



Sapien Labs Centre for the Human Brain
and Mind at Krea University

Family Closeness and Mental Wellbeing of the Internet-Enabled Young Adults in India

Report | June 2024



Introduction

Mental wellbeing, as we measure it, relates to the ability to navigate the stresses and adversities of life and function productively, and is therefore different from constructs that focus solely on happiness or how an individual is feeling. In this context, our previous report found that internet-enabled young adults (18-24) are struggling with their mental wellbeing in all parts of India (Rapid Report, 2023). This is a cause for worry given that they are expected to drive India's economic growth over the next several decades.

Family relationships are one of several factors that have been shown to be important for mental health (Chen et al., 2019; Mental State of the World 2022). In this report, we examine the association between the closeness of family relationships and the poor state of mental wellbeing among India's young adults. While the previous report used data from only individuals responding to our English survey, this report also uses data from their counterparts responding in Hindi. We use data from 62,832 respondents residing in 36 states and Union Territories of India that responded to an online survey between January 2022 and August 2023. This data comes from the Global Mind project which uses an online survey to track mental wellbeing from the internet-enabled people around the world, and now includes over 1.5 million individuals from over 71 countries and 14 languages.





We have four main findings:

- 1** Closer relationships with the family are associated with higher levels of mental wellbeing, including the sub-dimensions of Social Self and Cognition.
- 2** Family closeness levels are worse for young adults relative to older generations.
- 3** Closeness to family matters more for mental wellbeing than does income.
- 4** Mental wellbeing of young adults responding to the survey in English was worse relative to those responding in Hindi. Relative to English respondents, those responding in Hindi had lower income levels but reported being closer to their families.

Understanding the Mental Health Quotient (MHQ)

Data for the Global Mind Project is collected using an online assessment tool called the Mental Health Quotient (MHQ) that was developed at Sapien Labs. The MHQ is a unique comprehensive assessment of mental wellbeing comprised of 47 elements of mental feeling and function including problems that include symptoms of 10 major disorders as well as positive aspects of mental function. It uses these elements to provide an aggregate score to position individuals on a spectrum from Distressed to Thriving, as well as sub-scores across 6 broad functional dimensions including Mood & Outlook, Social Self, Adaptability & Resilience, Drive & Motivation, Cognition and Mind-Body Connection. The MHQ scale spans a possible range of scores from -100 to +200 where negative scores indicate a mental wellbeing status that has significant negative impact on the ability to function.

More information on the assessment can be found in the Annexure.

