Social Indicators Research (2026) 185:11
https://doi.org/10.1007/s11205-026-03890-0

ORIGINAL RESEARCH

Global Mental Wealth: A Multidimensional Analysis of Social, Financial, and Emotional Well-Being in 92 Countries

Kai Ruggeri[1,2] · Guillermo Valenzuela-Catari[3] · Elli Polemiti[4,5] · Galla Abderahaman[6] · Taha R. Adawi[7] · Talar Agopian[8] et al. *[full author details at the end of the article]*

Received: 18 February 2026 / Accepted: 9 July 2026
© The Author(s) 2026, modified publication 2026

Abstract
Governments and organizations increasingly endorse the importance of mental health in all forms of policy, though emphasis in measurement still remains on indicators such as GDP, depression, and other common disorders. In this study of 92 countries (n=53,799), we assess the mental health of individuals around the world alongside measures of financial and social well-being. Findings include a trend of languishing mental health across many groups, particularly among younger adults and within higher-income countries. While positive trends are observed for education and income, a number of concerning trends also emerge, particularly the poor results for young adults and generally moderate results for employed individuals. In sum, we find an alarming but perhaps unsurprisingly low level of positive mental health in a substantial number of countries, but also identify specific economic, social, and other indicators that policymakers could target in improving the well-being of the populations they serve.

Keywords: Well-being · Mental health · Financial well-being · Economic stability · Depression · Mental wealth

1 Introduction

The well-being of individuals, communities, and entire populations is the most critical goal of the governments, policies, and institutions meant to support them. Improving mental health and well-being is associated with better economic outcomes (Santini et al., 2022), national stability (DeKay, 2023), and economic performance (Chisholm et al., 2016), among many positives. Additionally, investments toward better mental health can yield substantial returns. Yet, while GDP, security, education, health and longevity, and employment are all

In memoriam

This study was carried out and written in memory and honor of Prof Felicia A Huppert, who for decades fought – sometimes literally – for mental health to be treated with the importance it has recently begun to receive. Her fight, often against individuals and institutions who have since endorsed that view and now receive funding to carry forward that work, was simultaneously underappreciated and overly impactful. The blunt tone in which this manuscript has been written is done in hopes that it reflects the unapologetic way in which she fought for this truth – academic, respectful, but unrelenting on principle. Felicia passed away shortly before this work was initiated but was informed the day before her death that it would be carried out in both her name and honor.

Extended author information available on the last page of the article

vital for governments and leaders to understand and utilize (Occhipinti et al., 2023), they each function as means to an end: the well-being of the populations they reflect.

As the world goes through perpetual and accelerating socio-technological change, economic turmoil, and conflict, as well as the reconfiguration of systems following a global pandemic (European Environment Agency, 2015; Vogels, 2021), understanding how people are doing globally can signal strengths, areas of concern, and potential levers for change. Additionally, because well-being can be understood as both a mental-emotional construct as well as the result of objective indicators (Gautam et al., 2024) such as employment and longevity, multidimensional approaches are necessary to capture each of those aspects in as wide a sample as is possible.

Given recent global changes, it is unsurprising that well-being has fluctuated considerably of late compared to the recent past. For example, 162-country data from 2009 to 2019 indicated generally stable average levels of multidimensional well-being, while existing gaps between certain groups (e.g., income, education) widened in some areas, such as health and life satisfaction (Shiba et al., 2022). However, multiple studies identified significant declines in mental health during 2020–2021 (VanderWeele et al., 2021), with recovery only beginning in the late stages of the pandemic but remaining on a generally declining trend (Daly & Macchia, 2023; OECD, 2024; Zaninotto et al., 2025).

1.1 Mental Health and Well-Being

Mental health itself is defined, studied, and reported in numerous ways that are the subject of intense debates (Wren-Lewis & Alexandrova, 2021). These debates can be as broad as how conceptualization and measurement should (or should not) vary based on region, population, or language, or as narrow as the precise parsing of individual words used in survey response options. However, there are two aspects of mental health that appear almost universally in related studies, policy reports, and debates:

1. Mental health is a fundamentally critical aspect of life for all humans and populations that should be measured, supported, and promoted to positive ends.
2. Mental health is both a factor and an outcome – perhaps the most important outcome – for all aspects of public and private life around the world.

There are also broadly – but not necessarily universally – agreed ways to approach the study of mental health. Perhaps most critically, it is the view that mental health is essentially synonymous with well-being, exists on a continuum, and should be considered multidimensional (Diener et al., 2010; Keyes, 2002; Marsh et al., 2020). Such points may come across as excessively academic. However, it is highly applied and consequential: measuring mental health as a single indicator such as happiness or life satisfaction, or simply inferring mental health from the absence of mental illness, produces insights that leave little direction for comprehensive understanding that would support interventions (Huppert, 2014). In blunt terms: to measure mental health appropriately and in a way that can be used for impact, we must measure all relevant dimensions, not only general or popular ones that get headlines but cannot indicate what or how to improve (Huppert & So, 2013).

Expanded, multidimensional, and multi-indicator studies of mental health are vital to inform almost all matters of public interest. While the World Health Organization (WHO) has recognized the central role of mental health since its inception in 1948, emphatic government support toward recognizing this was relatively minimal until the start of the twenty-

first century. Following major reports such as the UK's 2006 Depression Report (Layard & CEP Group at LSE, 2006), No Health without Mental Health (Prince et al., 2007), Mental Wealth of Nations (Beddington et al., 2008), and the Stiglitz-Sen-Fitoussi Commission (Stiglitz et al., 2009), governments increasingly acknowledged the central importance of mental health in everyday life, not just as a medical concern for psychiatrists. With that momentum came more recent calls for and commitments to factoring in the impact of mental health across all policy domains (The Lancet Psychiatry, 2025).

Focus has unfortunately centered on common mental disorders such as depression, stress, and anxiety (de Oliveira et al., 2023). This is unsurprising in treatment-focused healthcare systems, yet resulted in underinvestment and research visibility for understanding and emphasizing positive aspects of mental health or how to promote them (Mahomed, 2020). Furthermore, ambiguity in terminology has allowed the rise of pseudoscientific, non-expert voices on "wellness" approaches that largely promote non-validated products and services with no established link to genuine mental health or well-being (Stea & Hupp, 2023).

1.2 Pervasive Semantic Failures of "Mental Health" and "Well-Being"

On mental health, semantics are vital. The term "mental health" itself should never be used synonymously with mental illness (Wren-Lewis & Alexandrova, 2021) and the absence of mental illness is not the equivalent of good mental health (Huppert, 2009; Tamnes et al., 2025). Likewise, "mental health prevention" should never be a goal (Huppert & Ruggeri, 2018). Unfortunately, references to "mental health" when discussing illness and disorder is systematic and widespread. Even the WHO, whose guiding charter explicitly stresses that health is more than the absence of illness, continually refers to "mental health conditions" in focusing solely on illness and disorder – none on measurement of positive mental health – in their most recent global assessment (WHO, 2025a, 2025b).

These arguments are not pedantic: illness should be prevented or treated; health should be protected and promoted. All individuals exist somewhere on the mental health continuum (Mason-Stephens et al., 2025). Poor mental health must be addressed earnestly, while positive mental health should be actively nurtured and made achievable for others. Effective, evidence-based ways to enable positive mental health should be highlighted and replicated where possible.

There are, however, some conceptual ambiguities in the taxonomy and semantics of mental health. A key debate concerns the extent to which positive and negative mental health exist on the same continuum, on dual continua (Khumalo et al., 2022), or on somewhat-overlapping ones (Tamnes et al., 2025). Such inferences have multiple concerns, not least being that they lead to different conclusions about individuals and populations if looking at only one (Blanchflower & Bryson, 2022). Another concerns whether "well-being" can be treated as synonymous with "mental health" (Wren-Lewis & Alexandrova, 2021) or whether it represents a broader construct encompassing, but not reducible to, mental health (Diener et al., 2010; OECD, 2024).

1.3 Multiple Measures Across many Populations are Necessary

The purpose of recruiting reliable, diverse, and substantial population samples is not simply to capture headlines about who is happiest, most depressed, or to compare geopoliti-

cal rivals. Collecting like measures across populations is instead critical for explicitly and empirically identifying strengths, weaknesses, and indicators of effect that could be levers for policy impacts (Nees et al., 2024). To reiterate: multiple dimensions in such measurement are required (Allin & Hand, 2017); as indicated later (Fig. 3), single measures can make two highly dissimilar countries appear indistinguishable while also failing to identify any useful mechanisms for improvement (Ruggeri et al., 2020).

These points may seem especially academic but are, in fact, highly applicable to policy. Two countries with life satisfaction of 7.0 (out of 10) offer little indication how to improve to 8.0, for example. Because there is no variability in the construction of the dependent variable, no individual dimension be selected to explore further as a mechanism for change. Nor can it be inferred which do or do not directly impact the outcome. However, in a multidimensional scale, two countries could have identical composite scores that are the sums of entirely different individual measures. Each dimension becomes a target for impact with independent variables as prospective levers.

Similarly, purely celebrating a high score on happiness or life satisfaction – common for Nordic countries – can mask significant underlying issues that would otherwise have raised flags for necessary improvements (Farver-Vestergaard & Ruggeri, 2017). Worse, they can ignore the similarly high rates of suicide or depression in those same communities (European Union, 2024). One popular tool in this context is the World Happiness Report (WHR). The 2024 WHR involved over 140 countries, reporting well-being across populations across three indicators: life satisfaction, positive emotion, and negative emotion. Although the number of participants is impressive, this study, like many similar, examined well-being with a small number of questions in a conceptually limited way (Somarriba Arechavala et al., 2015). Thus, it is exceptional at generating awareness and headlines but presents neither a holistic understanding nor actionable data.

Ultimately, what is most critical is that mental health and well-being are studied as multidimensional constructs that capture critical aspects of how life is experienced by individuals and populations. Capturing only negative indicators can inform treatment but has limited value for population-level policy (Blanchflower & Bryson, 2022). Oversimplification into single measures or purely objective, proxy indicators will fail to capture actionable insights.

1.4 Why this study?

Understanding population mental health is always valuable; there is no uniquely specific argument for carrying out the study now over any other period. However, it has been over a decade since the specific roll-out of the dimensions applied here were tested. That period has seen major global shifts in governance, political alignment, economy, climate, and conflict, as well as the effects of a global pandemic of historic proportions resulting in epochal redirection of societal norms. Thus, if there is to be an updated understanding of how critical dimensions of mental health – and their indicators – appear at a scale compared to 2012, then no time is better than the present.

Running global data collection is extremely challenging (Galbraith et al., 2024), expensive (even to participants), and often unachievable (World Bank, 2021). While a predominantly online survey is not perfect for capturing well-being that represents a population in any or all countries, it also provides several advantages. First, global events are now known to populations within moments to individuals that have access to the internet, mean-

ing attempts to connect such events to mental health should reasonably ensure they are known. Similarly, the pace of collecting data online can help narrow the timeline to avoid significant confounds of major events (i.e., having some participants completing the survey prior to the event, and others after; see Appendix A1). Finally, financial management has also increasingly moved online (Klapper et al., 2025) and was a major theme in our study, enhancing appropriateness.

This study involved a global collaboration of researchers covering 92 countries in a short survey of mental, financial, and social well-being. The aim was to present the current, multidimensional state of mental health in ways that had been deemed both valid and valuable in applications to public policy when first proposed (Ruggeri et al., 2020). Based on findings of related work, we anticipated overall mental health would likely appear worse than in major studies prior to 2020, but better than those during 2020–2022. We also anticipated significant group differences within and between countries, but with major exceptions mediated by individual circumstances. We additionally intended to provide insights on going questions in mental health, such as the observed decline of mental health among young adults and potential differences between those working remotely and those working in-person from a neutral perspective.

By expanding the widest possible participation and mobilizing a large, informal network of motivated researchers, our aim was less on testing any specific hypotheses but instead to provide a robust, holistic understanding of global well-being in 2025.

2 Methods

This section overviews the most critical insights relevant to findings included in this paper. Due to the expansive nature of running a global study such as this one, extended details on methods are included in Supplement S1, which covers further justification for the selected approach, details on the collaboration, sampling guidelines, participant procedures, data management and cleaning, analytical approaches, and psychometric properties of the instrument.

2.1 Instrument

The core measurement involved 10 questions (see Table 1) on mental health, one item for each of the ten dimensions identified by Huppert and So (2013). Under the name Multidimensional Psychological Well-being (MPWB), these were subsequently affirmed by Ruggeri et al. (2020) followed by a standardized scaling approach validated by Graeff-Buehl-Nielsen et al. (2020).

The dimensions themselves approach mental health by inverting standard items from diagnostic tools that assessed negative ranges. For example, a classic test for depression or anxiety might ask about lacking help or support, inability to finding calm, or feeling low on energy. These items invert that approach by instead asking about positive affect: receiving help and support, feeling calm, having energy, and so on. Critically, it is argued that this approach is more robust: not having these positive functions is a strong indicator of poor well-being whereas only indicating no negative affect is not an indicator of high well-being. Though no comparative research establishes a single instrument as superior or optimal for

multi-national assessments of well-being, the MPWB dimensions show strong alignment with a recent expert consensus on positive mental health (Iasiello et al., 2026), as well as a previous literature review on measurement instruments (Iasiello et al., 2024), directly matching at least eight out of 10 dimensions of both investigations. Dimensional names align with those applied in previous research; no modifications have been made here.

The ten items were presented in a random order and no framing or time period was used to direct participants in how they should respond. This was done intentionally to avoid any confounds that could be caused by linguistic differences and to allow participants to answer as they felt most appropriate (i.e., whether they chose to answer momentary, current feelings, or general, prevailing ones). Mental health items were followed by ten additional social, economic, and general well-being measures, including age, sex, wealth, race/ethnicity/citizenship, employment, and general measures of social and economic perspectives.

Demographic questions were kept relatively generic and, to the extent possible, uniform. For employment, to limit confusion about varying national standards, we treated anyone working greater than 25 h/week as "full-time" because it was significantly greater than half of a standard working week at any known standard and could be balanced with income where that boundary may have been low (e.g., where countries may have unique standards for "full-time" based on age, family care arrangements, health or physical ability challenges, or more complex taxation-based guidelines).

Following the core measures, nine questions were presented on both complementary and topical themes (see Procedure and Supplement S2). To ensure uniform comprehension across translations, color coding (red-green gradient) was used for any measures that ranged from very negative to very positive.

Household income and some demographic questions allowed free-text if pre-defined categories did not capture personal circumstances. Assets, debts, age, and household size were numeric free-text with validation ranges. All other questions offered only Likert-type response options, which mostly ranged 1 (absolutely disagree) to 7 (absolutely agree). Life satisfaction (0–10), economic background (five options), and working location (five options) were the main Likert-type questions not using a 1–7 scale.

