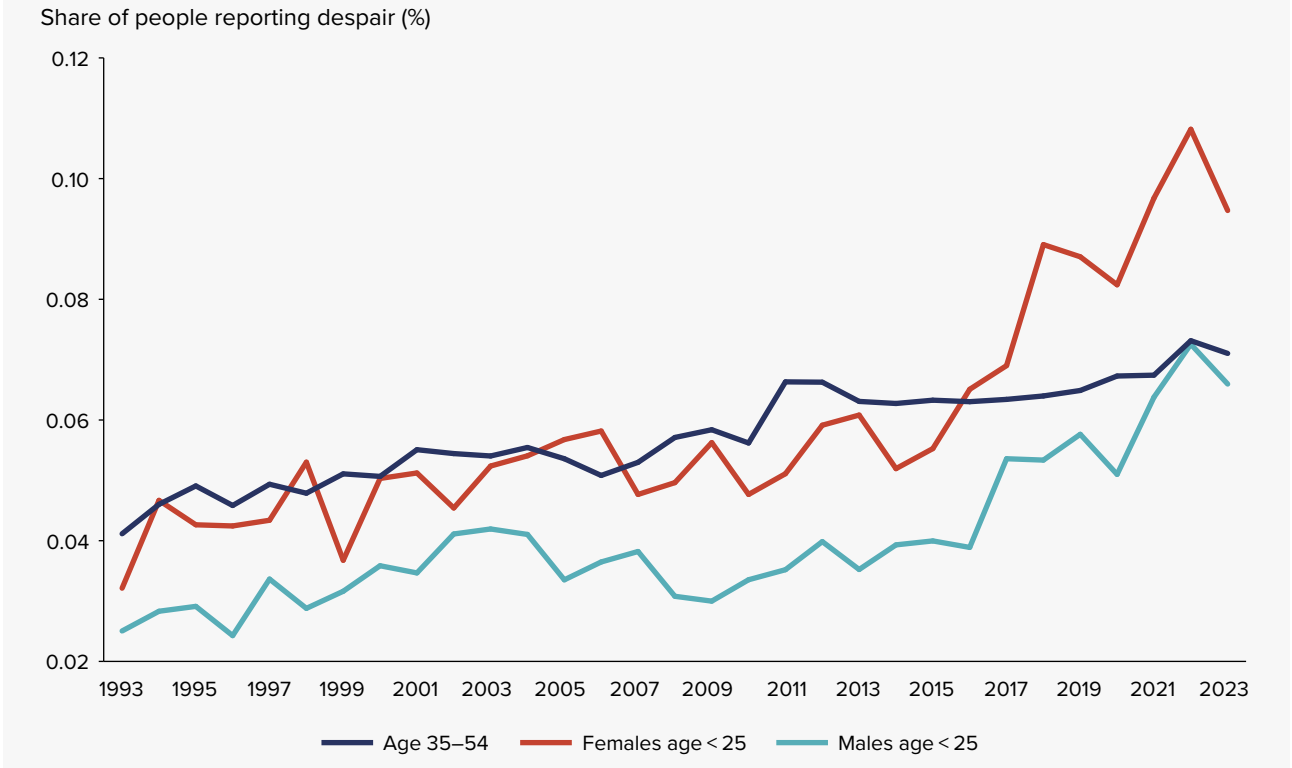
The shift is not consistent across all datasets or across all dimensions of subjective wellbeing.[19] It is particularly evident in some very high HDI countries[20] and less pronounced or nonexistent in lower HDI countries (with a few exceptions, such as specific surveys in Mexico).[21] This information is telling, considering that most young people in low-income countries are not yet using the internet (see box figure 1 in box 3.3 in the chapter). And detailed case studies

Figure S3.1.1 Declining wellbeing, rising despair among young people in the United States



Note: Mean wellbeing scores are based on responses to the question, "In general, how satisfied are you with your life?" Responses were given on a four-step scale (very dissatisfied = 1, dissatisfied = 2, satisfied = 3 and very satisfied = 4). Share of young people reporting despair is the percentage of young people who responded 30 to the question, "Now thinking about your mental health—which includes stress, depression and problems with emotions—for how many days during the past 30 days was your mental health not good?"
Source: Blanchflower and Bryson (2024c) using data from the US Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System.