1. Results

1. Family Relationships Matter for Mental Wellbeing

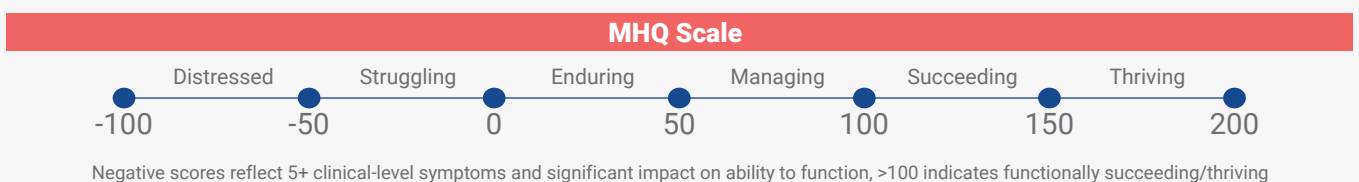
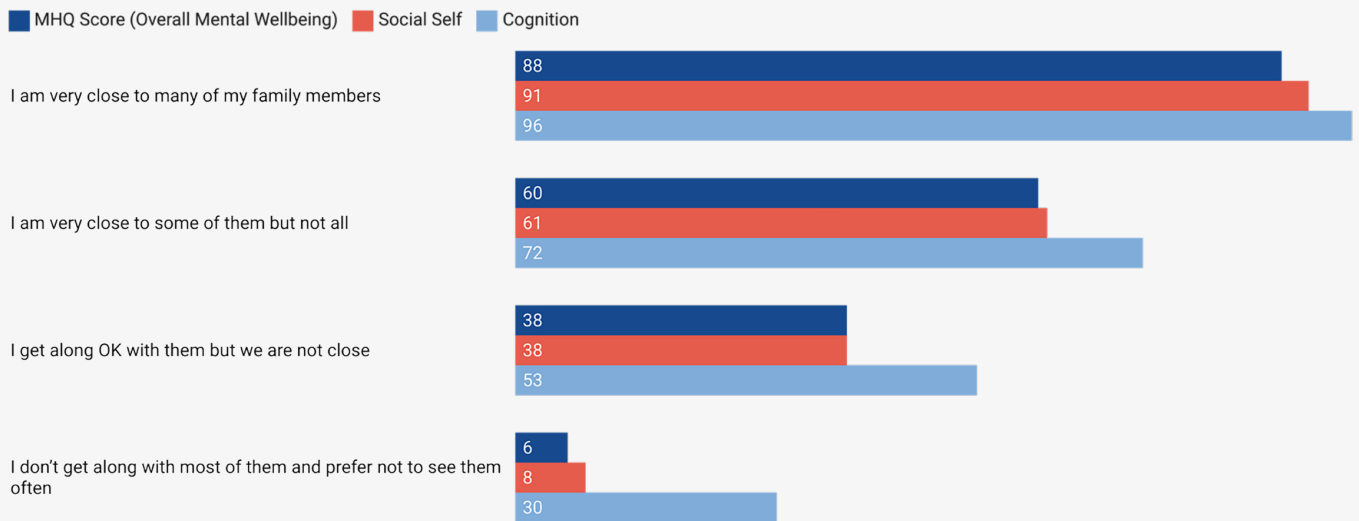
How would you describe your relationships with your adult family?

Mental wellbeing scores increase systematically with increased family closeness for all adults 18+ (Panel A) and young adults age 18-24 (Panel B); a pattern mirrored by all sub-scores of mental wellbeing including Social Self and Cognition which are shown here. Between all adults who did not get along with anyone in their families and their counterparts who were close to many of their family members, mental wellbeing was 82 points (or about 27% on a 300-point scale) higher for all adults (panel A) and 75 points (or 25%) higher for young adults (panel B). The corresponding difference was 83 and 70 points for Social Self and 66 and 56 points for Cognition.

Figure 1: Mental Wellbeing and Family Relationships

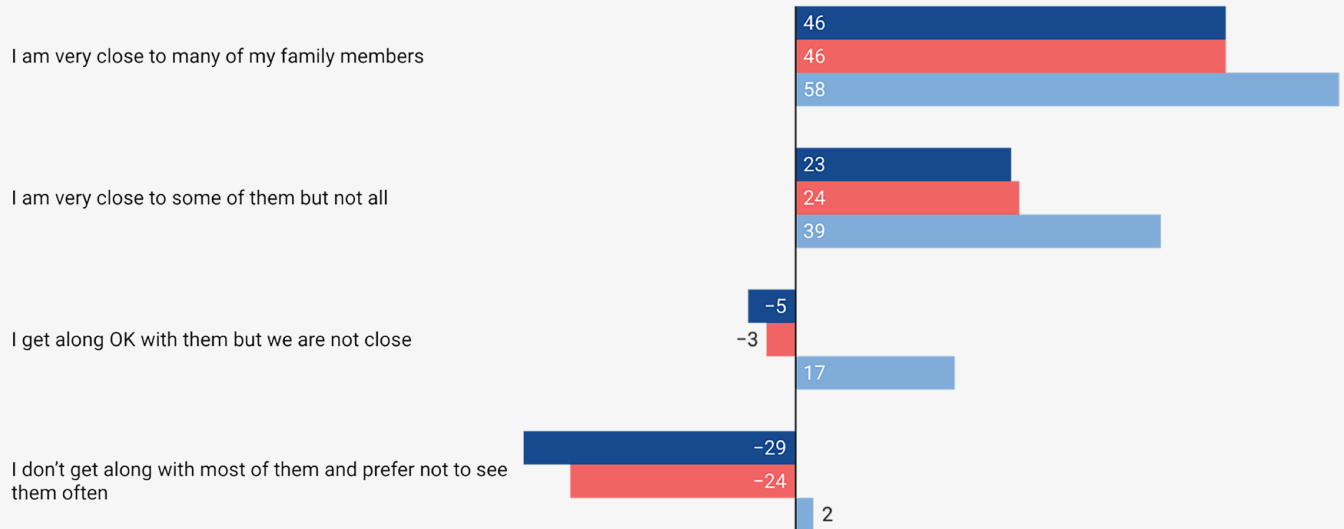
Panel A: All Adults

Association of Family Closeness with Mental Wellbeing, Social Self and Cognition



Association of Family Closeness of Young Adults with Mental Health, Social Self and Cognition