Table 1 Measures for ten dimensions of psychological well-being

Dimension	Measure	$M_{weighted}$ (*SD*)	% flourishing$_{weighted}$
Positive relationships	I receive help and support from people I am close to when I need it	5.05 (1.46)	38.5
Meaning	I feel what I do in my life is valuable and worthwhile	4.93 (1.48)	35.7
Competence	I feel a sense of accomplishment from what I do	4.83 (1.44)	31.9
Engagement	I feel absorbed in what I am doing	4.81 (1.34)	28.7
Self-esteem	I feel positive about myself	4.81 (1.49)	32.3
Optimism	I am optimistic about my future	4.71 (1.58)	31.4
Positive emotion	I feel happy	4.70 (1.46)	27.8
Emotional stability	I feel calm and peaceful	4.47 (1.51)	23.6
Resilience	I recover quickly from things that go wrong in my life	4.45 (1.48)	22.2
Vitality	I feel full of energy	4.20 (1.56)	19.3

All items were measured on a scale of 1 (absolutely disagree) to 7 (absolutely agree). The table provides aggregate, weighted values for all participants as well as a cursory representation possible flourishing (responding 6 or 7) rates for each dimension (see Results)

For completeness and comparisons, we also used adapted scales for the two-item ("little interest or pleasure in doing things", "feeling down, depressed, or hopeless") version of the Patient Health Questionnaire (PHQ-2) (Kroenke et al., 2003) and the two-item ("feeling nervous, anxious, or on edge","not being able to stop or control worrying") version of the Generalized Anxiety Disorder scale (GAD-2) (Kroenke et al., 2007), which together make up the four-item PHQ-4 (Löwe et al., 2010). For this, we used a 1–7 scale for PHQ-2 and GAD-2 items to align with other core mental health items. Options were developed in a way that could be converted back to the standard 0–3 range for future comparisons by merging options that added granularity for lower ratings. As PHQ-4 explicitly includes time in the response options, we retained the "last two weeks" framing of the four items.

In total, 123 versions of the survey were used across 50 languages. Measures were adapted to local contexts before translation into local languages. Currency symbols shown in the income deciles and next to the financial free-text fields were switched to local currency (in countries with multiple currencies in circulation, the most commonly used for financial reporting was chosen). Options for employment, race/ethnicity, education, and income were adapted to each country's context.

Surveys were then translated using a standard forward-back translation approach. One individual, typically a native speaker of the target language, first translated from English into the target language. Next, an independent native speaker (required) back-translated it into English. Where discrepancies were identified (see Supplement S3 for significant examples), team members resolved them through discussion, giving preference to conceptual equivalence, or sought a third perspective.

All versions of the survey went through multiple rounds of checking ahead of launch, which included the first author re-reviewing all versions with Google Translate to ensure consistency (not for linguistic appropriateness, only technical aspects such as typos, currency labels, and issues that may arise from using over 20 unique alphabets). Though imperfect, this approach allowed a centralized and standardized final step to identify potential mistakes or concerns. In some cases, checks proved necessary as mistakes were found. In others, the tool was not effectively able to capture the translated meaning, and teams opted to disregard flagged wording. However, the vast majority of the text and responses back-translated with high or perfect fidelity, making it possible that individuals in some countries that may not have spoken one of the available languages could have participated using a translation tool on their browser.

Primary ethical approval for the study was provided by the Columbia University (USA) Human Research Protection Office Institutional Review Board, Administrative Review Committee. Additional approvals were received in 18 countries (19 institutions), where it was deemed necessary for appropriateness or mandate (see Supplement S5).

2.2 Data Collection

Following final technical checks of all versions of the instrument, data collection formally began on June 2, 2025, with the "soft launch" phase. In this phase, which was staggered over two weeks, all countries invited a small number of participants to complete the survey. These were primarily convenience samples of individuals that would be able to notify the study collaborators if they faced any major issues in completing the survey or if any errors were noted that would have directly harmed results. Once completed, countries began the active

"full launch" phase, which ran through July 28, 2025, and involved comprehensive implementation of the recruitment strategy described in this section. Due to the delayed nature of some responses and specific timeline requests made by organizations that offered to help circulate the survey, the survey was left open in a passive phase until August 21, 2025.

Participants were recruited through a many-layered strategy meant to engage the widest possible population without systematically skewing responses within or between countries. This involved sophisticated use of the Demić-Većkalov method (Ruggeri et al., 2022) and the Jarke method (Ruggeri et al., 2023) for using social media and web-based discussion forums to engage diverse populations, convenience sampling, leveraging institutional contacts and membership lists (ranging from government agencies to highly specialized NGOs and non-profits), direct communications, offline public invitations (e.g., poster campaigns).

Due to local customs and various challenges in limiting to online-only samples, some countries also made use of household contact (door-knocks), open-market solicitation, public and mailbox flyers, and use of announcements on popular channels. Despite study guidelines and leadership advising against, some teams used student and university contact lists, which is reflected in the skew for certain countries. In locations where student mailing lists were used as a primary form of engagement, teams were required to augment the sample by explicitly building out broader engagement strategies. Where we faced significant barriers to engage sufficient participation, the collection firm Bohemian Research provided pro-bono assistance in circulating the survey to its user base. In Ireland, data were collected both following the standard guidelines as well as through an established, representative surveying platform.

While approaches within guidelines collectively lower the risk of systematically, singularly skewed results at the highest level, they do not ensure perfectly representative samples. As such, we make no claim in the overall superiority or representativeness of unweighted samples. We also emphasize that caution should be taken and "country" should be seen as an indication of a sample group as opposed to representative of a nation. Supplements S1.4, 1.6, and 1.8 provide extensive detail on these aspects.

To account for these issues to the extent possible, an extensive approach to sample weighting (within and between countries) was applied before analyses were conducted. These steps are lengthy and have been detailed in Supplement S1.6 and Appendix A0.4. In light of this, we focus here on the general quality of a sample that engages a large number of populations that are often missed in major surveys. Uniquely, we also find somewhat of a correction (or perhaps an over-correction) in representation of certain locations compared to some surveys that aim to cover entire countries (e.g., Italian participants are predominantly from northern communities with fewer from Rome; some of the largest American samples come from Missoula, Montana, as well as from Appalachia, with fewer from major metropolitan areas). We also aim to be transparent about various sampling concerns based on our approach, which are discussed in more detail in Limitations.

3 Results

In this 92-country study of well-being, we focused on 53,799 individuals whose responses were deemed appropriate (in terms of quality and reliability) for extensive analysis. To reach this number, we began with the 69,408 individuals that accessed the survey link, then

removed 12,181 (17.6%) who did not complete the survey, 2,332 (3.4%) who completed it too quickly, 705 (1.0%) who were not resident in target countries, 365 (0.5%) who gave non-viable demographic combinations, and 26 (0.04%) who were flagged as having accumulated more than four data quality concerns in their responses. Following application of these rules, the overall inclusion rate was 77.5%, ranging from 91.9% in Ireland to 40.4% in China, with national samples ranging from 115 (Chad) to 4,242 (USA).

Prior to implementing any weighting, the overall sample makeup was 60.6% female (ranging from 90.3% in Estonia to 22.6% in Chad), with a mean age of 37.1 years ($SD = 13.3$), and 56.7% were fully employed. After applying weights, the total of observations was 53,319 (Kish's effective sample size = 28,941), which was 53.9% female, 39.7 years ($SD = 15.3$), and 50.5% fully employed (see Table 2 and Fig. 1 for full summaries). The weighted-mean MPWB sum score was 46.96 ($SD = 11.05$). Overall, median completion time for included participants was 6.2 min. Full sample characteristics are provided in Appendix A4 and A5, aggregated overall and by-country, respectively. Due to the extensive data collected, in this paper, we focus primarily on the highest-level patterns of global well-being. For general insights, a small number of multivariate models have been provided in Supplement S1.9; focused and multivariate analyses will be expanded in future publications.

In our sample, we also find high rates of individuals living alone, though varying by age (see Appendix A8). Globally, 44.9% of people 75 and older lived alone, compared to the overall average of 27.1%. Among younger adults (18–25), living alone is typically higher in places like the USA (44.5%) and the European Union (38.4%), compared to the global average of 28.6%. From 26 to 64, averages are typically around 25.6% globally.

3.1 Psychometric Performance and Cross-National Comparability

Regarding the appropriateness of the measure for testing in over 90 countries, the single-factor MPWB model showed acceptable fit (CFI = 0.96, TLI = 0.95, RMSEA = 0.08, SRMR = 0.03) and high internal consistency ($\omega = 0.91$) for both unweighted and weighted values. Per-country CFAs indicated acceptable fit in 64 of 92 countries (70%) unweighted and 49 of 92 (53%) weighted, with median weighted per-country fit of CFI = 0.93, TLI = 0.91, SRMR = 0.05 (see Supplement S1.8).

Multi-group weighted invariance tests on the 36 countries with sample sizes ≥ 500 supported configural invariance (CFI = 0.94) and metric invariance (ΔCFI = 0.011, below the 0.020 cutoff recommended for designs with large numbers of groups; Rutkowski & Svetina, 2014). Scalar invariance was not supported (ΔCFI = 0.042), which is a common outcome for cross-national research of this scope (Davidov et al., 2014). Given the complexity of providing comparable analyses in many-country studies, we were satisfied with these standards for the purpose of general reporting and similarly urge caution in direct national comparisons, which should be robustly tested rather than ranked or inferred in overly simplistic terms.

3.2 Ten Dimensions of Mental Health and Life Satisfaction in 92 Countries

There are many layers of possible analysis in this study between locations, measurements, and covariates of well-being. To ensure a robust, procedural understanding similar to earlier work, we first summarize general trends in the specific dimensions assessed in this study. More invested focus on population well-being involves deeper understanding and

Table 2 Comprehensive aggregate descriptives of 92-country sample

Variable	Unweighted	Weighted
	M (SD)	*M (SD)*
MPWB sum (range 10–70)	47.43 (10.94)	46.96 (11.05)
Life satisfaction (range 0–10)	6.42 (2.38)	6.31 (2.46)
	Md (IQR)	*Md (IQR)*
Duration (minutes)	6.17 (4.52)	—
Household income	*n (%)*	*n (%)*
No income	1948 (3.6%)	2322 (4.4%)
Second decile	6194 (11.5%)	7243 (13.6%)
Third decile	6583 (12.2%)	7242 (13.6%)
Fourth decile	6675 (12.4%)	6693 (12.6%)
Fifth decile	6360 (11.8%)	6153 (11.5%)
Sixth decile	5637 (10.5%)	5303 (9.9%)
Seventh decile	5001 (9.3%)	4589 (8.6%)
Eighth decile	4880 (9.1%)	4348 (8.2%)
Ninth decile	3793 (7.1%)	3335 (6.3%)
Tenth decile	6011 (11.2%)	5287 (9.9%)
Removed	717 (1.3%)	803 (1.5%)
Household size		
1	13846 (25.7%)	13925 (26.1%)
2	13726 (25.5%)	13418 (25.2%)
3	9031 (16.8%)	8835 (16.6%)
4–5	13115 (24.4%)	12922 (24.2%)
6–20	4081 (7.6%)	4218 (7.9%)
Age group		
18–25	11550 (21.5%)	12933 (24.3%)
26–44	28059 (52.2%)	22246 (41.7%)
45–64	11970 (22.2%)	14118 (26.5%)
65–74	1776 (3.3%)	3248 (6.1%)
75+	444 (0.8%)	774 (1.5%)
Sex		
Male	20738 (38.5%)	24542 (46.0%)
Female	32607 (60.6%)	28749 (53.9%)
Other	352 (0.7%)	21 (0.0%)
Removed	102 (0.2%)	7 (0.0%)
Education level		
Less than secondary	1346 (2.5%)	3044 (5.7%)
Secondary	10226 (19.0%)	16624 (31.2%)
Technical	5693 (10.6%)	6351 (11.9%)
University	19276 (35.8%)	15423 (28.9%)
Advanced	17258 (32.1%)	11877 (22.3%)
Employment status		
Not in paid employment (by choice/health)	3263 (6.1%)	3805 (7.1%)
Not in paid employment (looking for work)	3883 (7.2%)	4137 (7.8%)
Student non-working (Full or part-time)	7122 (13.2%)	7746 (14.5%)
Employed/working full-time (25+hours per week)	30478 (56.7%)	26905 (50.5%)
Employed/working part-time (less than 25 h per week)	5961 (11.1%)	6206 (11.6%)
Retired	2288 (4.3%)	3739 (7.0%)
Military service	804 (1.5%)	782 (1.5%)

Table 2 (continued)

Variable	Unweighted	Weighted
Citizenship		
Citizen	49136 (91.3%)	48549 (91.1%)
Non-citizen (Permanent Resident)	1400 (2.6%)	1519 (2.8%)
Born outside country (Citizen)	1058 (2.0%)	1063 (2.0%)
Born outside country (Non-citizen, Permanent Resident)	574 (1.1%)	468 (0.9%)
Born outside country (Non-citizen, Non-permanent Resident)	1631 (3.0%)	1720 (3.2%)
Childhood socioeconomic status		
Poor	4379 (11.4%)	4698 (12.6%)
Below average but not poor	10022 (26.0%)	10018 (26.8%)
Around average	14523 (37.7%)	13871 (37.1%)
Above average but not wealthy	8439 (21.9%)	7744 (20.7%)
Wealthy	1115 (2.9%)	1012 (2.7%)
Work arrangement		
I work entirely in-person (i.e., in an office, on-site)	17150 (53.2%)	16443 (55.3%)
I mostly work in-person, with occasional remote days	5857 (18.2%)	5004 (16.8%)
I work about evenly in-person/remote	3375 (10.5%)	3004 (10.1%)
I mostly work remotely, with occasional in-person days	3077 (9.5%)	2646 (8.9%)
I work entirely remotely	2776 (8.6%)	2631 (8.8%)

Unweighted estimates based on full sample. Weighted estimates based on participants with propensity weights. The weighted N is the sum of normalized propensity weights

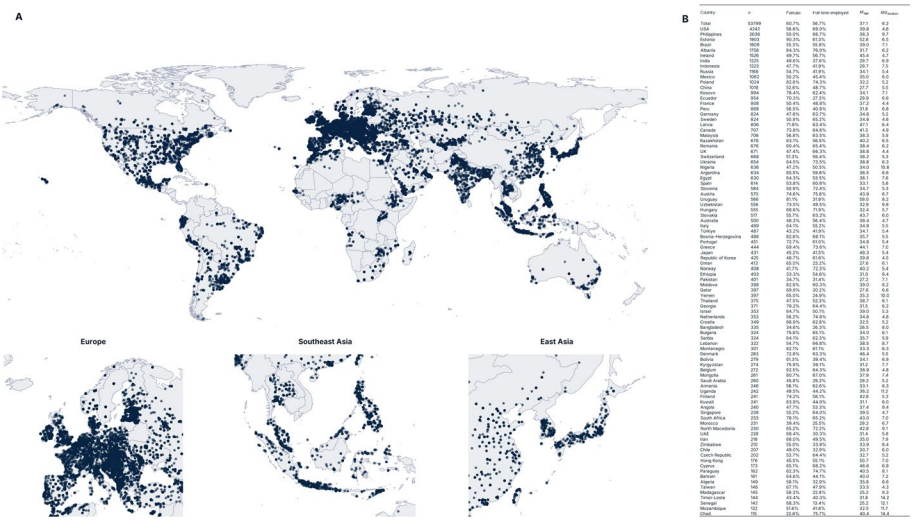


Fig. 1 Overview of sample characteristics. Left (**A**): Geographic spread of included participants in the study. Note that some countries (e.g., Norway, South Africa, Sweden) may appear to have lower geographic variance in engagement due to place of residence being recorded at the regional or provincial level rather than town or county. Similarly, some locations may appear unlikely due to their remoteness but this is more likely due to participants reporting a general region than a specific town, and the location point is just the geographic middle of the named region. These aesthetic limitations are unlikely to be indicative of true geographic spread. Right (**B**): Broad total and (unweighted) country sample demographics

measurement of multiple dimensions rather than solely happiness and life satisfaction, thus we report all ten dimensions at a national level before shifting to use composite scores for detailed analyses.