Figure S3.1.2 Increase in despair in the United States since 2010, especially among women



Source: Blanchflower 2025c.

Box S3.1.1 Connected or disconnected? Exploring possible mechanisms between smartphones and mental wellbeing

Social comparison. Wellbeing is determined not only by what people have but also by how much they think they have relative to others. Well-established in the literature on income and earnings,[1] this extends more broadly to other settings, such as friendship groups and social activity. Smartphones provide regular updates on how others are doing, and young people may perceive their own world as lacking.[2]

Direct impact on brain function. The addictive effect of smartphones is akin to the user returning continually for another "fix," creating a dopamine response in the brain. Smartphone use can then become an end in itself, with the wellbeing response dependent on more intensive usage. The links between smartphone dependency and mental wellbeing are yet to be fully established, but smartphone addiction could have adverse impacts on behaviours and response mechanisms.[3]

Displacement. The addictive component may cause smartphone use to replace other activities more conducive to mental and physical health, such as maintaining "real" social networks and engaging in social activities outside the home, such as sport and art.[4]

Information overload. Relying on smartphones to perform numerous functions increases screen interaction. For some people, especially young ones,[5] some applications can result in information overload, which can be overwhelming and produce anxiety and stress.[6]

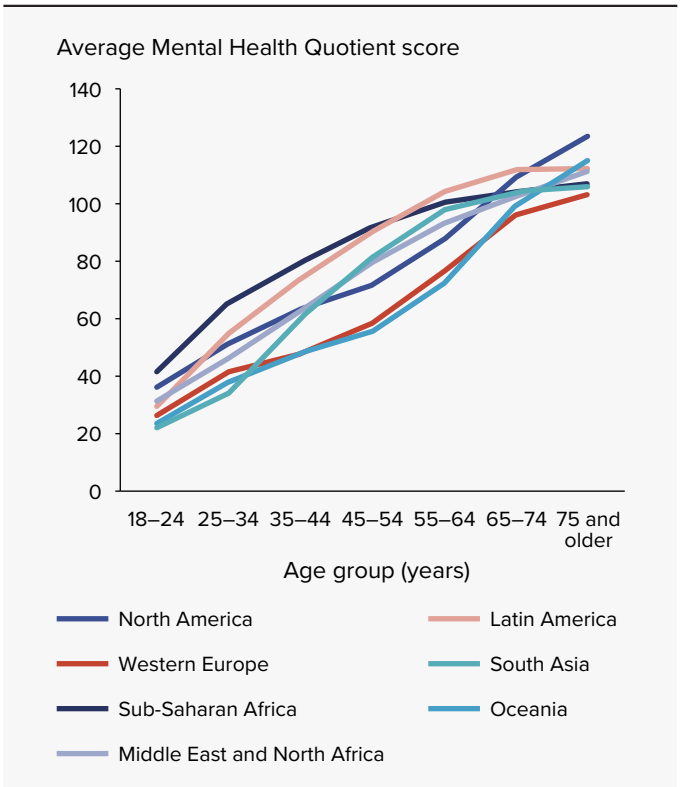
Cyberbullying. The internet extends into a virtual world that is difficult to police. So, smartphone users can be subject to intimidation and bullying, often continually in real time, making it difficult to "hide." This could have a direct adverse impact on individual wellbeing.[7]

Notes
1. UNDP 2019. **2.** Aubry, Quiamzade and Meier 2024; Braghieri, Levy and Makarin 2022; Faelens and others 2021; Irmer and Schmiedek 2023; McComb, Vanman and Tobin 2023. **3.** Lembke 2021. **4.** Bone and others 2022; Fluharty and others 2023. **5.** Benselin and Ragsdell 2016. **6.** Bawden and Robinson 2020; Matthes and others 2020. **7.** Peebles 2014; Thiagarajan, Newson and Swaminathan 2025; Zhu and others 2021.

have found an association between diffusion of the internet and deterioration in young people's mental wellbeing.[22]

The story becomes even clearer in a global survey that includes only people with internet access. Although the survey samples were not representative of the population, in every country that participated, across all regions, mental wellbeing is lowest for young adults and increases with age (figure S3.1.3). Among the global internet-enabled population, 45 percent of young people ages 18–24 struggle with mental wellbeing at a level that has functional consequences and with symptomatic distress that would be considered of clinical concern.[23]

Figure S3.1.3 Young internet users are struggling everywhere



Note: The MHQ score encompasses 47 aspects of mental function assessed on a life impact scale that spans six dimensions: Adaptability and Resilience, Cognition, Mind-Body Connection, Mood and Outlook, and Social Self. Higher values indicate better perceived mental wellbeing. The survey was conducted during 2020–2024.
Source: Thiagarajan, Newson and Swaminathan (2025) using data from the Global Mind Project at Sapiens Lab.