■ MHQ Score (Overall Mental Wellbeing) ■ Social Self ■ Cognition

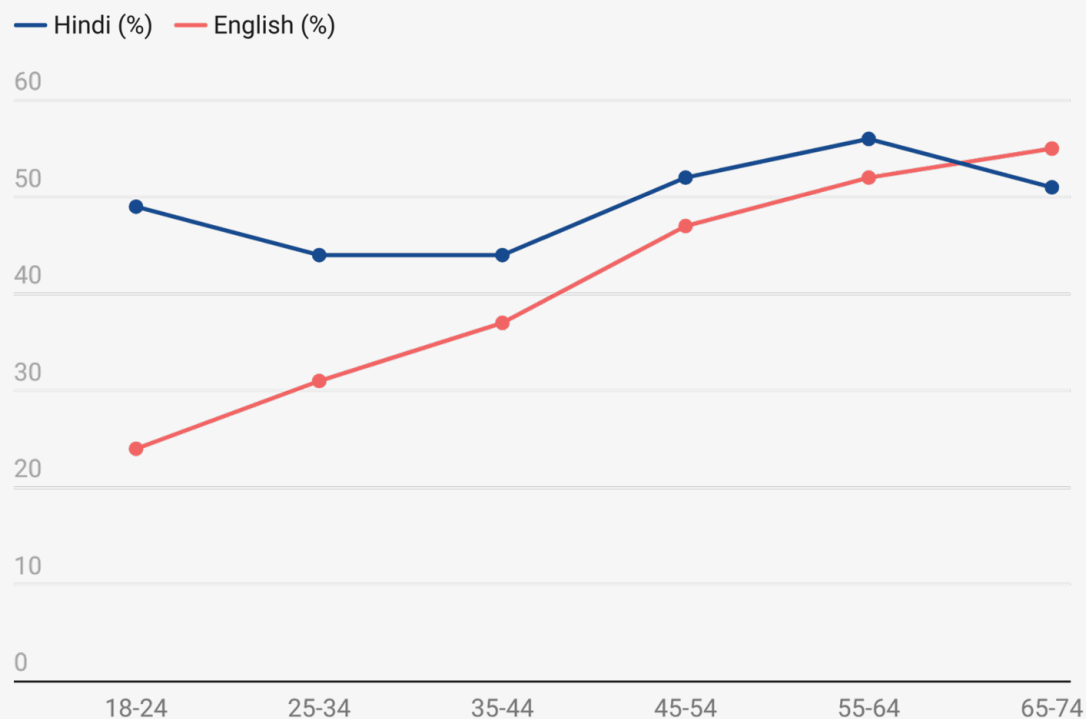


2. Closeness to Family Lower in Young Adults, Particularly English Respondents

Figure 2 plots the percentage of individuals who report that they are close to most of their family. There are several key takeaways from this figure. First, for English speakers, the percentage that report being very close to many family members decreases sharply with younger age, with the youngest adults (18-24) reporting the greatest lack of family closeness. Second, among Hindi speakers, while young adults do have lower family closeness relative to older adults, the trend is not as strong or significant offering a sharp contrast. This significant difference in language groups, and therefore cultural groups, suggests a culture-mediated decline in family closeness with younger generations among English speakers rather than a natural tendency to become closer to adult family as one ages.