As in Fig. 2, dimensions of well-being with the most positive results overall were positive relationships, meaning, competence, and engagement. Contrarily, measures of vitality, resilience, and emotional stability were the most negative. The vast majority of national sample averages were above 4, indicating an overall positive average for each dimension. However, as is also visible, only a few outlier means approach 5.5, indicating that even the higher rating averages were not particularly high. Similarly, while we utilized only positive measurement for the ten dimensions, the combination of neutral to negative averages for vitality, emotional stability, and resilience likely comports with high rates of stress and burnout, which we present later using PHQ-4.

Across the ten dimensions, positive emotion (the item typically used to infer happiness) consistently had the strongest correlation with life satisfaction (Pearson's $r = 0.71$) and overall well-being (0.83 for all 10; 0.78 when dimension left out). Engagement (0.41, 0.64, 0.56) and positive relationships (0.43, 0.58, and 0.48) had the weakest correlations, though these were likely a result of lower variability in those dimensions, resulting in less ability to distinguish outcomes.

While useful for comparison and generally correlated with MPWB at the population level (Pearson's $r = 0.75$), we again find that life satisfaction measures lack the dynamic insight and range necessary for identifying policy levers. For example, participants from Denmark and Norway have essentially identical life satisfaction means of 6.2. Yet, as indi-

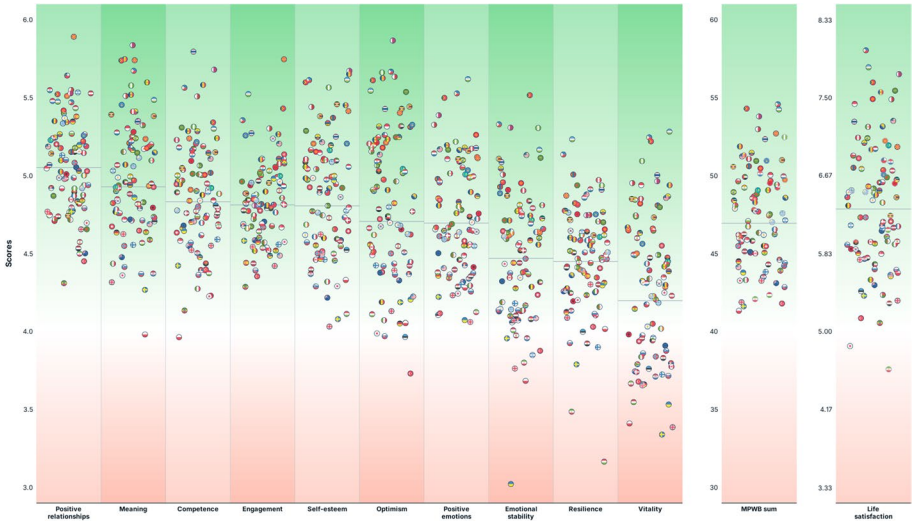


Fig. 2 Global rankings on ten dimensions of mental health and life satisfaction. This figure indicates national sample averages for all 92 countries (as well as an average for the European Union) on ten dimensions of mental health, a composite score of all ten dimensions, and on the life satisfaction measure. Rankings should be interpreted with caution as representativeness, cultural, and linguistic factors may explain differences and individual dimensions can be particularly prone to error. Dimension order is presented from left (highest global mean score) to right (lowest), with MPWB sum score and life satisfaction at the end

cated in Fig. 3, also show unambiguously distinct constellations that result across the ten dimensions. While this is not necessarily true for all countries with similar circumstances, the high variability again validates the value of measuring multiple dimensions.

Using a simplified rule of scoring 60 or above on MPWB and two or below on PHQ-4, which tracks with the general approach defined by Huppert and So (2013) but with updated data, we find 6.5% to be flourishing, ranging from 0% in Madagascar to 24.0% in the North Macedonia sample. The original framework noted many issues in the original data for identifying flourishing (aligning positive and negative questions, four different scales, and lack of additional validation). Thus, while we apply the rule for higher scores on MPWB items and validate with lower scores on PHQ-4, we provide these exploratory estimates only for general context; future work on these data may provide more statistically robust approaches and interpretations, as well as incorporate other measures such as income and outlook.

3.3 General Patterns for Mental Health in 2025

As indicated in Fig. 4, unambiguous patterns emerge for well-being between key groups. First, we find no U-shape for age; instead, young adults of student and early-career age have significantly lower well-being than older working-age and older populations. Males have significantly higher well-being than women, but the effect size is extremely small. Though varied in how it was collected (and in many countries, not collected at all), individuals that did not identify as male or female had substantially poorer mental health (data could not be plotted due to absence of weighting guidance for most countries; see A13 and A15). We also

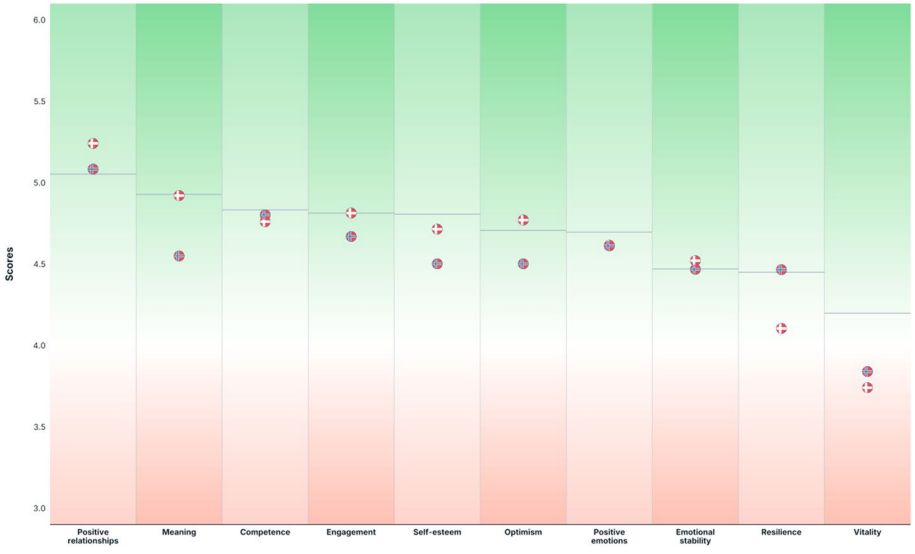


Fig. 3 Divergence in mental health for countries with identical life satisfaction. Denmark and Norway are generally similar countries in terms of wealth, demographics, geographic location, linguistic, and cultural norms, and consistently score at or near the top of global studies of happiness. In our data, they have identical life satisfaction means (6.2), which implies another similarity. Yet, specific mental health dimensions yield different interpretations, with Denmark having the most extreme scores, though typically higher, compared to Norway, which present a narrower range but were typically lower

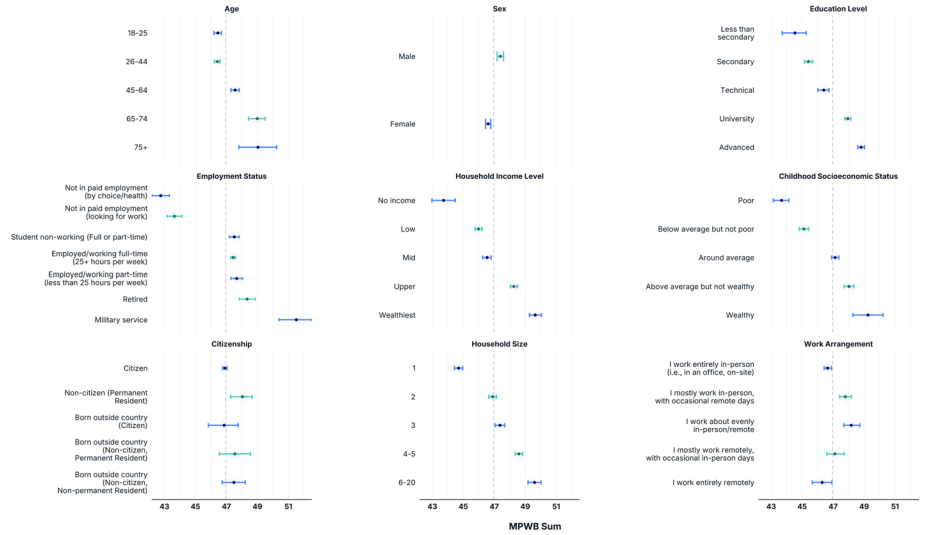


Fig. 4 Broad demographic trends in global mental health. Across nine major social and economic indicators, we demonstrate major differences in well-being between age groups, sexes, educational attainment, employment, income, household size, citizenship/residency, childhood wealth, and working environment. Bootstrapped 95% confidence intervals (CI) were used for weighted estimates. These CI should be interpreted as uncertainty from the weighted estimates model, since our sample was non-probabilistic

observed a clear effect of educational attainment, with higher attainment associated with significantly greater well-being for each level.

Mental health was significantly higher at essentially every income level increase. A similar pattern was observed for household size and while it has a small, positive correlation with income (Pearson's $r=0.13$), they were not collinear. Unemployed individuals (irrespective of reason) had significantly lower well-being than employed (fully or part-time) individuals, students, and retirees. Those in military service, though a small part of the sample, had significantly greater well-being than all groups, which is likely a reflection of well-being dimensions given that relationships, feeling energetic, having a sense of purpose, and engagement would typically be higher in a military unit than the general population. In line with similar work, we also find a near-absolute trend of high MPWB scores for individuals with greater childhood wealth.

Collinearity among the predictors (sex, age, education, employment, income, household size, childhood SES, work arrangement) was small (Supplement 1.9), with adjusted generalized standard error inflation factors ranging between 1.29 (income) and 1.50 (household size). Specifically, the correlation between income and education was 0.32 (SE = 0.006) and both retained independent association with MPWB sum when modelled jointly (income $F(4, 83)=13.62$, $p<.001$; education $F(4, 83)=8.25$, $p<.001$).

Note that due to the inclusion of 92 countries, we do not focus on race or ethnicity as these typically require unique country focus for appropriate comparison.

3.4 Working Arrangements and Mental Health

Due to highly topical debates around working environment impacts, we included a simple measure of whether employees worked at home or in-person (students were excluded from

this analysis). The scale ranged from entirely remote to entirely in-person, with a 50–50 option and options for mostly-remote or mostly in-person. A weighted regression clustered by country reveals a significant effect: individuals that worked about evenly remote (M=48.2, 95% CI [47.2, 49.2]) and mostly in-person (M=47.8, [47, 48.7]) had the highest overall well-being, followed by those that mostly worked remotely with some in-person days (M=47.1, [46.2, 48.2]); *Wald* $F(4, 87)=5.57$, $p<.001$, $R^2=.003$. These are depicted in Fig. 4, which also shows how entirely remote (M=46.3, [45.6, 47.3]) or in-person workers (M=46.6, [45.5, 48]) had the lowest overall well-being. Pairwise contrasts showed those that work entirely remotely also had significantly lower well-being than those with even balances (b=1.87, d=0.17, p=.004) or somewhat more in-person (b=1.48, d=0.14, p=.009). Note that effect sizes here should be interpreted with caution as they cannot fully account for weighting in the model.

In this approach, we cannot account for direction as to whether, for example, jobs that generally offer better well-being are simply more likely to offer remote working arrangements. However, that the two may be linked remains informative.

3.5 Demographic Trends for Mental Health Within Countries

Numerous general patterns emerge that provide an update from 2012, when the last MPWB data were collected (for a smaller number of countries, all in Europe) using the non-standardized scale. As Fig. 5 shows for the 2025 data, differences between men and women within countries are highly varied and inconsistent, resulting in minimal global difference, which is similar to 2012. However, there are substantial and potentially alarming differences that were either not observed or were less noteworthy in the past, particularly for age, education, and employment.

As in the global analysis, which has also recently been identified by others (Blanchflower et al., 2025), there is minimal evidence of a U-shape for age. Similarly, education trends indicate that having secondary education or less is consistently associated with lower well-being in many countries, refuting narratives about declining value of university education. Though employment categories yield largely unsurprising results, we do find that retired populations – unlike in 2012, where they often appeared worse in lower-income regions – had overall well-being similar to employed and student populations in most countries.

Fig. 5 is included to demonstrate variability within and between countries for major demographic variables, not for inferring any specific effects. We also urge caution in how Fig. 5 is interpreted due to representativeness and skew issues (discussed elsewhere) for certain countries. Even with extensive weighting and statistical sophistication, patterns should be understood in broad terms rather than for individual point comparisons.

3.6 Global Mental Illness

A total of 38,133 participants completed the PHQ-4 scale. The 1–7 scoring version has a total range from 4 (no indication of common disorder) to 28 (highest likelihood of common disorder), the average score was 12.05 (SD=6.58), with the items ranging from 2.84 (SD=1.99) for worrying to 3.24 (SD=1.94) for feeling anxious.

At the country level, the PHQ-4 values ranged from 9.17 (SD=4.44) in Hong Kong to 15.90 (SD=7.03) in Egypt. Applying standard PHQ-2 and GAD-2 scoring, 20.82% of par-

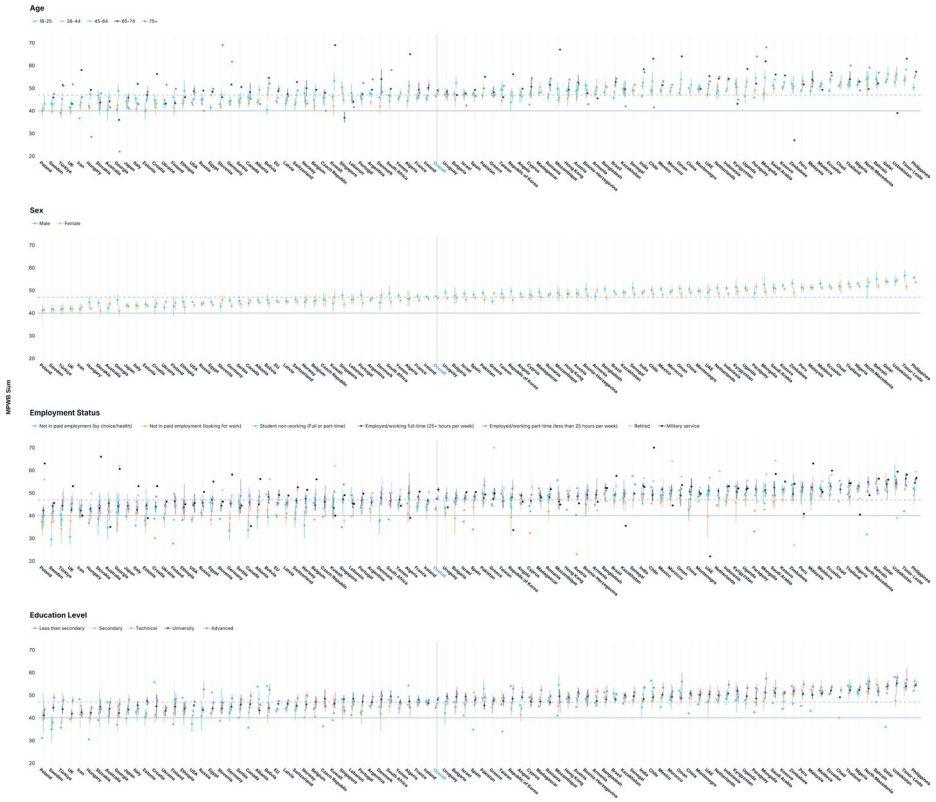


Fig. 5 Within-country demographic trends for mental health. Countries presented in order of national MPWB mean for observing general variability patterns, not specific effects. Any element without a 95% CI indicates fewer than 20 participants met that criterion and thus the value should not be treated as reliable. These CI should be interpreted as the uncertainty from the weighted estimates model, since our sample was non-probabilistic. Estimates represent the sample from each country, not a representative national average

ticipants surpassed the cutoff for depression (ranging from 4.29% in Hong Kong to 46.72% in Georgia) and 22.27% for anxiety (2.88% in Hong Kong to 41.92% in Egypt). For the PHQ-4 combined scale, 53.79% participants scored within the mild range (36.51% in Algeria to 72.95% in Bolivia), 12.60% moderate (1.41% in Hong Kong to 27.70% in Madagascar), and 10.01% severe (0.25% in Zimbabwe to 24.49% in Egypt). Note that these values are only intended to represent the samples from within each of those countries but not perfectly estimate national means.

