



## Impact of Early Smartphone Use on Adolescents

**For Prelims:** [Anxiety](#), [PRAGYATA guidelines](#), [E-PG Pathshala](#), [Metaverse](#), [Virtual Reality](#), [National Human Rights Commission](#), [CHILDLINE 1098](#), [Digital Infrastructure for Knowledge Sharing](#), [National Educational Alliance for Technology](#)

**For Mains:** Digital platforms and its impact on children, Cyber Security and Privacy, Technology and Society.

[Source: TH](#)

### Why in News?

A study by Sapien Labs, titled “*The Youth Mind: Rising Aggression and Anger*”, highlights the troubling **link between early smartphone use and deteriorating mental well-being in adolescents** aged 13-17 in India and the US.

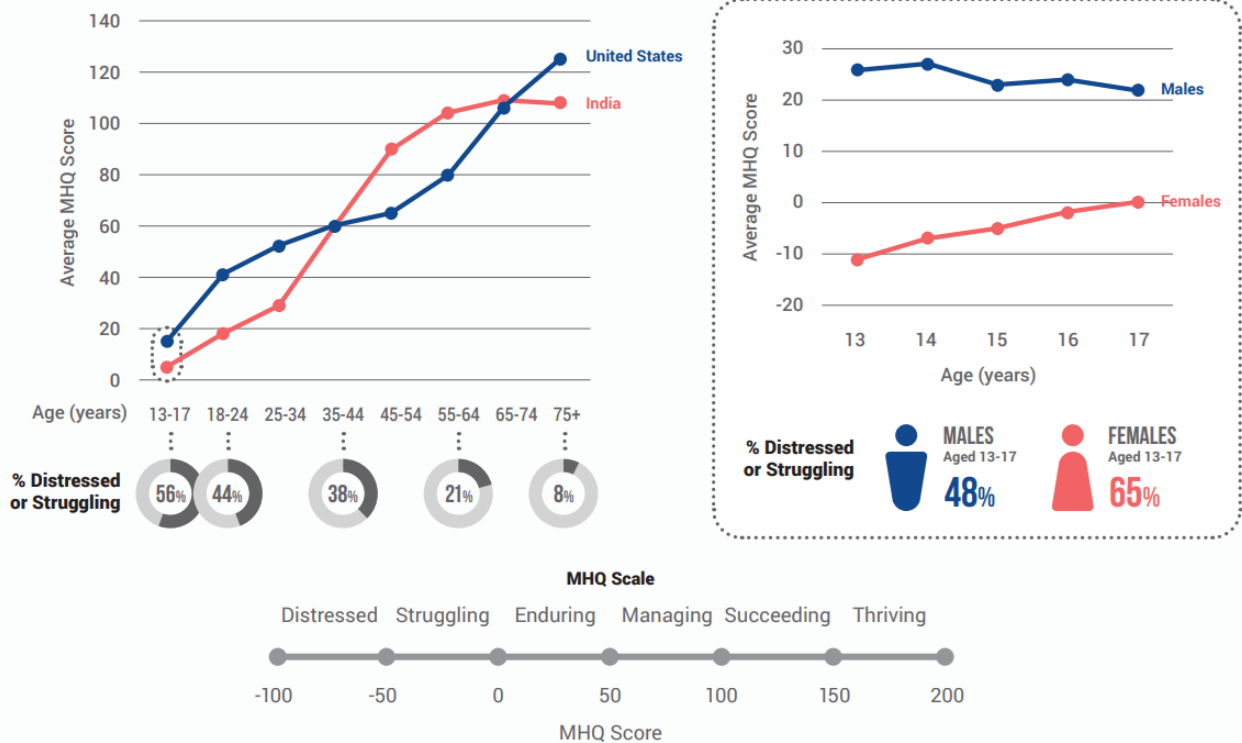
### What are the Key Findings of the Study?