Figure 2: Family Closeness, by Individuals Responding to Survey in English or Hindi

% Very Close to Many Family Members, by Age



3. Family Closeness Matters More for the Mental Wellbeing of Young Adults than Income

Figure 3, Panel A presents data on the MHQ score of young adults (18–24-year-olds) by closeness to the family for two income groups: annual income < Rs.1 Lakh and annual income > Rs. 10 Lakh. While the mental wellbeing of those with the higher income was consistently better at each level of family closeness (about 10 points), MHQ scores declined with worse family relationships regardless of income levels, with a drop of 20 MHQ points (~6.5% on the 300-point scale) with each successive category. Consequently, in the aggregate, those with close family relationships but < Rs. 1 Lakh annual income had substantially better mental wellbeing than those with > Rs.10 Lakh who got along with their family but were not close. This indicates that family closeness matters twice as much or more for mental wellbeing than income. We note that a similar pattern is observed in older adults as well but is not shown here.

Figure 3: Mental Wellbeing, Income, and Family Closeness




Panel A: Closeness to Family and MHQ: By High (> Rs. 10 Lakh) and Low (< Rs. 1 Lakh) Annual Household Income

Young Adult MHQ by Family Closeness and Annual Income



Panel B: Comparison of Young Adults Responding in Hindi and English



18-24 Year Olds	Hindi	English
 MHQ	34	16
 % Very Close to Many Family Members	49%	24%
 % with Annual Household Income < Rs. 1 Lakh	78%	44%

A comparison of the young adults responding in English versus Hindi is telling. Those responding in Hindi had an average MHQ of 34 compared to 16 for English respondents - an 18-point or a 6 per cent difference in MHQ (on a 300-point scale). This was despite lower income levels among Hindi respondents where 49% report household income levels of less than Rs. 1 Lakh annually while the corresponding number for English respondents is 24%. On the other hand, 78% of the Hindi respondents report being very close to their family compared to 44% for English respondents.

Insights and Interpretations

We have previously documented (Rapid Report, 2023) that the mental health of young Internet-enabled adults is substantially worse than older generations. In this report, we focus on the role of diminished family closeness of young adults as one factor explaining their poor mental wellbeing. Three primary questions arise:

- First, is it simply a natural progression that young people are less close to their adult families but become close as they age, or is it a generational decline?
- Second, is it that poor Social Self, arising from other causes, such as smartphones and social media, also impairs family relationships rather than the other way around?
- Third, why and how do lower levels of family closeness affect cognition?

The first question might be answered by the difference between Internet-enabled Hindi and English speakers. If it were the case that family closeness simply grows with age then we would see the same relationship regardless of language group. However, the difference suggests that this phenomenon represents a generational decline that is somehow cultural or environmental in nature. Cultural factors could include that many of India's young adult English speakers are first-generation English speakers and, therefore, exposed to different media and values that clash with their parents and/or grandparents. The generally greater individualism of western culture that may be more dominant in English speakers may also play a role. Cultural indicators of Individualism have been associated with lower mental wellbeing at a country level while social collectivism has been associated with higher mental wellbeing (Mental State of the World in 2021 report).

The second question is more difficult to answer. Previous studies have found a strong association between better adolescent relationships with their mother and father, and lower depressive and stress levels as young adults. (Ford et al., 2023). One study also found hypertension in young adulthood was associated with poor family connectedness (Mak et al., 2019). These findings suggest that family closeness is a driver of mental wellbeing. On the other hand, challenges to the Social Self, which encompasses the ability to form and maintain positive relationships with others, may then translate to challenges with family relationships. It has previously been shown that the Social Self is negatively impacted by an earlier age of smartphones (Sapien Labs, May 2023), while social media has been strongly linked to various self-image and other mental health challenges (Twenge and Campbell 2019;). Although both English and Hindi speakers who answered this survey are internet-enabled, it is possible that the English internet/social media environment, which has many-fold more content, is more damaging to the Social Self. This could be another explanation for the difference in Social Self and family closeness between English and Hindi speakers. Altogether, evidence from both our study and previous work suggests that weak family relationships adversely impact the mental wellbeing of young adults in a negative feedback loop.