We also observed alarming patterns for young adults: globally, only 14.7% of those aged 18–25 demonstrate no signs of illness, with 28.6% in the moderate to severe range. Those results compare to global rates of 23.6% and 22.6%, respectively. Such patterns were also particularly pronounced in the UK, where only 6.1% of young adults indicated no signs but 42.8% were moderate to severe, the US (12.4% vs 36.6%), and across the European Union (12.7% vs 29.0%). These patterns invert with age almost without exception (see Appendix A17).

Regarding patterns for Hong Kong, we recommend some caution. First, Hong Kong had the lowest engagement count of all countries based on only one-third of participants completing the additional questions. Furthermore, while proportions at ceilings and floors appear to be outliers, the overall means are still generally in line with global average (i.e., a higher concentration of scores in the lower-middle part of the scale).

Though not absolute, there is a strong, negative relationship between PHQ-4 and MPWB scores (see Fig. 6, which uses standard PHQ-4 scale scoring) both at the individual (Pearson's $r = -0.63$) and country (Pearson's $r = -0.66$) levels. There is no substantive difference between the 0–3 and the 1–7 version for scoring; the seven-option was used primarily to streamline with the MPWB items and only added granularity to the "1" response ("several days") for the traditional four-option score by adding more specific choices between "not at all" and "more than half the days" (see Appendix A0.1).

4 Discussion

In this 92-country involving over 50,000 people, we find global mental health may lean toward the positive, but across ten core dimensions, scores are generally moderate or low. This indicates that mental health may be modest or languishing across large amounts of the global population. Furthermore, individual covariates such as age, education, employment, and wealth reveal significant group differences within and between countries.

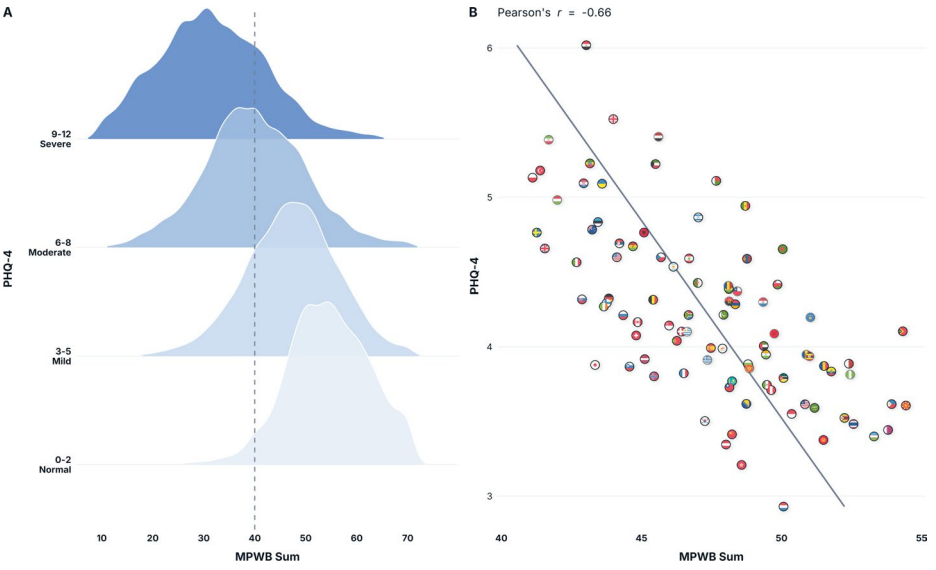


Fig. 6 Relationship and distinction between mental health and mental illness. While there is a clear inverse relationship between PHQ-4 (depression and anxiety) and MPWB (positive mental health), the pattern is not absolute. In (**A**), on top of significant heterogeneity within the "normal" group, there are many individuals without indication of illness that have relatively low MPWB scores. PHQ-4 in this figure uses the standard 0–12 metric, and the 1–7 Likert responses were recoded to the conventional 0–3 per-item scaling (1 = 0; 2–5 = 1; 6 = 2; 7 = 3) before the sum. In (**B**), while strong and without significant outlier, national patterns for health and illness are not perfectly aligned

Policymakers would do well to treat this as a major warning if not an all-out alarm: poor mental health is a result and predictor of extremely negative circumstances (or consequences) for the prosperity of entire populations. In our findings, high-income countries are not spared from this concern. In fact, we find many countries and groups that are regularly presumed as being the gold standard for mental health to have dropped significantly, particularly among OECD countries and in northern Europe. This can also be said of younger adults globally. Specifically, policymakers may need to consider that shifts in global economic opportunities and the absence of regional stability (real or perceived) may mean population-level intervention should not only focus on those identified as suffering mental illness. Instead, urgent emphasis should be placed on developing interventions and policies that can improve mental health across even those groups previously presumed to be doing well or a high probability of flourishing in the future.

Regarding age, a "U-shape" for happiness and life satisfaction has long been presumed (Bartram, 2024; Frijters & Beatton, 2012), characterized by more positive results for younger and older people with a nadir during middle adulthood through to retirement. The 2012 MPWB data showed this effect had largely dissolved due to declines among older people in countries with limited social safety nets. Subsequent work challenged how reliable the U-shape notion was in the first place (Bartram, 2023), while recent studies using single-item measures observed similar happiness declines among younger people (Blanchflower et al., 2025). In line with more recent views, we observe an alarming pattern: young adults have significantly lower well-being than other age groups, and the trend is largely linear. Thus, much of the poorer national mental health averages, which appear to be dragged down heavily by lower vitality, emotional stability, and feelings of resilience, are the result of younger people – with the most life ahead of them – lacking fundamental aspects of well-being.

Similarly, five dimensions with the highest means (relationships, meaning, competence, engagement, and self-esteem) could be inferred as indicating that individuals self-assess positively but are negative about external factors driving down well-being. In other words, while people may feel generally positive about their personal circumstances and experiences, things happening beyond their control (political and economic instability) are creating significant harms (fear, stress, burnout). This aligns with reports on optimism gaps between what people view for their own lives versus what they view for society more generally (IPSOS, 2025).

We also collected wealth (income, assets, debts) and adjacent indicators (childhood SES, education, employment, household size) that require comprehensive analysis. On aggregate, our findings demonstrate a very clear, positive relationship between finances (past and present) and adult mental health: individuals in higher income deciles reported significantly greater well-being, as did individuals with greater childhood wealth. In contravention to how existing paradigms are commonly reported, we show no clear satiation point for income yet also do not present an absolute pattern for national wealth and mental health. Aggregate analyses such as these are not optimal for tackling such questions, though. Thus, necessary multi-layered and comprehensive analyses of such insights will be published separately with greater nuance offering more informative conclusions on the wealth-well-being relationship.

On the more positive end, we see unambiguous associations with educational attainment: every level increase is associated with a significantly higher mean MPWB score. Similarly, there continues to be an undeniable benefit of not living alone, as higher well-being is con-

tinually observed in larger households, corroborated by recent work on longevity (Argentieri et al., 2025). We also note the much more positive pattern for retired individuals than immediately following the 2008 financial crisis. Though optimistically it may indicate more stability in systems to support non-working older adults, we caution it may instead be a statistical effect such that retired individuals may not have improved so much as students and younger adults with and without work have declined.

At the aggregate level, the lack of meaningful effect between citizenship and residency status was surprising. There are various ways to interpret this and likely further analysis would reach different conclusions of focused on specific examples. The same can be said for inconsistent trend of effects between males and females: though the aggregate (small) difference is in line with 2012 MPWB patterns, the heterogeneity between countries necessitates more robust exploration. Likewise, the dissimilar measurement of sex between countries means the pattern for those not indicating male or female may be concerning but not fully indicative.

Unlike studies that highlight which locations are the happiest or otherwise highest-scoring on positive or negative measures, we refrain from furthering this unfortunate tradition. While we present global "rankings" of all ten dimensions of mental health as well as composite well-being scores and life satisfaction, we urge caution when interpreting these as more than a general indication of direction due to variance in psychometric properties between countries and appropriate application of social survey. There may also be factors that influence how people respond in some places, such as being aware that the study is global and reporting positive responses to project a positive external image. We also do not wish to imply our samples are perfectly representative of any particular country such that rankings would be appropriate (often the case but commonly ignored in global reports). We discuss further in Limitations as well as in Supplement S1.8.

In line with population-level thinking (Huppert, 2005; Rose, 1985), we urge greater focus on within-country and within-group variability. Consider countries such as Uzbekistan, Timor-Leste, the Philippines, North Macedonia, and Thailand, which all appear to have notably high scores on multiple dimensions even when attempting to correct for sample skew. Similarly, for life satisfaction, Nigeria and Zimbabwe have notably higher scores whereas those in Scandinavia are lower than usually reported (see Supplement S1.8). Yet individual circumstances from, for example, high-income individuals from OECD countries, may create a misleading between-country comparison, amplified by likely heterogeneity in how questions are understood (Axelsson & Dahlberg, 2024; Cowden et al., 2025). To validate this limitation, we tested for a relationship between Gini coefficient and MPWB, finding a weak (Pearson's $r = 0.23$), positive trend, which would indicate that we were likely limited to generally privileged groups in more deprived regions.

Based on those patterns, we caution that, for example, it is inappropriate to equate particularly low scores for Sweden as meaning a fully employed Swede with a high level of education has a worse overall well-being than an unemployed individual with low education in Uzbekistan. Instead, proximal comparisons within Sweden mixed with potentially high levels of work-related stress or perception of instability likely explain these scores. That many of the countries with higher well-being also have significant migrant outflows and the absence of differences between citizens and non-citizens means policymakers in countries on both ends would be wise not to disregard either pattern out of hand. More likely, it supports the view that populations with significantly fewer substantive economic opportunities

largely decouple well-being from financial circumstances (Galbraith et al., 2024). Focus on within-country comparisons is therefore more useful than between-country rankings.

With those caveats in mind, the research team were still alarmed by the findings. Our first instinct was to assume the skew in our samples produced these effects. However, having a young and highly educated sample would typically have skewed results in the *opposite* direction. Instead, our most robust findings iterate strongly that mental health among younger populations is comparatively low compared to older generations, despite all advantages of modern living. It would seem reasonable to indicate that the tradeoff of modern conveniences is the deluge of (whether rightly or wrongly) pronouncements about stress, negativity, instability, unfairness, conflict, and lack of opportunity. Furthermore, lower vitality, emotional stability, and resilience may well be impacted by global trends of increasing loneliness and deteriorating social connections, particularly among young adults who report meeting in person less frequently than in the past (OECD, 2025).

There are also potential concerns around sampling bias: it could be young people who volunteered to participate were eager to share specifically because they feel their concerns about mental health have not been addressed. Likewise, it may be that the oldest populations engaged were those most able to due to overall connectedness (i.e., how they were informed of the survey in the first place) and vitality levels (i.e., some energy and motivation was required to complete the survey). However, these alone cannot explain away the entire effect for such a large sample.

This work argues strongly for multidimensional measurement of well-being as opposed to single-item assessments such as happiness or life satisfaction. Yet, for transparency, we do note that, at least on aggregate, the single-item happiness measure would serve as the best proxy for overall global mental health. Limiting to just that measure would still retain all concerns we flag earlier and thus greatly reduce the value of measurement due to lack of actionable insights. However, where only a single item is possible, our findings cautiously endorse using the positive emotion measure to do so.

Finally, despite clear indications of common mental disorders globally, as indicated in Fig. 6, measures of stress and anxiety are still not sufficient replacements or proxies for mental health. While there is an expected and unambiguous negative relationship between common mental disorder for individual scores and national prevalence, the pattern is not absolute. As widely argued, simply having no indication of mental illness is not a guarantee of positive mental health: the distribution of MPWB scores for individuals scoring 0–2 in the combined PHQ-4 scale indicates considerable diversity across the "normal" group, including a non-trivial number of people with only moderate or worse mental health.

4.1 A Caution Against Denial and Ideology/Propaganda Machines

While some patterns found in our global sample were generally expected, such as associations of mental health with education or employment, others were very much a surprise, even (or especially) accounting for skews in the sampling. This was particularly true for higher-income, relatively stable regions, which typically show greater overall well-being across multiple dimensions. Despite challenges faced due to major societal shifts and how they appear to have affected experiences, those regions still maintain greater wealth (even against rising costs of living), employment, and system stability.

Thus, we raise two cautions: first, leaders in regions with worrying results cannot and should not ignore the shockingly low scores for dimensions such as those observed for vitality and emotional stability. Second, this should not be interpreted as a zero-sum result of one region rising and another collapsing, or used to drive a narrative of economic system views: greater wealth through higher employment and education is still clearly very much aligned with greater well-being. How those intersect clearly demands intervention: governments, employers, and civic leaders (in all regions) need to reassure individuals, employees, and students about the stability of their systems, careers, and future opportunities. Inaction, denial, and selective comparisons of rank to support a particular view will not resolve those issues but will almost certainly result in compounding the negative trends indicated we report.

5 Limitations

Limitations exist in this largely correlational work and should not be ignored; the team were fully aware of these throughout the study and worked diligently to resolve where possible and highlight where not. First, and perhaps most critically, our data are not representative and no amount of weighting can fully endorse absolute generalizability of our findings. We make no claim to the contrary and urge caution when interpreting or extrapolating our findings to indicate perfectly representative national means. For example, some of the most extreme examples involve limited participation in places like Chad, where almost all participants were academics. Others simply involved highly skewed samples due to higher interest demonstrated by specific groups (often females), even if there were easily enough from other groups to offer robust analyses. To allow more detailed understanding of how various sample differences might impact estimates, we have not only made all data accessible, but provided an extensive, interactive data dashboard along with the public materials (See Data availability).

Reanalysis of our work could focus on only the countries that have the most representative samples. We did not take this approach as some of the smallest and most skewed groups included are the most challenging to engage, face the most extreme obstacles to participate (including active armed conflict), or have few institutions to support the work. Representative or not, it is important that data from these individuals be reported with appropriate caveats stated outright.

Reliance on predominantly-online participants also potentially skews our results toward individuals with greater resources and literacy, such as observed for Chad. However, it can also mean that, particularly for wealthier countries, participants may also be more inclined toward negativity. We also note that in some of our most outsized samples (e.g., Kosovo, Estonia, Latvia), significant skew was largely due to the survey gaining traction through highly-followed social media accounts popular with one sex. Samples were sufficiently large for males and females to resolve weighting matters, but this concern was certainly not lost on us.