- **Smartphone Use and Mental Health:** The study based on **Mind Health Quotient (MHQ)** of adolescents reveals a significant correlation between the **early initiation of smartphone use** and the **decline in mental health among adolescents**, with symptoms such as aggression, anger, irritability, and [hallucinations](#) becoming more prevalent.
  - Adolescents who start using smartphones at a younger age show more pronounced mental health issues.
  - In addition to sadness and [anxiety](#), new symptoms like **intrusive thoughts and detachment from reality** were observed, indicating a deeper [mental health crisis](#).
- **Online Exposure Risks:** Early smartphone access exposes young people to **inappropriate content**, disrupts sleep, and **reduces in-person interactions**, which are vital for developing social skills and **coping with conflict**.
- **Gender Differences:** The study points out that **females are particularly vulnerable, with rising aggression and anger** being observed more frequently among girls.
  - Notably, 65% of adolescent girls reported distress, significantly higher than boys.
- **Cultural Differences:** The decline in mental well-being is slower in India compared to the US.
  - The decline in **mental well-being** is evident in both males and females in the US, but **only females in India show a decline**, with some aspects improving in males.
- **Educational Technology as a Solution:** The study suggests using **educational technology and restricted access to smartphones** with parental controls as potential solutions to mitigate the mental health impact.

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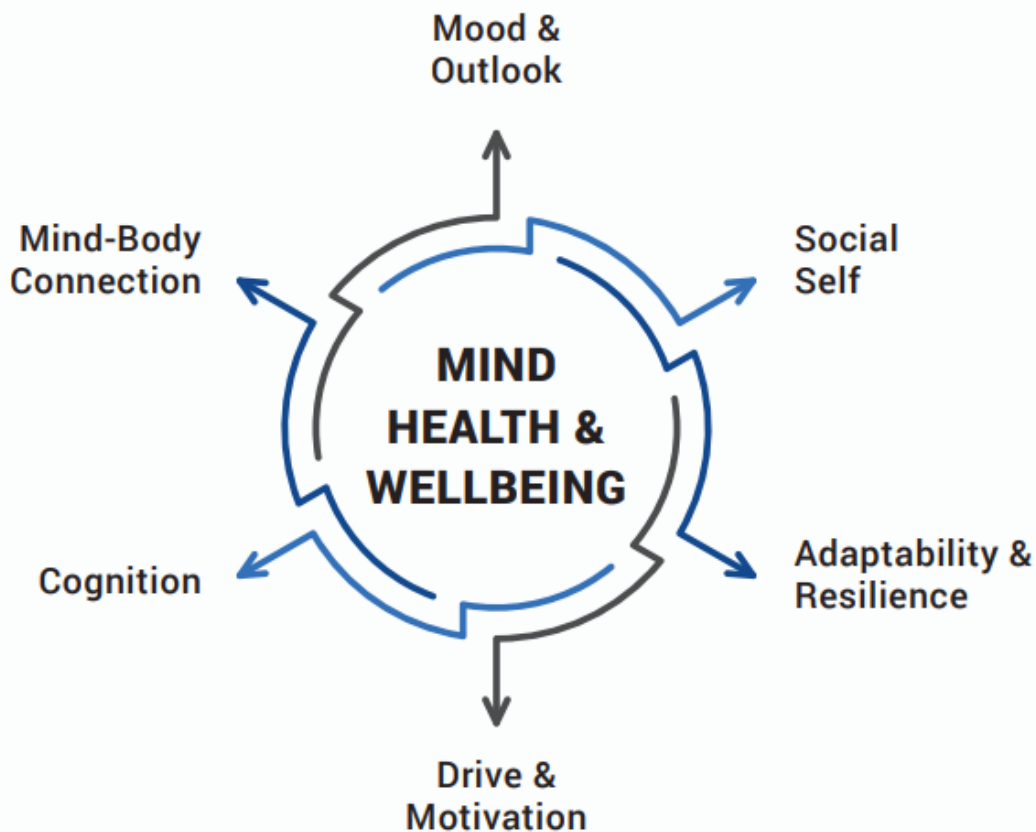
**Left:** MHQ scores declines and the percentage distressed/struggling increases with successively younger generations (age 75 to 13-17) in both US and India.

**Right:** Females aged 13-17 have lower MHQ scores and higher percentage distressed/struggling compared to males, in both US and India.