Finally, the strong association between low levels of family closeness and poor cognition is less equivocal. It further has quite profound implications. The dimension of Cognition includes capabilities such as focus and concentration, the ability to control unwanted thoughts, memory and decision making. Cognition, along with Social Self, are capabilities that are fundamentally important for the workplace. The lack of ability to focus, make decisions and get along with and cooperate with other people is also likely to result in lower earnings. Our earlier report suggests poor mental wellbeing of young adults can hamper the promise of the great demographic dividend of India. If we are to fully unleash the potential of the younger generation in India, we must further investigate the potential role of poor family relationships on poor mental wellbeing or poor Cognition, Social Self and mental wellbeing overall.

In Conclusion

Increasing income levels is often taken as an important goal of any developing economy. However, previous studies have found that while income matters for mental wellbeing, the effects are largely concentrated among those at very low-income levels that are below the poverty line (Thompson et al., 2022; Sapien Labs India report 2023). With family closeness more strongly associated with mental wellbeing than income for most middle- and high-income levels, economic development initiatives should take a more comprehensive approach that also considers the effect of such development on mental wellbeing.



References

Chen P, Harris KM. Association of Positive Family Relationships With Mental Health Trajectories From Adolescence to Midlife. *JAMA Pediatrics*. 2019;173(12).

Mak, H. W., Kim, J., & Wang, S. The role of parent-adolescent relationships in the development of (pre) hypertension in young adulthood in the US. *Journal of Adolescent Health*, 2019; 64(2).

Robert C. Whitaker, Tracy Dearth-Wesley, Allison N. Herman, Anne-Sophie N. van Wingerden, Delaine W. Winn; Family Connection and Flourishing Among Adolescents in 26 Countries. *Pediatrics* 2022; 149 (6).

Sapien Labs. The Mental State of the World 2022. (2023).

Sapien Labs, May 2023. "Age of First Smartphone/Tablet and Mental Wellbeing Outcomes"

Steiner, R. J., Sheremenko, G., Lesesne, C., Dittus, P. J., Sieving, R. E., & Ethier, K. A. Adolescent connectedness and adult health outcomes. *Pediatrics*, 2019; 144(1).

Thomson RM, Igelström E, Purba AK, Shimonovich M, Thomson H, McCartney G, Reeves A, Leyland A, Pearce A, Katikireddi SV. How do income changes impact on mental health and wellbeing for working-age adults? A systematic review and meta-analysis. *Lancet Public Health*, 2022;7(6).

Twenge J. M., Campbell W. K. (2019). Media use is linked to lower psychological well-being: evidence from three datasets. *Psychiatr. Q.* 11 311–331.

Mental State of the World 2021, Sapien Labs. Mental Health Million Project. Accessed at <https://sapienlabs.org/wp-content/uploads/2022/03/Mental-State-of-the-World-Report-2021.pdf> on May 10th, 2024.

Mental State of India: The Internet-Enabled Youth. Rapid Report, October 2023. Accessed at <https://sapienlabs.org/wp-content/uploads/2023/11/Mental-State-of-India-Report-October-2023.pdf> on May 10th, 2024.

Annexure: Methodology

The MHQ and Assessment

The MHQ Assessment and Scores

Understanding the MHQ

Data for the Global Mind Project is collected using an online assessment tool called the Mental Health Quotient (MHQ) that was developed at Sapien Labs. The MHQ is a unique comprehensive assessment of mental wellbeing comprised of 47 elements of mental feeling and function, including both problems that include symptoms of 10 major disorders as well as positive aspects of mental function⁴. It uses these elements to provide an aggregate score to position individuals on a spectrum from Distressed to Thriving, as well as sub-scores across 6 broad functional dimensions including Mood & Outlook, Social Self, Adaptability & Resilience, Drive & Motivation, Cognition and Mind-Body Connection.

The MHQ is freely available online, is anonymous, and takes ~15 minutes to complete. It is currently available in English, Spanish, French, Arabic, Hindi, German, Portuguese (European & Brazilian) Swahili, Hebrew, Russian, (Simplified) Chinese and Italian with additional translations planned for 2024 and beyond. In addition to the 47 scored questions, respondents answer questions relating to their demographics, life experience and lifestyle. To encourage thoughtful and honest responses, respondents receive an MHQ score along with tailored feedback on completion of the MHQ and can opt to receive a more detailed report with recommendations for action via email.