The standardized MPWB measures are similarly not perfect nor do we make any claim of their broad or situational superiority. Work with these measures provided a substantial and sufficient validation for purpose: clear indications of strengths and weak-

nesses that can be directly addressed with policy. Other measures could certainly have been used to this end – and in fact, it could be argued some could have done so "better" (depending on how defined). Additionally, there can be debate about the appropriateness and completeness of the ten dimensions chosen as being relevant in all countries and simultaneously that, if so, more measures for each might have been preferable. While the overall psychometric properties were generally very good, fit was not ideal across all countries, which is why we limit the extent to which we magnify or amplify any specific national patterns or comparisons.

There is never a bad time to improve interoperability of standardized mental health measures, so any future investment to improving such instruments has our full support. Additional limitations with extended analyses are included in Supplement S1-S4.

6 Conclusion

Across 92 countries and more than 50,000 people, we find mental health to be languishing globally, weighed down by the well-being of young adults and by concerning results for feelings of vitality, emotional stability, and resilience. We reiterate the critical importance of distinguishing – and measuring – mental health from mental illness and demonstrate that the overlap is not absolute nor singularly informative. Though some unambiguous findings indicate that fundamentals such as education, income, and employment continue to be of value, we stop short of suggesting a global policy approach and instead urge a population strategy that accounts for variability within countries and groups. Our data are not perfect; we instead advise highly-invested local extensions (and where necessary, re-contextualization) of this work to identify the precise dimensions of concerns and their local covariates. Those insights are best placed to provide policy guidance to produce meaningful change. Thus, as ever, the better we measure, the more we can do to improve the mental health and well-being of entire populations.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s11205-026-03890-0.

Acknowledgements The authors wish to thank Amel Benzerga, Takatuf Scholars Programme, Bohemian Research, Dr. Ming-Jen Lin, Hau-Hung Yang, Dorina Pető, Alexandrina Uache, Lucio Afo, Celso Mateus, Assane Pinto, FLACSO Paraguay, Nancy Ramos, Antonia Tsitseli, Gerasimos Prodromitis, Ivan Dala, Maria Damiana dos Santos, Mah Asombang, Claudiana de Azevedo Silva, Paulo Henrique Ferreira Lacerda, Kevin Rigotti Prestes, Ana Claudia Lopes Pires, Lara Vilas Boas Talga, Aline Santos Nobre, Raniery Vilas Boas Gondim, Luciana Almeida Mendes, Alberto Reis Neto, Fernando Romantieze Vicente, and Ramona Henter. We also acknowledge indirect support from the US National Science Foundation Directorate for Social, Behavioral, and Economic Sciences.

Funding No substantive funding was received or leveraged in carrying out this work. Some individual collaborators used available, discretionary funds to facilitate some data collection or other processes, but no funder supported the broader collaboration nor had any involvement in the initiation, conduct, analysis, or reporting. Bohemian Research provided pro bono data collection support.

Code and Data Availability All data and code will be made available at osf.io/3jyda. For the current stage of peer review, the interactive dashboard with the ability to download data and reports is accessible at: https://globalmentalwealth.shinyapps.io/2025. Appendices are available in an efile via: https://globalmentalwealth-appendix.share.connect.posit.cloud.

Declarations

Conflicts of interest All 261 authors actively confirm that they have no competing interests in this work and that they contributed voluntarily.

Dissemination Throughout the study, collaborators compiled an extensive list of over 5,000 steps taken to engage participants in the survey. Where possible, those precise sources will be re-contacted once the study has been published to maximize likelihood of awareness of results. Additional steps will also be taken to ensure maximum reach, particularly for those that participated.

Transparency Declaration The lead author affirms that the manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that all adaptations, limitations, procedural concerns, and other significant factors relevant to understanding the depth of the work have been reported on extensively here and/or are available in the supplementary materials.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

References

Allin, P., & Hand, D. J. (2017). New statistics for old?—Measuring the wellbeing of the UK. *Journal of the Royal Statistical Society. Series a, Statistics in Society,180*(1), 3–43.

Argentieri, M. A., Amin, N., Nevado-Holgado, A. J., Sproviero, W., Collister, J. A., Keestra, S. M., Kuilman, M. M., Ginos, B. N. R., Ghanbari, M., Doherty, A., Hunter, D. J., Alvergne, A., & van Duijn, C. M. (2025). Integrating the environmental and genetic architectures of aging and mortality. *Nature Medicine,31*(3), 1016–1025. https://doi.org/10.1038/s41591-024-03483-9

Axelsson, S., & Dahlberg, S. (2024). Measuring happiness and life satisfaction amongst Swedish citizens: An inquiry into semantic equivalence in comparative survey research. *Journal of Happiness Studies,25*(8), 113. https://doi.org/10.1007/s10902-024-00827-7

Bartram, D. (2023). Is happiness u-shaped in age everywhere? A methodological reconsideration for Europe. *National Institute Economic Review,263*, 61–75. https://doi.org/10.1017/nie.2022.1

Bartram, D. (2024). To evaluate the age-happiness relationship, look beyond statistical significance. *Journal of Happiness Studies,25*(1), 22. https://doi.org/10.1007/s10902-024-00728-9

Beddington, J., Cooper, C. L., Field, J., Goswami, U., Huppert, F. A., Jenkins, R., Jones, H. S., Kirkwood, T. B. L., Sahakian, B. J., & Thomas, S. M. (2008). The mental wealth of nations. *Nature,455*(7216), 1057–1060. https://doi.org/10.1038/4551057a

Blanchflower, D. G., Bryson, A., & Xu, X. (2025). The declining mental health of the young and the global disappearance of the unhappiness hump shape in age. *PLoS ONE,20*(8), e0327858. https://doi.org/10.1371/journal.pone.0327858

Blanchflower, D. G., & Bryson, A. (2022). Wellbeing Rankings. *National Bureau of Economic Research*, (NBER Working Paper No. 30759). https://www.nber.org/system/files/working_papers/w30759/w30759.pdf. Accessed 29 Aug 2025.

Chisholm, D., Sweeny, K., Sheehan, P., Rasmussen, B., Smit, F., Cuijpers, P., & Saxena, S. (2016). Scaling-up treatment of depression and anxiety: A global return on investment analysis. *The Lancet Psychiatry,3*(5), 415–424. https://doi.org/10.1016/S2215-0366(16)30024-4

Cowden, R. G., Skinstad, D., Lomas, T., Johnson, B. R., & VanderWeele, T. J. (2025). Measuring wellbeing in the Global Flourishing Study: Insights from a cross-national analysis of cognitive interviews from 22 countries. *Quality & Quantity,59*(1), 575–597. https://doi.org/10.1007/s11135-024-01947-1

Daly, M., & Macchia, L. (2023). Global trends in emotional distress. *Proceedings of the National Academy of Sciences of the United States of America,120*(14), e2216207120. https://doi.org/10.1073/pnas.2216207120

Davidov, E., Meuleman, B., Cieciuch, J., Schmidt, P., & Billiet, J. (2014). Measurement equivalence in cross-national research. *Annual Review of Sociology,40*, 55–75. https://doi.org/10.1146/annurev-soc-071913-043137

de Oliveira, C., Saka, M., Bone, L., & Jacobs, R. (2023). The role of mental health on workplace productivity: A critical review of the literature. *Applied Health Economics and Health Policy,21*(2), 167–193. https://doi.org/10.1007/s40258-022-00761-w

DeKay, L. (2023). The invisible threat: How increasing mental illness rates among america's youth population is a national security crisis. *National Security Law Journal*, *11,* 156–179.

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research,97*(2), 143–156. https://doi.org/10.1007/s11205-009-9493-y

European Environment Agency. (2015). *Accelerating technological change: Racing into the unknown*. https://www.eea.europa.eu/en/analysis/publications/the-european-environment-state-and-outlook-2010-synthesis/global-megatrends/accelerating-technological-change-racing-into-the-unknown-global-megatrend-4/@@download/file. Accessed 18 Aug 2025.

European Union. (2024). *Deaths by suicide in the EU down by 13% in a decade*. https://ec.europa.eu/eurostat/web/products-eurostat-news/w/edn-20240909-1

Farver-Vestergaard, I., & Ruggeri, K. (2017). Setting national policy agendas in light of the Denmark results for well-being. *JAMA Psychiatry,74*(8), 773–774. https://doi.org/10.1001/jamapsychiatry.2017.1330

Frijters, P., & Beatton, T. (2012). The mystery of the U-shaped relationship between happiness and age. *Journal of Economic Behavior & Organization, Emergence in Economics,82*(2), 525–542. https://doi.org/10.1016/j.jebo.2012.03.008

Galbraith, E. D., Barrington-Leigh, C., Miñarro, S., Álvarez-Fernández, S., Attoh, E. M. N. A. N., Benyei, P., Calvet-Mir, L., Carmona, R., Chakauya, R., Chen, Z., Chengula, F., Fernández-Llamazares, Á., García-del-Amo, D., Glauser, M., Huanca, T., Izquierdo, A. E., Junqueira, A. B., Lanker, M., Li, X., & Reyes-García, V. (2024). High life satisfaction reported among small-scale societies with low incomes. *Proceedings of the National Academy of Sciences,121*(7), e2311703121. https://doi.org/10.1073/pnas.2311703121

Gautam, S., Jain, A., Chaudhary, J., Gautam, M., Gaur, M., & Grover, S. (2024). Concept of mental health and mental well-being, it's determinants and coping strategies. *Indian Journal of Psychiatry,66*(Suppl 2), S231. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_707_23

Graeff-Buhl-Nielsen, S., Garcia-Garzon, E., Benzerga, A., Folke, T., & Ruggeri, K. (2020). Global mental health: An improved measure of well-being in multiple languages. *Health and Quality of Life Outcomes,18*(1), 209. https://doi.org/10.1186/s12955-020-01375-3

Huppert, F. A. (2009). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-Being,1*(2), 137–164. https://doi.org/10.1111/j.1758-0854.2009.01008.x

Huppert, F. A. (2014). The state of wellbeing science. *Wellbeing* (pp. 1–49). John Wiley & Sons, Ltd. https://doi.org/10.1002/9781118539415.wbwell036

Huppert, F. A., & So, T. T. C. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research,110*(3), 837–861. https://doi.org/10.1007/s11205-011-9966-7

Huppert, F. A., & Ruggeri, K. (2018). *Policy challenges: Well-being as a priority in public mental health* (pp. 131–140). Oxford University Press.

Huppert, F. A. (2005). Positive mental health in individuals and populations. In F. A. Huppert, N. Baylis, & B. Keverne (Eds.), *The Science of Well-Being* (p. 0). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198567523.003.0012

Iasiello, M., Ali, K., van Agteren, J., Kolovos, E., Kyrios, M., Kashdan, T. B., & Fassnacht, D. B. (2024). What's the difference between measures of wellbeing, quality of life, resilience, and coping? An umbrella review and concept map of 155 measures of positive mental health. *International Journal of Wellbeing*. https://doi.org/10.5502/ijw.v14i2.3621

Iasiello, M., van Agteren, J., Ali, K., Kolovos, E., Batterham, P. J., Goodman, F., Jarden, A., Kashdan, T. B., Kyrios, M., Oades, L. G., Weziak-Bialowolska, D., & Fassnacht, D. B. (2026). A Delphi consensus study on the dimensions of positive mental health. *Nature Mental Health*, 1–8. https://doi.org/10.1038/s44220-026-00617-5

IPSOS. (2025). *Ipsos Predictions 2025: A 33-Country Ipsos Global Advisor Survey*. https://www.ipsos.com/sites/default/files/ct/news/documents/2024-12/ipsos-predictions-2025-survey-report.pdf. Accessed 2 Nov 2025.

Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior,43*(2), 207–222. https://doi.org/10.2307/3090197

Khumalo, I. P., Appiah, R., & Wilson Fadiji, A. (2022). Measuring positive mental health and depression in Africa: A variable-based and person-centred analysis of the dual-continua model. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2022.885278

Klapper, L., Singer, D., Starita, L., & Norris, A. (2025). *The global Findex database 2025*. World Bank.

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2003). The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Medical Care,41*(11), 1284. https://doi.org/10.1097/01.MLR.0000093487.78664.3C

Kroenke, K., Spitzer, R. L., Williams, J. B. W., Monahan, P. O., & Löwe, B. (2007). Anxiety disorders in primary care: Prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine,146*(5), 317–325. https://doi.org/10.7326/0003-4819-146-5-200703060-00004

Layard, R., & CEP Group at LSE. (2006). *The Depression Report: A New Deal for Depression and Anxiety Disorders* (No. CEPSP15). Centre for Economic Performance, LSE. https://cep.lse.ac.uk/_new/publications/abstract.asp?index=2404. Accessed 11 Aug 2025.

Löwe, B., Wahl, I., Rose, M., Spitzer, C., Glaesmer, H., Wingenfeld, K., Schneider, A., & Brähler, E. (2010). A 4-item measure of depression and anxiety: Validation and standardization of the Patient Health Questionnaire-4 (PHQ-4) in the general population. *Journal of Affective Disorders,122*(1), 86–95. https://doi.org/10.1016/j.jad.2009.06.019

Mahomed, F. (2020). Addressing the problem of severe underinvestment in mental health and well-being from a human rights perspective. *Health and Human Rights,22*(1), 35–49.

Marsh, H. W., Huppert, F. A., Donald, J. N., Horwood, M. S., & Sahdra, B. K. (2020). The well-being profile (WB-Pro): Creating a theoretically based multidimensional measure of well-being to advance theory, research, policy, and practice. *Psychological Assessment,32*(3), 294–313. https://doi.org/10.1037/pas0000787

Mason-Stephens, J., Sgherza, T. R., DeMarree, K. G., & Naragon-Gainey, K. (2025). The dual-continua model of mental health in daily life: Momentary associations between distress and wellbeing in clinical and non-clinical populations. *Journal of Affective Disorders,386*, 119432. https://doi.org/10.1016/j.jad.2025.119432

Nees, F., Renner, P., Holz, N. E., Polemiti, E., Siehl, S., Hese, S., Schepanski, K., & Schumann, G. (2024). Large-scale population data enrichment in mental health research. *Nature Mental Health,2*(10), 1124–1127. https://doi.org/10.1038/s44220-024-00316-z

Occhipinti, J.-A., Buchanan, J., Hynes, W., Eyre, H. A., Tran, K., Song, Y. J. C., Fels, A., Skinner, A., Rosenberg, S., Prodan, A., Ujdur, G., Natsky, A. N., Henderson, T., Hasudungan, R., & Hickie, I. B. (2023). Estimating the mental wealth of nations: Valuing social production and investment. *Nature Mental Health,1*(4), 247–253. https://doi.org/10.1038/s44220-023-00044-w

OECD, OECD. (2025). *Social connections and loneliness in OECD countries*. OECD Publishing. https://doi.org/10.1787/6df2d6a0-en

OECD. (2024, November 5). *How's Life? 2024*. OECD. https://www.oecd.org/en/publications/how-s-life-2024_90ba854a-en.html. Accessed 19 Aug 2025.