## Mind Health Quotient (MHQ)

- **About:** The MHQ is a comprehensive assessment of **47 aspects of mental function**, measured across six dimensions (Mood and Outlook, Adaptability and Resilience, Social Self, Drive and Motivation, Cognition, and Mind-Body Connection).
  - The aggregate MHQ score correlates with **functional productivity**, with **higher scores linked to more productive days**.
  - Unlike "mental wellbeing," which focuses on emotional states, "mind health" encompasses both **emotional and functional aspects**, emphasizing the ability to navigate life's challenges and maintain productivity.
- **MHQ Vs IQ and EQ:** MHQ differs from **Intelligence Quotient (IQ)** (measures cognitive abilities) and **Emotional Quotient (EQ)** (measures [emotional intelligence \(EI\)](#)).
  - MHQ encompasses a broader range of mental functions, including mood, resilience, and mind-body connection.



## What is the Impact of Early Digital Access to Children?

- The proliferation of the internet and social media has been a **double-edged sword for children**. While on one hand it has **democratized learning for millions**, on the other it has exposed **children to harmful and toxic behaviours**.
- **Positive Impacts:**
  - **Enhanced Learning Opportunities:** Digital access offers a wealth of educational resources, and India's initiatives like **tablet sets pre-loaded with educational content**, and [PRAGYATA guidelines](#) ensure that students focus on learning while limiting distractions.
    - [E-PG Pathshala](#) provides access to online courses and collaborative learning, especially for students in remote areas.
  - **Personalised Learning:** [Machine Learning and Artificial Intelligence](#)-based platforms adapt to students' **learning styles**, providing customized educational experiences.
    - Digital tools like **games, simulations, and interactive platforms** can make learning more **engaging**, helping children develop skills in various subjects, **such as math, language, and science**.
  - **Skills Development:** Exposure to digital technology can help children develop important skills like **problem-solving, coding, and digital literacy, which are vital in today's technology-driven world**.

- In recent years, "**Kidfluencers**" have driven a **booming [social media advertising industry](#)**, with children earning significant amounts through sponsored content.
- **Social Connection:** Helps **reduce loneliness** by keeping kids connected with family and friends.
- **Access to Support:** Provides easy access to **mental health resources and coping strategies**.
- **Negative Impacts:**
  - **Physical Inactivity:** Adolescence is crucial for developing **emotional habits**, with factors like sleep, physical activity, coping skills, and supportive relationships promoting well-being.
    - However, early digital access to children leads to **sedentary behavior**, affecting **both physical and mental health**.
    - **Screen Addiction** can cause **anxiety, depression, and sleep problems and brain rot**, leading to **mental stagnation and reduced cognitive function**.
  - **Privacy:** Violations by tech companies, hackers, or advertisers can lead to **identity theft, fraud, manipulation**, and exposure to harmful content.
  - **Cyberbullying:** Increases vulnerability to **online harassment**, impacting **self-esteem**.
    - Children can fall victim to **extortion or online exploitation** by predators who manipulate or threaten them using **personal information or explicit content**.
    - The internet exposes children to the risk of encountering **pornography**, as **unfiltered content can lead to accidental exposure or targeted exploitation**, raising serious legal, psychological, and safety concerns.
    - In the realm of the **Metaverse** and **Virtual Reality**, virtual predators exploit children through **scams, harassment, and discrimination, fostering** an environment ripe for **cyberbullying**.
  - **FOMO:** Social media often presents an **idealised life**, causing young people to feel like they're missing out (**Fear of Missing Out (FOMO)**), leading to anxiety, stress, and inadequacy.
  - **Reduced Social Interaction:** Excessive phone use can decrease **face-to-face interactions**, hindering social skills.
  - **Violence:** Exposure to online violence, including **violent games and graphic content**, can desensitize children, **normalize aggression**, and lead to **increased fear and emotional distress**.
    - Young internet users are **vulnerable to recruitment by [extremist and terrorist groups](#)**.