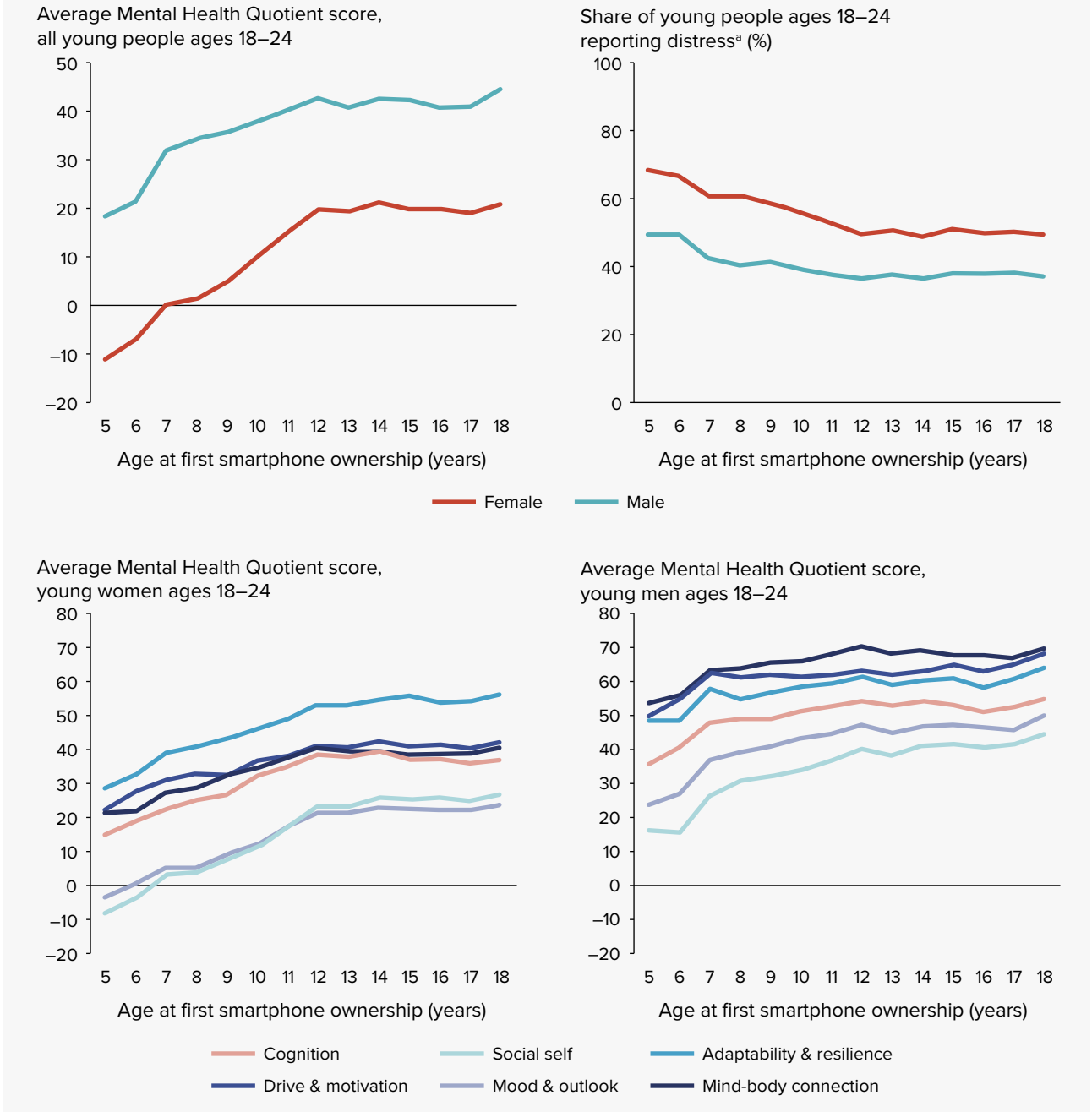
The age at which young people first own a smartphone appears to matter. Among 18- to 24-year-olds today, those who had a smartphone before age 13 show significantly worse mental wellbeing and a higher likelihood of being distressed or struggling than those who received their first smartphone later (top panels in figure S3.1.4). The effects are most pronounced among women and young people who first owned a smartphone at age 5 or 6. Nearly 70 percent of young women and 50 percent of young men responding to the survey now report distress and struggling. By contrast, among those who first owned a smartphone at age 13, the values drop to 51 percent for women and 38 percent for men.