Prince, M., Patel, V., Saxena, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007). No health without mental health. *Lancet,370*(9590), 859–877. https://doi.org/10.1016/S0140-6736(07)61238-0

The Lancet Psychiatry. (2025). Mental health in all policies. *The Lancet Psychiatry,12*(8), 543. https://doi.org/10.1016/S2215-0366(25)00214-7

Rose, G. (1985). Sick individuals and sick populations. *International Journal of Epidemiology,14*(1), 32–38. https://doi.org/10.1093/ije/14.1.32

Ruggeri, K., Garcia-Garzon, E., Maguire, Á., Matz, S., & Huppert, F. A. (2020). Well-being is more than happiness and life satisfaction: A multidimensional analysis of 21 countries. *Health and Quality of Life Outcomes,18*(1), 192. https://doi.org/10.1186/s12955-020-01423-y

Ruggeri, K., Ashcroft-Jones, S., Abate Romero Landini, G., Al-Zahli, N., Alexander, N., Andersen, M. H., Bibilouri, K., Busch, K., Cafarelli, V., Chen, J., Doubravová, B., Dugué, T., Durrani, A. A., Dutra, N., Garciagarzon, E., Gomes, C., Gracheva, A., Grilc, N., Gürol, D. M., & Stock, F. (2023). The persistence of cognitive biases in financial decisions across economic groups. *Scientific Reports,13*(1), 10329. https://doi.org/10.1038/s41598-023-36339-2

Ruggeri, K., Panin, A., Vdovic, M., Većkalov, B., Abdul-Salaam, N., Achterberg, J., Akil, C., Amatya, J., Amatya, K., Andersen, T. L., Aquino, S. D., Arunasalam, A., Ashcroft-Jones, S., Askelund, A. D., Ayacaxli, N., Sheshdeh, A. B., Bailey, A., Barea Arroyo, P., Mejía, G. B., García-Garzon, E. (2022). The globalizability of temporal discounting. *Nature Human Behaviour*, 1–12. https://doi.org/10.1038/s41562-022-01392-w

Rutkowski, L., & Svetina, D. (2014). Assessing the hypothesis of measurement invariance in the context of large-scale international surveys. *Educational and psychological measurement, 74*(1), 31–57.

Santini, Z. I., Thygesen, L. C., Koyanagi, A., Stewart-Brown, S., Meilstrup, C., Nielsen, L., Olsen, K. R., Birkjær, M., McDaid, D., Koushede, V., & Ekholm, O. (2022). Economics of mental well-being: A prospective study estimating associated productivity costs due to sickness absence from the workplace in Denmark. *Mental Health & Prevention,28*, 200247. https://doi.org/10.1016/j.mhp.2022.200247

Shiba, K., Cowden, R. G., Gonzalez, N., Lee, M. T., Lomas, T., Lai, A. Y., & VanderWeele, T. J. (2022). Global trends of mean and inequality in multidimensional wellbeing: Analysis of 1.2 million individuals from 162 countries, 2009-2019. *Frontiers in Public Health,10*, 824960. https://doi.org/10.3389/fpubh.2022.824960

Somarriba Arechavala, N., Zarzosa Espina, P., & Pena Trapero, B. (2015). The economic crisis and its effects on the quality of life in the European Union. *Social Indicators Research,120*(2), 323–343. https://doi.org/10.1007/s11205-014-0595-9

Stea, J. N., & Hupp, S. (2023). *Investigating clinical psychology: Pseudoscience, fringe science, and controversies*. Taylor & Francis.

Stiglitz, J., Sen, A., & Fitoussi, J.-P. (2009). *Report by the Commission on the Measurement of Economic Performance and Social Progress*. https://ec.europa.eu/eurostat/documents/8131721/8131772/Stiglitz-Sen-Fitoussi-Commission-report.pdf

Tamnes, C. K., Bekkhus, M., Eilertsen, M., Nes, R. B., Prydz, M. B., Ystrom, E., Aksnes, E. R., Andersen, S. N., Ask, H., Ayorech, Z., Baier, T., Beck, D., Berger, E. J., Bjørndal, L. D., Boer, O. D., Bos, M. G. N., Caspi, A., Cheesman, R., Chegeni, R., von Soest, T. (2025). The nature of the relation between mental well-being and ill-being. *Nature Human Behaviour*, 1–10. https://doi.org/10.1038/s41562-025-02319-x

VanderWeele, T. J., Fulks, J., Plake, J. F., & Lee, M. T. (2021). National well-being measures before and during the COVID-19 pandemic in online samples. *Journal of General Internal Medicine,36*(1), 248–250. https://doi.org/10.1007/s11606-020-06274-3

Vogels, J. A., Lee Rainie and Emily A. (2021, February 18). Experts Say the 'New Normal' in 2025 Will Be Far More Tech-Driven, Presenting More Big Challenges. *Pew Research Center*. https://www.pewresearch.org/internet/2021/02/18/experts-say-the-new-normal-in-2025-will-be-far-more-tech-driven-presenting-more-big-challenges/. Accessed 18 Aug 2025.

WHO. (2025a). *Over a billion people living with mental health conditions – services require urgent scale-up*. https://www.who.int/news/item/02-09-2025-over-a-billion-people-living-with-mental-health-conditions-services-require-urgent-scale-up. Accessed 5 Sept 2025.

WHO. (2025b). *World mental health today: Latest data*. https://www.who.int/publications/i/item/9789240113817. Accessed 5 Sept 2025.

World Bank. (2021). *World Development Report 2021: Data for better lives* [Annual policy report]. https://www.worldbank.org/en/publication/wdr2021

Wren-Lewis, S., & Alexandrova, A. (2021). Mental health without well-being. *The Journal of Medicine and Philosophy,46*(6), 684–703. https://doi.org/10.1093/jmp/jhab032

Zaninotto, P., Iob, E., Di Gessa, G., & Steptoe, A. (2025). Recovery of psychological wellbeing following the COVID-19 pandemic: A longitudinal analysis of the English longitudinal study of ageing. *Aging & Mental Health,29*(4), 651–659. https://doi.org/10.1080/13607863.2025.2450260

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Authors and Affiliations

Kai Ruggeri[1,2] · Guillermo Valenzuela-Catarí[3] · Elli Polemiti[4,5] · Galla Abderahaman[6] · Taha R. Adawi[7] · Talar Agopian[8] · Deena Al-Dhahli[9] · Ali H. Al-Hoorie[10] · Rami Al-Sharif[11] · Narjes Al-Zahli[12,13] · Amani AlAmeeri[14] · Fawziah Alammar[15] · Habib Mohammad Ali[16] · Taif Aljaberi[8] · Sami M. Almahjoob[17] · Qais Ibrahim AlMeqdad[18] · Sama Alsewaidi[19] · Mohammed Amara[20] · Marcelo Amaral Mali[21] · Hansika Ambahelagedara[22] · Rizwana Amin[23] · Srinaath Anbu Durai[24] · Thomas Lind Andersen[25,26] · Joel R. Anderson[27] · Jack L. Andrews[28] · Marijn Antens[29] · Tamara Arh[30] · David Santson Ayebare[31] · Tsend-Ayush Azjargal[32] · Peter Baguma[33] · Martin Mabunda Baluku[34] · Edward Bantu[35] · Paula Barea-Arroyo[3] · Federico Barrera-Lemarchand[36,37] · Alain Belahimi[38] · Martina Benvenuti[39] · Elisa Berdica[40] · Frida Berglund[41] · Jana B. Berkessel[42] · Goni Biran[43] · Ludvig Daae Bjørndal[44] · Lana Bojanić[45] · Nicolas Brandao[46] · Eike K. Buabang[47] · Matthias Burghart[48] · Aslı Bursalıoğlu[49] · Vladimíra Čavojová[50] · Ana-Maria Cazan[51,52] · Diadora Cërmjani[53] · Apitchaya Chaiwutikornwanich[54] · Kai Qin Chan[55] · Shiyi Chen[56] · Bamlak Cherinet[57] · Magdalena Chorzępa[58] · Luis Sebastian Contreras-Huerta[59] · Éloïse Côté[60] · Hojjat Daniali[61] · Naomi G. Daniel[62] · Abdülhakim Bahadır Darı[63,64] · Arobindu Dash[65] · Ismahan Soukeyna Diop[66] · Tamara Đokić[67] · Vladyslav Dombrovskyi[68] · Jasmin Dönicke[69,70] · Barbora Doubravová[71] · Eva Dreyfus[72,73] · Tatianna Dugue[74] · Ksenija Edelinski[40,266] · Rita W. El-Haddad[75] · Esther Awazzi Envuladu[256] · Thorsten M. Erle[76] · Hadia Fakhreldin[77] · Eman Farahat[78] · Ingeborg Farver-Vestergaard[79,80] · Angelina Fauma[8] · Silvia Filippi[81,82] · Lucia Freira[83,84] · Andrea Freire-Pesántez[85] · Albina Gallyamova[86] · Ziwei Gao[87] · Saule Gazizova[88] · Sandra J. Geiger[89] · Biljana Gjoneska[90] · Anastasia Gracheva[91] · Ani Grigoryan[92] · Dmitry Grigoryev[86] · Silvia Guillén-Marín[93,94] · Deniz Mısra Gürol[95] · Srećko Gutić[67] · Abakar M. Habsita[96] · Stavros P. Hadjisolomou[75] · Ali Hajian[97] · Anna Hakobjanyan[92] · Julia G. Halilova[98] · Abdul Haseeb Hasan[99,265] · Georgina Haspel[100] · William Haspel[101] · Merle Havik[102] · Marlene Hecht[103,104] · Wen-Tso Ho[105] · Elham Hossain[106] · HsinPing Hsu[107] · Enma T. Huaman-Chulluncuy[108] · Alexander G. F. Ikonomeas[109] · David Izydorczyk[110] · Lea Jakob[8,111] · Hannes Jarke[112,113] · Dyana Chusnulitta Jatnika[114] · Maria Ali Jawad[14] · Gesine Jordan[115] · Kamoliddin Kadirov[116] · Zebuniso Kadirova[117] · Lenka Kalezić[118] · Lada Kaliska[119] · Ralitsa Karakasheva[120] · David Oliver Kasdan[121] · Kaltrina Kelmendi[122] · Narine Khachatryan[92] · Elena Kim[123] · Anneloes Kip[76,124] · Desislava Kirilova[125] · Pál Kolumbán[126] · Elizaveta Komyaginskaya[86] · Kenn Konstabel[102,233] · Daina Kosīte[127] · Nato Lagidze[141] · Jasmine Le[128] · Cheuk Yee Lee[129] · Žan Lep[130,131] · Guiquan Li[132] · Zerong Liu[133] · Johanna Löloff[134] · Claudio López-Calle[135] · Fiorella Macchiavello[136] · Filipe de Neri Machado[137] · Tiziana Maria Mahayri[138] · Metasebiya A. Mamo[139] · Silvana Mareva[140] · Khatuna Martskvishvili[141] · Mafalda F. Mascarenhas[142] · Žiga Mekiš Recek[130,131] · Nisma Merdad[143] · Sebastian A. Meyer[144] · Samson Mhizha[145] · Rania Miniesy[146] · Melika Miralem[147] · Katarina Mišetić[148] · Amina Mohammed[149] · Fredy S. Monge-Rodriguez[108] ·

Edmundo Monteiro[150] · Ali Mahamat Moussa[151] · Nozima Mullabaeva[152] · Erica Munnik[153] · Atheer Musad[154,264] · Ledion Musaj[126] · Asel Myrzabekova[155] · Joaquin Navajas[156,157] · Cristina Navarro[158] · Dieynaba Gabrielle Ndiaye[159] · Elena Niehoff[160] · Alex Ojeda Copa[161] · J. A. Olmos-Aguilar[161] · Rafaella Osores Urday[1] · Şebnem Özdemir[162] · Konstantinos Papachristopoulos[163] · Joonha Park[164] · Daria Stefania Pascu[165] · Jeanet Pérez Rodríguez[166] · Gerit Pfuhl[167] · Katarina Pižurica[168] · Sara Plakolm Erlač[169] · Victoria Plămădeală[170] · Naya Polychroni[171] · Ivona Popović[172] · Gerhard Prinz[173] · Maksymilian Pyrkowski[174] · Otgonbayar Radnaa[175,176] · Mette Ranta[177] · Nagireddy Neelakanteswar Reddy[178] · Amanda Remsö[179,180] · Nirvana Ribić[181] · Gordana Ristevska Dimitrovska[182] · Ana M. Rocha[183] · Valério Souza-Neto[184] · F. Rojas-Thomas[185] · Abigail Roque Miranda[161] · Charlotte S. L. Rossetti[186] · Binahayati Rusyidi[114,187] · Nina Šafranko[188] · Fatima Zahra Sahli[189] · Rand Said[190] · Ivaylo Sakelariev[191] · Razafimbola Sandimampita[192] · Sergiu Sanduleac[193] · Lourdes V. Santos[194,235] · Ibraheem Sanusi[195] · Petra Šarić[181,196] · Ahmet Kerem Sarikaya[197] · Mohammad Sartawi[198] · Jakob Schuck[199] · Marija Sekulović[200] · Mariam Shavgulidze[219] · Zubaida Shebani[201] · Mirna Karim Shokry[14] · Shumetha K. Sidhu[202,203] · Elisabeth D. C. Sievert[204,205] · Yasmin Silane[118] · Liene Sile[206] · Susana Silva Mostajo[207] · Divita Singh[178] · Philippe Sloksnath[208] · Irina Soboleva[209] · Francisco Leonardo Soler-Anguiano[210] · Meeval Soorej[14] · Florencia M. Sortheix[211,212] · Jakub Šrol[213] · Gerard Martin C. Suarez[214] · Dhanya Sunil Subhas[215] · Ruiqing Sun[216] · Felicia T. A. Sundström[217] · Barnabas Szaszi[218,219] · Benjamin Miranda Tabak[220] · Carmit T. Tadmor[221] · Demetris Taliadoros[222] · Felice Tavera[223] · Anna-Lena Tebbe[224] · Tengku Amatullah Madeehah Tengku Mohd[225] · Habib Tiliouine[226] · Shane Timmons[190,227] · Filippo Toscano[228] · Maria Towns[229] · Vidit Megan[230] · Camelia Truța[51] · Solongo Tsogt[231] · Alexander Tudose[232,261,262] · Jaan Tulviste[102,233] · Markus R. Tünte[234] · Reginald G. Ugaddan[235,236] · Fitim Uka[122,237] · Volodymyr Vakhitov[238] · Tom Van Daele[239,240] · Edmunds Vanags[241] · Cecilia Vezzani[242,263] · Yufan Wang[243] · Yodit Kifle Wolde[244] · Ruohan Xu[245] · Rosliza Yahaya[246,247] · Yuki Yamada[248] · Fikret Yetkin[249] · Skerdi Zahaj[250] · Nataliia Zaika[238] · Mirela Zaneva[251] · Angel C. Zegarra-López[252] · Ashenafi Zelalem[253,254] · Yiyong Zhou[132] · Eszter Zilahi[255] · Joy Hyelni Zoakah[256] · Aysha Zummer[257,258] · Lucía Macchia[84,259] · Sarah Ashcroft-Jones[1] · Sofia Pelica[260]

✉ Kai Ruggeri
kai.ruggeri@columbia.edu

Sofia Pelica
s.i.gomes.pelica@vu.nl

[1] Department of Health Policy and Management, Mailman School of Public Health, Columbia University, 722 W 168 St, New York, NY 10032, USA

[2] Policy Research Group, Centre for Business Research, Judge Business School, University of Cambridge, Trumpington Street, Cambridge, UK