More information on the development and validation of the assessment can be found in peer-reviewed publications [here](#) and [here](#).

The MHQ Scale

The MHQ positions individuals on the spectrum from Distressed to Thriving, spanning a possible range of scores from -100 to +200 where negative scores indicate a mental wellbeing status that has significant negative impact on the ability to function^{3,5}. Importantly the MHQ score is not based on a simple averaging of question ratings but rather each individual rating is thresholded along the functional scale between positive and negative impact to function and nonlinearly transformed based on a ranked severity of implications. The positive range of the scale is modeled on the IQ scale. Positive scores, which are largely normally distributed, are calibrated to a mean of 100 based on our original 2019 sample and can range from 1 to 200. Negative scores, on the other hand, have a long-tailed distribution. In order to ensure that overall average scores are not inordinately determined by the small number of individuals in the long tail, the negative scale was compressed to a smaller scale of 0 to -100 in order to mitigate the impact of negative scores on the population average.

Functional Implications of the MHQ

The MHQ score has been demonstrated to relate systematically to the productive function of an individual in work and life^{3,5}. For example, we have shown that the average number of days of work missed in the past month decreases systematically as MHQ scores increase (Figure A1). Cumulatively, when considering the total loss of life productivity as a function of MHQ score (taking into account both days of work missed and days that were less productive and assuming a range of 20% to 50% loss of productivity on less productive days) those with the lowest MHQ scores (between -75 and -100) had an overall reduction in life productivity of anywhere from 18-23 days per month on average. While those with the highest MHQ scores did not often miss a day of work, even this group reported a few unproductive days a month. Thus, the MHQ score is a good representation of behavioral loss of function and supports the use of the MHQ as an assessment of the productive capacity of a population, independent of any disorder classification. It also positions the MHQ as an important tool for companies and universities to be more strategic in their management of mental health and wellbeing.

Question About Family Closeness

How would you describe your relationships with your adult family? (Select only one)
a. I don't have any family
b. I don't get along with most of them and prefer not to see them often
c. I get along OK with them but we are not close
d. I am very close to some of them but not all
e. I am very close to many of my family members
f. Prefer not to say

Details on Dimensions of Mental Wellbeing Used in Report

Cognition

Measures an individual's ability to perform basic cognitive functions, make sense of complex sets of events and situations and display a longer-term perspective in your thoughts and behaviour.

Social Self

How you interact with, relate to and see yourself with respect to others

Cognition Dimension	Social Self Dimension
Coordination	Speech & Language
Planning and Organisation	Avoidance & Withdrawal
Curiosity, Interest & Enthusiasm	Anger & Irritability
Addictions	Guilt & Blame
Repetitive or compulsive actions	Feelings of Sadness, Distress & Hopelessness
Creativity & Problem Solving	Self-worth & Confidence
Self-control & Impulsivity	Relationships with others
Ability to learn	Physical Intimacy
Speech & Language	Social Interactions and Cooperation
Memory	Empathy
Decision-making & Risk-taking	Self-image
Focus & Concentration	Aggression towards others
Sensory sensitivity	Sense of being detached from reality
Selective Attention	Suicidal thoughts or intentions
Restlessness & Hyperactivity	
Unwanted, Strange or Obsessive Thoughts	
Hallucinations	
Confusion or slowed thinking	

Data Sample

The data we use comes to us from the Global Mind project, that now contains data from over a million internet-enabled people from across 71+ countries and 14 languages, along with demographics, lifestyle, and life experience factors. On average, about 2,000 individuals are added to this database each day. The dynamic and agile design allows for a rapid probing of emerging trends.

In this report, we use the data from the Global Mind Project reported from India during the period January 1, 2022 and August 2023. Overall, we use data from 62,832 respondents in the age group 18-74 who reported non-missing values on closeness to family. The age distribution is shown in Table 1 below.

Age Group	Sample Size
18-24	11,950
25-34	10,074
35-44	9,617
45-54	11,976
55-64	12,009
65-74	7,206
Total	62,832

From the total, 30,564 were female, 31,929 were male, 64 were “other or nonbinary”, and 275 preferred not to report on their gender. The data come from 36 states and Union Territories of India.



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