## Online Child Safety Statistics

- **Mental Health:** According to the **[World Health Organization \(WHO\)](#)** globally, **1 in 7 adolescents faces a mental disorder**, contributing to **15% of the disease burden**, with depression, anxiety, and behavioral disorders as leading causes, and early digital access being a key contributor.
  - Neglecting adolescent mental health can lead to lasting physical and mental health issues, limiting opportunities for a fulfilling adult life.
- **Cyberbullying:** Over a third of young people in 30 countries report being cyberbullied, with **1 in 5 skipping school because of it**.
- **Online Sexual Exploitation:** 80% of children in 25 countries report feeling in danger of online sexual abuse or exploitation.
  - Children in India are at **high risk of exposure to [child sexual abuse material \(CSAM\)](#)** due to the rapid increase in internet usage and the availability of harmful content.
  - According to the **[National Human Rights Commission \(NHRC\)](#)**, India accounted for 5.6 million reports of CSAM out of 32 million globally in 2022, highlighting a significant problem.

## What are India's initiatives to Protect Children Online and Productive Digital Access?

- **Protect Children Online:**
  - **POSCO Act (Protection of Children from Sexual Offences Act), 2012:** The [POSCO Act](#) has provisions to protect children from online sexual offences, including mandatory reporting and child-friendly procedures.
  - **CHILDLINE 1098:** It is a National, 24 Hour, Emergency [toll free phone service for children](#) in need of care and protection. It is a project of The Ministry of Woman and Child Development.
  - **Digital Literacy Programs:** The Ministry of Education and CBSE have incorporated **cyber safety** in school curricula to educate children on safe internet use.
  - **Information Technology (IT) Act, 2000:** Section 67B of the [IT Act](#), imposes stringent punishments for **publishing or viewing CSAM online**.
  - **Cyber Crime Prevention against Women and Children (CCPWC):** The [CCPWC](#) is a [Nirbhaya Fund](#) project that raises awareness, strengthens law enforcement capacity, and enhances cyber forensic facilities.
- **Productive Digital Access:**
  - [Digital Infrastructure for Knowledge Sharing \(DIKSHA\)](#)
  - [PM eVidya](#).
  - [Swayam Prabha TV Channel](#)
  - [SWAYAM portal](#)
  - [National Educational Alliance for Technology \(NEAT 3.0\)](#)
  - [National Programme on Technology Enhanced Learning](#)

## Way Forward

- **Child Online Safety Toolkit:** Install the [Child Online Safety Toolkit](#) on children's devices, this toolkit provides a **hands-on, comprehensive approach to safeguarding young users online**.
  - It aligns with international frameworks like the [United Nations Convention on the Rights of the Child \(UNCRC\)](#), addressing key issues such as **cyberbullying, emotional intelligence, and mental health**.
- **Delay Smartphone Ownership:** **Delaying smartphone ownership** (until at least 8th grade) could help reduce aggression, anxiety, and suicide rates among adolescents, urging action from parents, schools, and governments.
- **Stronger Regulations:** Some countries, like **Australia, have already taken steps to protect children by banning social media use for those under the age of 16**.
  - Implement the draft [Data Protection Rules, 2025](#), through which India has introduced **requirements for age verification and parental consent** for children under 18 to access social media.
- **Awareness:** Promote digital literacy programs that teach children about the **potential dangers of online spaces** and equip them with skills to **identify harmful content, cyberbullying, and online predators**.
- **Mental Health Support:** Invest in accessible mental health resources like [National Tele Mental Health Programme](#), [Kiran Helpline](#), and [MANAS Mobile App](#) for children and adolescents, offering counseling and coping strategies for those impacted by excessive screen time and online exploitation.

### **Drishti Mains Question:**

How can early smartphone use impact the mental health of adolescents? Discuss the implications and possible measures to mitigate these effects.

## UPSC Civil Services Examination, Previous Year Questions (PYQs)

### ***Mains***

**Q.** In order to enhance the prospects of social development, sound and adequate health care policies are needed particularly in the fields of geriatric and maternal health care. Discuss. **(2020)**

**Q.** What are the different elements of cyber security ? Keeping in view the challenges in cyber security, examine the extent to which India has successfully developed a comprehensive National Cyber Security Strategy. **(2022)**

PDF Refernece URL: <https://www.drishtias.com/printpdf/impact-of-early-smartphone-use-on-adolescents>