[3] Universidad de Sevilla, C. Camilo José Cela, S/N, 41018 Seville, Spain

[4] Center of Digital Health, Berlin Institute of Health at Charité University of Medicine Berlin, Charitéplatz 1, 10117 Berlin, Germany

[5] Health Data Science Unit Bioquant Medical Faculty, University of Heidelberg, Im Neuenheimer Feld 267, 69120 Heidelberg, Germany

[6] Universität Zu Köln, Albertus Magnus Platz 0, Cologne, Germany

[7] Psychological Sciences, College of Education Qatar University, I10 Psychological Sciences Department College of Education – Qatar University, Office E514, 4 Floor, P.O Box 2713, Doha, Qatar

[8] School of Psychology, University of New York in Prague, Londýnská 41, 120 00 Vinohrady, Prague, Czech Republic

[9] Department of Humanities, Mazoon College, Airport Heights–SeebP.C. 133, Oman Al Matar Street, Muscat Governorate, P.O. Box 101, Muscat, Oman

[10] Royal Commission for Jubail and Yanbu, Jubail, Saudi Arabia

[11] Adam Smith Business School, University of Glasgow, 2 Discovery Place, Glasgow G11 6EY, UK

[12] Columbia University, 2960 Broadway, New York, NY 10027-6907, USA

[13] University of California Berkeley, 110 Sproul Hall, Berkeley, CA 94 720, USA

[14] Sharjah, UAE

[15] Psychology, Faculty of Education, Art, and Science, Amran University, Amran, Yemen

[16] Department of Journalism and Media Communication, Green University of Bangladesh, Purbachal American City, Kanchan, Rupganj, Narayanganj, 1461 Dhaka, Bangladesh

[17] Psychology, Bahrain University, Sakhir, Bahrain

[18] Psychological Sciences, Qatar University, College of Education Qatar University, P.O. Box 2713, Doha, Qatar

[19] Counseling and Clinical Psychology, Teachers College Columbia University, 525 W 120 St, New York, NY 10027, USA

[20] Department of Experimental Psychology, University of Oxford, Oxford, UK

[21] Instituto Nacional Saude Publica Timor Leste, ComoroDili, Timor-Leste

[22] Faculty of Educational Sciences, University of Helsinki, Siltavuorenpenger 5, Helsinki, Finland

[23] Psychology Department, Effat University, Jeddah, Saudi Arabia

[24] Hec Paris, 1 Rue de La Liberation, Jouy en Jousas, France

[25] Copenhagen University Hospital - Mental Health Services CPH, Child and Adolescent Mental Health Center, Copenhagen, Denmark

[26] Department of Clinical Medicine, University of Copenhagen, Copenhagen, Denmark

[27] Australian Research Centre in Sex Health and Society, La Trobe University, Melbourne, Bundoora NR6, Australia

[28] Department of Experimental Psychology, University of Oxford, Life & Mind Building, South Parks Road, Oxford OX1 3PS, UK

[29] Psychiatry, Erasmus MC, Dr. Molewaterplein 40, Rotterdam, The Netherlands

[30] Ljubljana, Slovenia

[31] Department of Community Health, Mbarara University of Science and Technology, Mbarara, Uganda

[32] Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia

[33] DESOP, Makerere University, Box 7062, Kampala, Uganda

[34] School of Psychology, Makerere University, P.O Box 7062, Kampala, Uganda

[35] Psychology, Kabale University, 317, KikunjiriKabale, Uganda

[36] Laboratorio de Neurociencia, Universidad Torcuato Di Tella, Av. Pres. Figueroa Alcorta, 7350 Ciudad de Buenos Aires, Argentina

[37] Consejo Nacional de Investigaciones Científicas y Técnicas, Godoy Cruz, 2290 Ciudad Autónoma de Buenos Aires, Argentina

[38] Médecine, Facultés Des Sciences de La Santé Humaine, Ndjamena, Chad

[39] Department of Psychology, Alma Mater Studiorum University of Bologna, Viale Berti Pichat 5, Bologna, Italy

[40] University of Mannheim, Schloss Westflügel, Mannheim, Germany

[41] Department of Women's and Children's Health, Uppsala University, MTC-Huset, Dag Hammarskjölds Väg 14B, 752 37 Uppsala, Sweden

[42] Institute for Social Sciences of Religions, University of Lausanne, Anthropole Building, Lausanne, Switzerland

[43] Department of Philosophy, Sociology, Education and Applied Psychology, University of Padova, Padua, Italy

[44] Department of Psychology, University of Oslo, Forskningsveien 3A, Oslo, Norway

[45] Division of Psychology and Mental Health, University of Manchester, Oxford Road, Manchester M13 9PL, UK

[46] Department of Psychology, University of Zurich, Binzmuehlestrasse 14, 8050 Zurich, Switzerland

[47] Trinity College Institute of Neuroscience, Trinity College Dublin, Dublin, Ireland

[48] Max Planck Institute for the Study of Crime, Security and Law, Günterstalstraße 73, Freiburg, Germany

[49] Department of Psychology, Northwestern University, 633 Clark St, Evanston, USA

[50] Institute of Experimental Psychology Centre of Social and Psychological Sciences, Slovak Academy of Sciences, Dubravska Cesta 9, Bratislava, Slovakia

[51] Department of Psychology and Education Sciences, Transilvania University of Brasov, Eroilor 29, Brasov, Romania

[52] Institute of Philosophy and Psychology Constantin Rădulescu Motru, Romanian Academy, Calea Victoriei 125, Bucharest, Romania

[53] Institute of Psychology, University of Prishtina, Eqrem Çabej Street, #21 | 10000, Prishtina, Kosovo

[54] Faculty of Psychology, Chulalongkorn University, 7Th Fl. Borommaratchachonnanisisattaphat Bldg. Rama 1 Road, Wangmai, Patumwan 10330, Bangkok, Thailand

[55] James Cook University, 149 Sims Dr, Singapore 387380, Singapore

[56] Department of Psychology, St. Olaf College, 1520 St. Olaf Ave, Northfield, MN 55057, USA

[57] Medicine, Myungsung Medical College, Bole Subcity, Woreda 14, Gerji, Addis Ababa, Ethiopia

[58] SWPS University, Chodakowska 19/31, 03-815 Warsaw, Poland

[59] Center for Social and Cognitive Neuroscience (CSCN), School of Psychology, Universidad Adolfo Ibáñez, Padre Hurtado 750, Viña del Mar, Chile

[60] Department of Psychology, University of Toronto, 27 King's College Cir, Toronto, ON M5S 1A1, Canada

[61] Department of Psychology, Norwegian University of Science and Technology, N-7491 Trondheim, Norway

[62] Department of Psychology, Harvard University, 52 Oxford Street, Cambridge, USA

[63] Kırgızistan-Türkiye Manas Üniversitesi, Bişkek, Kyrgyz Republic

[64] Yalova Üniversitesi, Yalova, Türkiye

[65] Department of Social Sciences, International University of Business Agriculture and Technology, 1230 Dhaka, Bangladesh

[66] Département de Psychologie, Faculté Des Lettres Et Sciences Humaines, Université Cheikh Anta Diop, Boulevard Martin Luther King, Dakar, Senegal

[67] Department of Psychology, Faculty of Philosophy , University of Belgrade, Čika Ljubina 18-20, Belgrade, Serbia

[68] School of Management, American University Kyiv, Poshtova Square, 3, Kiev 04070, Ukraine

[69] Georg August Universität Göttingen, Wilhelmsplatz 1, 37073 Göttingen, Germany

[70] Johannes Gutenberg Universität Mainz, Saarstraße 21, 55122 Mainz, Germany

[71] Department of Psychology, Faculty of Social Studies, Masaryk University, Brno, Czech Republic

[72] First Faculty of Medicine, Charles University, Kateřinská 32, Prague, Czech Republic

[73] National Institute of Mental Health NIMH, Topolová 748, Klecany, Czech Republic

[74] Clinical Psychology, The City College of New York, 160 Convent Ave, New York, NY 10031, USA

[75] Department of Social and Behavioral Sciences, American University of Kuwait, 15 Salem Al Mubarak Street, Salmiya, Kuwait

[76] Department of Social Psychology, Tilburg University, P.O. Box 90153, 5000 LE Tilburg, The Netherlands

[77] Business Administration, The British University in Egypt, El Sherouk City, Suez Desert Road, P.O. Box 43, Cairo 11837, Egypt

[78] Behavioral Science Group, Office of Development Affairs, Abu Dhabi, UAE

[79] Department of Medicine, Lillebaelt Hospital, Beriderbakken 4, Vejle, Denmark

[80] Department of Regional Health Research, University of Southern Denmark, Odense, Denmark

[81] Faculty of Psychology and Educational Sciences, University of Geneva, Bd du Pont-d'Arve 40, 1205 Geneva, Switzerland

[82] Department of Developmental Psychology and Socialization, University of Padova, Via Venezia, 8, Padua, Italy

[83] Departamento de Economía y Negocios, Universidad Católica del Uruguay, Av. 8 de Octubre 2738, Montevideo, Uruguay

[84] Escuela de Negocios, Universidad Torcuato Di Tella, Av. Pres. Figueroa Alcorta, 7350 Ciudad de Buenos Aires, Argentina

[85] Universidad del Azuay, 24 de Mayo Avenue and Hernán Malo Street, Cuenca, Ecuador

[86] Center for Sociocultural Research, HSE University, Moscow, Russia

[87] Dyson School of Design Engineering, Imperial College London, Exhibition Road, London SW7 2AZ, UK

[88] Survey Center, Corporate Fund National Analytical Center, 53 Kabanbay Batyr Street, Astana, Kazakhstan

[89] Andlinger Center for Energy and the Environment, Princeton University, 86 Olden St, Princeton, USA

[90] Macedonian Academy of Sciences and Arts, Krste Misirkov 2, Skopje, North Macedonia

[91] Wharton School of the University of Pennsylvania, 3200 Locust Walk, Philadelphia, USA

[92] Personality Psychology, Yerevan State University, 1 Alex Manoogian, 0025 Yerevan, Armenia

[93] Department of Psychology and Sociology, University of Zaragoza, C/Pedro Cerbuna 12, 50009 Saragossa, Spain

[94] Department of Psychology, Universidad Internacional de La Rioja UNIR, Logroño, Spain

[95] Department of Psychology, Koç University, Rumelifeneri, Sarıyer Rumeli Feneri Yolu, 34450 Sarıyer/Istanbul, Türkiye

[96] Psychiatry Department, University of Nairobi, Nairobi, Kenya

[97] Department of Psychological and Brain Sciences, University of Massachusetts Amherst, Amherst, USA

[98] Department of Psychology, York University, 4700 Keele Street, Toronto, Canada

[99] Medicine, King Edward Medical University, Nila Gumbad Rd, Neela Gumbad, Lahore, Pakistan

[100] Psychology, Davidson College, 405 N Main St, Davidson, NC 28035, USA

[101] Claremont, CA, USA

[102] Department of Chronic Diseases, National Institute for Health Development, Paldiski Mnt 80, 10617 Tallinn, Estonia

[103] Center for Adaptive Rationality, Max Planck Institute for Human Development, Lentzeallee 94, 14195 Berlin, Germany

[104] Department of Psychology, Humboldt-Universität zu Berlin, Unter den Linden 6, 10099 Berlin, Germany

[105] Department of Psychology, Kaohsiung Medical University, No. 100, Shiquan 1St Rd., Sanmin Dist., 807378 Kaohsiung City, Taiwan

[106] Department of English, Green University of Bangladesh, Purbachal, American City, Rupganj, Narayanganj, Dhaka, Bangladesh

[107] Department of Psychology, National Cheng Kung University, No. 1, University Road, Tainan City 701, Taiwan

[108] Department of Psychology, Universidad Peruana Cayetano Heredia, Jr. José Antonio 310 - 220, La Molina 15023, Lima, Peru

[109] Department of Psychology, The University of Oslo (UiO), University of Oslo, Boks 1072 Blindern, NO-0316 Oslo, Norway

[110] Department of Psychology, University of Mannheim, 68131 Mannheim, Germany

[111] National Institute of Mental Health, Topolová 748, Klecany, Czech Republic

[112] Department of International Health, Maastricht University, Universiteitssingel 40, Maastricht, The Netherlands

[113] Judge Business School Centre for Business Research, University of Cambridge, Trumpington Street, Cambridge, UK

[114] Department of Social Welfare, Universitas Padjadjaran, Jl. Raya Bandung Sumedang KM.21, Hegarmanah, Kec. Jatinangor, Kabupaten Sumedang, Jawa Barat, 45363 Sumedang Regency, Indonesia

[115] Department of Behavioural and Cognitive Sciences, University of Luxembourg, 11 Porte Des Sciences, L-4366 Esch Sur Alzette, Luxembourg

[116] Department of Pedagogy and Psychology, Tashkent University of Social Innovation, Tashkent, Uzbekistan

[117] General Psychology, Moscow State University in Tashkent, Tashkent, Uzbekistan

[118] Cognitive Neuroscience and Clinical Neuropsychology, Department of Psychology, University of Padova, Padua, Italy

[119] Department of Psychology Faculty of Education, Matej Bel University in Banska Bystrica, Ruzova 13, Banska Bystrica, Slovakia

[120] Kuala Lumpur, Malaysia

[121] Sungkyunkwan University, Public Administration, 25-2 Sungkyunkwan-Ro, Jongno Gu, Republic of Korea

[122] Department of Psychology, University of Prishtina, George Bush Boulevard, Nr. 31, 100000 Prishtina, Kosovo

[123] Psychology, Bard College, 30 Campus Rd, Annandale On Hudson, USA

[124] Department of Methodology and Statistics, Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands

[125] Sofia, Bulgaria

[126] Department of Affective Psychology, Eötvös Loránd University, Izabella Street. 46, 1064 Budapest, Hungary

[127] Department of Public Health, Erasmus MC University Medical Center Rotterdam, Dr. Molewaterplein 40, 3015 GD Rotterdam, The Netherlands

[128] Columbia University, New York, USA

[129] University College London, 117 Gower Street, London WC1E 6AP, UK

[130] Social Psychology and Policy Lab, Department of Psychology, Faculty of Arts, University of Ljubljana, Aškerčeva 2, Ljubljana, Slovenia

[131] Centre for Applied Epistemology, Educational Research Institute, Gerbičeva 62, Ljubljana, Slovenia

[132] School of Psychological and Cognitive Sciences, Peking University, 5 Yiheyuan Road, Haidian, China

[133] University College London, London, UK

[134] Zentrum für Psychologische Psychotherapie, Universität Heidelberg, Heidelberg, Germany

[135] Universidad de Cuenca, 12 de Abril Avenue and Loja Avenue, Cuenca, Ecuador

[136] School of Psychology, Universidad Adolfo Ibáñez, Padre Hurtado 750, Viña del Mar, Chile

[137] National Directorate of Public Health, INSP Timor-Leste, Dili, Timor-Leste

[138] Národní Ústav duševního Zdraví, Topolová 748, Klecany, Czech Republic

[139] Jackson School of Global Affairs, Yale University, 55 Hillhouse Ave, New Haven, USA

[140] Department of Psychology, University of Exeter, Washington Singer Building Perry Road Exeter, Exeter EX4 4QG, UK

[141] Faculty of Psychology and Educational Sciences, Ivane Javakhishvili Tbilisi State University, 11, Ilia Chavchavadze Avenue, III Block/Building, Room N105, Tbilisi, Georgia