The most affected areas are the social self—a dimension of wellbeing that reflects self-perception and the ability to relate to others—and mood and outlook. The younger the age at first smartphone ownership, the greater the decline in this fundamental aspect of mental wellbeing (bottom panels in figure S3.1.4).

The relationship between age at first smartphone ownership and mental wellbeing is visible in internet-enabled survey respondents across all countries and regions. It appears for both young men and young women but is much stronger for women. Women not only experience a greater drop in wellbeing with younger ages of smartphone ownership but also consistently have lower wellbeing than men overall.

As digital technologies play a larger role in childhood and adolescence and AI-powered applications widen their reach, these findings underscore the need for deeper reflection about the specific mechanisms that cause harm, the risks associated with current AI applications (for instance, recommender systems optimized for engagement based on online behaviour) and the potential for drawing on the new affordances of AI, along with other measures, to mitigate the risks of harm. This agenda, crucial everywhere, is important particularly in countries and settings where digital technologies have not yet diffused as widely, so that societies can be ahead of the curve and harness these technologies to advance human development instead of hindering it.

Figure S3.1.4 The age at first smartphone ownership appears to matter for mental wellbeing



a. Distress is indicated by a Mental Health Quotient score below 0.
Note: The MHQ score encompasses 47 aspects of mental function assessed on a life impact scale that spans six dimensions: Adaptability and Resilience, Cognition, Mind-Body Connection, Mood and Outlook, and Social Self. Higher values indicate better perceived mental wellbeing. The survey was conducted during 2020–2024.
Source: Thiagarajan, Newson and Swaminathan (2025) using data from the Global Mind Project at Sapiens Lab.

NOTES

1. Blanchflower 2021.
2. Blanchflower 2025b.
3. Blanchflower, Bryson and Xu 2024.
4. Twenge and Blanchflower 2025.
5. Blanchflower 2025a.
6. Blanchflower and Bryson 2024b.
7. Social media can amplify outrage, status seeking and group conflict but also has the potential to support prosociality and collective action (Van Bavel and others 2024). Its use can have some benefits, such as enabling people to access more targeted content, goods and services that cater to their interests, facilitating access to the labour market by recent college graduates (Armona 2023) and enabling greater opportunities for expression and for creators to disseminate their work (Aridor and others 2024).
8. Aubry, Quiamzade and Meier 2024.
9. Blanchflower and Bryson 2024a.
10. Braghieri, Levy and Makarin 2022; Carter and others 2024; Faelens and others 2021; Huang and others 2023; Irmer and Schmiedek 2023; Khalaf and others 2023; McComb, Vanman and Tobin 2023; Stuart and Scott 2021; Scott, Stuart and Barber 2021, 2022; Twenge and others 2020.
11. Lewandowsky, Robertson and DiResta 2024. The purpose of social media use (to access information, to seek entertainment or to express oneself) also matters (Qiao, Liu and Xu 2024).
12. Corredor-Waldron and Currie 2024.
13. Haidt 2024.
14. Lukianoff and Haidt 2019. Evidence is from the United States.
15. Blanchflower 2025a; Blanchflower and Bryson 2024c; Blanchflower and others 2024.
16. Blanchflower, Bryson and Bell 2024. This seems to be the case for the United Kingdom but not for the United States (Blanchflower, Bryson and Xu 2024).
17. Blanchflower, Bryson and Bell 2024.
18. Blanchflower, Bryson and Xu 2024.
19. Blanchflower and Bryson 2025.
20. Twenge and Blanchflower 2025.
21. Blanchflower and Bryson 2024b, 2024c, 2025.
22. For the case of Italy, see Donati and others (2022).
23. Thiagarajan, Newson and Swaminathan 2025.