[142] Faculdade de Psicologia e Instituto de Ciências Sociais, Universidade de Lisboa, Lisbon, Portugal

[143] Psychology Department, Effat University, Qasr Khuzam, 8482 Jeddah, Saudi Arabia

[144] Innovation and Development, Fundación Paraguaya de Cooperación y Desarrollo, Manuel Blinder 5589 Esq. Tte. Espinoza, Asunción, Paraguay

[145] Applied Psychology Department, University of Zimbabwe, 630 Churchil Avenue, Mt Pleasant Harare Zimbabwe, Harare, Zimbabwe

[146] Economics Department, The British University in Egypt, Suez Desert Road, P.O. Box 43, El Sherouk City 11837, Cairo, Egypt

[147] Department of Psychosocial Science, University of Bergen, Christies Gate 12, Bergen, Norway

[148] Department of Psychology, University of Sarajevo, Obala Kulina Bana 7, Sarajevo, Bosnia and Herzegovina

[149] Department of Community Medicine, Abubakar Tafawa Balewa University, Bauchi, Nigeria

[150] Military Health Department, FDTL, Dili, Timor-Leste

[151] Département de Médecine, Faculté Des Sciences de La Santé Humaine, BP 130, Ndjamena, Chad

[152] Department of Social Sciences and Education, Tashkent International University, Tashkent, Uzbekistan

[153] Department of Psychology, University of the Western Cape, Private Bag X17, Bellville, South Africa

[154] Columbia University, 3227 Broadway, New York, NY 10027, USA

[155] Psychology Department, American University of Central Asia, 7/6 Aaly Tokombaev Street, Bişkek, Kyrgyz Republic

[156] Laboratorio de Neurociencia, Universidad Torcuato Di Tella, Av Figueroa Alcorta 7350, Ciudad de Buenos Aires, Argentina

[157] Consejo Nacional de Investigaciones Científicas y Técnicas, Ciudad de Buenos Aires, Argentina

[158] Mass Communication and Media, Gulf University for Science and Technology, Mubarak Al-Abdullah, Kuwait

[159] Psychology, Cheikh Anta Diop University of Dakar, Dakar, Senegal

[160] Climate Protection Management, Stadt Gronau, Grünstiege 64, 48599 Gronau, Germany

[161] Laboratorio de Tecnologías Sociales, Cochabamba, Bolivia

[162] New Media and Communication, Sivas Cumhuriyet University, Sivas Cumhuriyet Üniversitesi, Sivas, Türkiye

[163] Athens University of Economics and Business, Athens, Greece

[164] Graduate School of Education, Kyoto University, Yoshidahonmachi Sakyo-Ku, Kyoto, Japan

[165] Fondazione Novella Fronda, Piazza Castello 16, 35141 Padua, PD, Italy

[166] Department of Social Sciences and Communication, Transilvania University of Brasov, Postal Code 500036, Bulevardul Eroilor Nr. 29, Brasov, Romania

[167] Department of Psychology, Norwegian University of Science and Technology, Postboks 8900, Torgarden, Trondheim, Norway

[168] Department of Brain and Behavioral Sciences, Università degli Studi di Pavia, Pavia, Italy

[169] Unit for Child and Adolescent Psychiatry, Paediatric Clinic, University Medical Centre Maribor, Ljubljanska Ulica 5, Maribor, Slovenia

[170] Social Work, Ion Creanga State Pedagogical University of Chisinau, 1 Ion Creanga St., Chisinau MD-2069, Moldova

[171] Department of Experimental Psychology, University of Oxford, Oxford, UK

[172] Department of Basic Pedagogical Studies, Faculty of Education, University of Maribor, Koroška Cesta 160, 2000 Maribor, Slovenia

[173] Department of Psychology, University of Trier, Universitätsring 15, 54296 Trier, Germany

[174] Polish Economic Institute, Al. Jerozolimskie 87, 02-001 Warsaw, Poland

[175] Pediatrics, MNUMS, Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia

[176] Health Management, Mongolian National University of Medical Sciences, SBD DIST, 1 KHOROO, Ulaanbaatar, Mongolia

[177] Faculty of Educational Sciences, University of Helsinki, P.O. Box 9 (Siltavuorenpenger 5A), FI-00014 Helsinki, Finland

[178] School of Arts and Sciences, Ahmedabad University, Naranpark Society, Navrangpura, Ahmedabad, Gujarat 380009, India

[179] Department of Psychology, Kristianstad University, Elmetorpsvägen 15, Kristianstad, Sweden

[180] Department of Psychology, Gothenburg University, Haraldsgatan 1, Göteborg, Sweden

[181] Division of Cognitive Sciences, University of Rijeka Faculty of Humanities and Social Sciences, Sveučilišna Avenija 4, 51000 Rijeka, Croatia

[182] Higher Medical School Bitola, University Saint Kliment Ohridski Bitola, Bul. 1 Maj, Bb, Bitola, Republic of North Macedonia

[183] Human Sciences Faculty, Catholic University of Angola, Av. Pedro de Castro Van Dunem Loy, 24, Luanda, Angola

[184] Department of Tourism and Marketing, Griffith University, Office 0.23, Glyn Davis Building (N72), Mimosa Crk Rd, Nathan, Brisbane, QLD 4111, Australia

[185] Center for Social and Cognitive Neuroscience, Universidad Adolfo Ibáñez, Av. Diag. Las Torres 2640, Santiago, Chile

[186] Department of Psychology, University of Zurich, Binzmühlestrasse 14, 8050 Zurich, Zurich, Switzerland

[187] The Research Center for Gender and Children, Social Welfare Department, Universitas Padjadjaran, Kampus FISIP UNPAD Jalan Raya Bandung-Sumedang Km 21, Sumedang Regency, Indonesia

[188] Department of Psychology, Faculty of Arts, University of Maribor, Koroška Cesta 160, 2000 Maribor, Slovenia

[189] Laboratory of Interdisciplinary Sport Sciences LISS, IMS University Ibn Tofaïl, University Campus, Kenitra, Morocco

[190] School of Psychology, Trinity College Dublin, College Green, Dublin 2, Ireland

[191] Independent Researcher, Sofia City, Bulgaria

[192] Centre d'Etudes Et de Recherche en Psychologie Sociale, Université d'Antananarivo, 7, Rue Joel Rakotomalala, Faravohitra, Antananarivo, Madagascar

[193] Psychology, Ion Creanga State Pedagogical University of Chisinau, 1 Ion Creanga St., MD-2069 Chisinau, Moldova

[194] Center for Local and Regional Governance (CLRG), Quezon City, Philippines

[195] Strengthening AUs Health Architecture Project, GIZ Office to the African Union, Minaye Office Park, Floor 6-8 Flamingo Area, Off Bole Road, P.O. Box 100009, Addis Ababa, Ethiopia

[196] Department of Psychology, University of Rijeka Faculty of Humanities and Social Sciences, Rijeka, Croatia

[197] Champalimaud Neuroscience Programme, Champalimaud Foundation, Av. Brasília, 1400-038 Lisbon, Portugal

[198] Psychology Department, Kuwait University, Kuwait, Kuwait

[199] Faculty of Psychology, University of Basel, Missionsstrasse 64a, 4055 Basel, Switzerland

[200] Faculty of Philosophy, University of Montenegro, Nikšić, Montenegro

[201] Department of Behavioral Medicine, Sultan Qaboos University, Muscat, Oman

[202] School of Psychology and Clinical Language Sciences, University of Reading Malaysia Persiaran Graduan, University of Reading Malaysia, Kota Ilmu, EduCity, 79200 Iskandar Puteri, Johor, Malaysia

[203] School of Psychology and Clinical Language Sciences, University of Reading, Harry Pitt Building, Earley Gate, Reading RG6 6ET, UK

[204] Health Communication, Bernhard Nocht Institute for Tropical Medicine, Bernhard-Nocht-Straße 74, Hamburg, Germany

[205] Institute for Planetary Health Behaviour, University of Erfurt, Nordhäuser Strasse 63, Erfurt, Germany

[206] Scientific Institute of Mental Health, National Center of Mental Health, Tvaija Street 2, Riga, Latvia

[207] Lima, Ministerio de La Mujer y Poblaciones Vulnerables, Lima, Peru

[208] Department of Communication and Media Research, University of Zurich, Andreasstrasse 15, R. 3.26, Zurich, Switzerland

[209] Division of Social Sciences, Duke Kunshan University, 8 Duke Avenue, Kunshan, China

[210] Faculty of Psychology, National Autonomous University of Mexico, Mexico City, Mexico

[211] Faculty of Educational Sciences, University of Helsinki, P.O. Box 9 (Siltavuorenpenger 5A), FI-00014 Helsinki, Finland

[212] ESADE, Ramon Llull University, Barcelona, Spain

[213] Institute of Experimental Psychology Centre of Social and Psychological Sciences, Slovak Academy of Sciences, Dubravska Cesta 9, 841 04 Bratislava, Slovakia

[214] Department of Broadcast Communication, University of the Philippines Diliman, Plaridel Hall, Ylanan Street, Diliman, Quezon City, Philippines

[215] School of Health and Psychological Sciences, City St Georges University of London, Northampton Square, London EC1V 0HB, UK

[216] St Olaf College, Northfield, USA

[217] Department of Psychology, Uppsala University, Von Kraemers Allé 1, 752 37 Uppsala, Sweden

[218] Corvinus Institute for Advanced Studies, Corvinus University of Budapest, Fővám Tér 8, 1093 Budapest, Hungary

[219] Institute of Psychology, Eötvös Loránd University, Izabella U. 46, Budapest, Hungary

[220] FGV EPPG, School of Public Policy, Government and Business, Getulio Vargas Foundation, Sector of Large North Areas - SGAN Block 602 - Modules A, B and C - North Wing, DF Brasilia 70873-020, Brazil

[221] Coller School of Management, Tel Aviv University, P.O. Box 39040, Tel Aviv, Israel

[222] Department of Medical Biochemistry and Microbiology, Uppsala University, Husargatan 3, Uppsala, Sweden

[223] Department of Psychology, University of Cologne, Richard-Strauss-Straße 2, 50931 Cologne, Germany

[224] Max Planck Institute for Human Cognitive and Brain Sciences, Stephanstr. 1a, Leipzig, Germany

[225] Public Health Unit, Universiti Sains Islam Malaysia, Persiaran Ilmu, Bandar Baru Nilai, 71800 Nilai, Negeri Sembilan, Malaysia

[226] Faculty of Social Sciences, University of Oran Mohamed Ben Ahmed, BP 1524 El Menaouer, 31000 Oran, Algeria

[227] Economic and Social Research Institute, Whitaker Square, Sir John Rogerson's Quay, Dublin, Ireland

[228] Department of Psychology, University of Zurich, Binzmuehlestrasse 14, 8050 Zurich, Switzerland

[229] Faculty of Educational Sciences, University of Helsinki, Siltavuorenpenger 5, Helsinki, Finland

[230] Biostatistics, Columbia University, 722 W 168 St, New York, NY 10032, USA

[231] Department of Neurology, Mongolia Japan Hospital, Bayanzurkh District, 12 Khoroo Botanical Garden, Ulaanbaatar, Mongolia

[232] Laboratory of Cognitive Clinical Sciences, University of Bucharest, Bucharest, Romania

[233] Institute of Psychology, University of Tartu, Näituse 2, 50409 Tartu, Estonia

[234] Department of Developmental and Educational Psychology, University of Vienna, Liebiggasse 5, Vienna, Austria

[235] National College of Public Administration and Governance, NCPAG, University of the Philippines, University of the Philippines Diliman, R.P. De Guzman, Diliman, 1101 Quezon City, Metro Manila, Philippines

[236] Center for Local and Regional Governance (CLRG), NCPAG, University of the Philippines, University of the Philippines Diliman, R.P. De Guzman, Diliman, 1101 Quezon City, Metro Manila, Philippines

[237] Clinical Department, Multidisciplinary Clinic Empatia, Teodor Muzaka, Blloku A, No. 5, Prishtina, Kosovo

[238] Institute for Behavioral Studies, American University Kyiv, 3, Poshtova Sq, Kiev, Ukraine

[239] Centre of Expertise Care and Well-Being, Thomas More University of Applied Sciences, Psychology and Technology, Molenstraat 8, Antwerp, Belgium

[240] Centre for Technological Innovation in Mental Health and Education, Queen's University Belfast, Belfast, UK

[241] Science Department, National Center of Mental Health, Tvaija Street 2, Riga, Latvia

[242] Department of Psychiatry and Psychotherapy, Faculty of Medicine University of Bonn, Venusberg Campus 1, 53127 Bonn, Germany

[243] Medical Social Sciences, Northwestern University, Floor 21, 625 N Michigan Ave, Chicago, IL 60611, USA

[244] Gondar University, Gondar, Ethiopia

[245] Independent Researcher (Unaffiliated), Edinburgh, UK

[246] Faculty of Medicine, Universiti Sultan Zainal Abidin, Gong Badak Campus, Gong Badak, 21300 Kuala Nerus, Terengganu Darul Iman, Malaysia

[247] UUM College of Arts and Sciences, Universiti Utara Malaysia, 06010 UUM Sintok Kedah Darul Aman, Sintok, Malaysia

[248] Faculty of Arts and Science, Kyushu University, 744 Motooka, Nishi-Ku, Fukuoka, Japan

[249] Department of International Trade and Business, Bursa Uludağ University, Bursa Uludağ Üniversitesi, Bursa, Türkiye

[250] Department of Psychology and Pedagogy, University of Tirana, Blv. Gjergj Fishta, , Tirana, Tirane, Albania

[251] University of Oxford, Oxford, UK

[252] Universidad de Lima, University of Lima, 4600 Javier Prado East Avenue, Monterrico, Santiago de Surco, 15023 Lima, Peru

[253] Research, Addis Ababa, Myungsung Medical College, Addis Ababa, Ethiopia

[254] Research, Addis Ababa, MERQ Consultancy PLC, Addis Ababa, Ethiopia

[255] Institute of Behavioural Sciences, Faculty of Medicine, University of Debrecen, Móricz Zsigmond krt. 22, 4032 Debrecen, Hungary

[256] Community Medicine, Jos University Teaching Hospital, Lamingo, Jos, Plateau State, Nigeria

[257] Lahore Garrison University, Psychology, DHA Phase 6, Lahore, Pakistan

[258] Government College University Faisalabad, Psychology, Kotwali Rd, Gurunanakpura, FaisalabadFaisalabad 38000, Pakistan

[259] School of Health and Medical Sciences, City St George's, University of London, 10 Northampton Square, London EC1V 0HB, UK

[260] Department of Experimental and Applied Psychology, Vrije Universiteit Amsterdam, Van Der Boechorststraat 7, Office MF-B555, 1081 BT, Amsterdam, The Netherlands

[261] Doctoral School of Psychology and Educational Sciences, University of Bucharest, Bucharest, Romania

[262] MINDCARE FOR ALL Association, Bucharest, Romania

[263] Vestre Viken Hospital Trust, Kongsberg Hospital, Kongsberg, Norway

[264] Rutgers University–New Brunswick Robert Wood Johnson Medical School Department of Neuroscience and Cell Biology, 675 Hoes Lane West, Piscataway, NJ 08854-8021, USA

[265] Department of Internal Medicine, Sentara Northern Virginia Medical Center, Woodbridge, VA, USA

[266] Mannheim, Germany