

Scrolling Away Our Intelligence – The Smartphone Generation’s Cognitive Challenge

A 2-minute read titled “Why Gen Z is less intelligent than millennials”¹ caught our attention and led us to explore the antecedents of the article to know more; as in general; at least to us, our Gen Z has appeared to be smarter as compared to all its predecessors. Also, if this is indeed true; than the quintessential question would be; are we, the preceding generations Gen X and Millennials responsible for this, in any way?

Further exploration, led us to Jared Cooney Horvath, a Ph.D. holding neuroscientist, who’s testimony on this topic before the U.S. Senate Committee on Commerce, Science, and Transportation; uploaded on You Tube has more than 2.5 million views;² the pdf version of which is available and is an extremely enlightening read.³

The fact that over the past two decades, the cognitive development of kids across the “developed world” has been hindered and, in many domains, actually reversed is actually concerning. While accessibility and attendance to schools has increased; performance across domains like literacy, numeracy, attention, and higher-order reasoning have declined.

Literacy refers to the ability to read, write, and use language effectively for various purposes, including comprehension and communication. Numeracy involves the ability to access, use, interpret, and communicate mathematical information and ideas. Literacy and numeracy are essential skills that enable individuals to engage with and understand the world around them; and the essential question is; do our “millennial” parents (and teachers) sense that our Gen Z kids are thought to be finding it difficult to engage with and understand the world around them? Same with attention, which is the ability to focus on and maintain focus on specific information or tasks, which is crucial for tasks that require sustained concentration. And if above is true; are we, compromising in our Gen Z’s higher-order reasoning, which encompasses the ability to think critically, analyze information, and make reasoned judgments and decisions?

The obvious major change in today’s classrooms is the rapid use of what is called “educational technology” (EdTech). A casual look around us at home, while travelling or at work; is all that is required to realize, how digital devices now dwell in a significant share of our lives. Indeed, even our places of recreation and healing like gyms and parks now have members who are being trained “online” by fitness instructors over sessions taken over their tabs.

While we may love to believe that these devices are doing us a world of good; Jared Cooney Horvath’s testimony backed by documented and available evidence (from international

Mayur R. Moreker¹, Nidhi K. Tiwari²

¹The Gen X author, Consultant Ophthalmologist, Bombay Hospital Institute of Medical Sciences and is a trained Counselling Psychologist and a trained AI Medical Professional.

²The Millennial author, Educator and a Teacher at Hansraj Morarji Public School, Mumbai, Maharashtra, India.

Corresponding Author:

Mayur R. Moreker, Consultant Ophthalmologist, Bombay Hospital Institute of Medical Sciences, Mumbai, Maharashtra, India.

E mail: mayurconsults@gmail.com

assessments, large-scale academic studies, and meta-analyses) goes on to show that the opposite may be true. He documents how increased “classroom screen exposure” may be conversely associated with weaker learning outcomes. He acknowledges that digital devices facilitate “surface-level skill acquisition” which are the initial stages of learning where students are exposed to concepts, skills, and strategies; but points out how they hinder learning core academic concepts by slowing learning, reducing depth of understanding and weakening retention.³

The “case for unplugging” is also made in an interesting article by Eric Jones, who, while pointing out that “unplugging” may boost attention spans, encourage creative problem-solving and strengthen social skills; balances out the argument pointing out how the goal shouldn’t be to avoid technology altogether but to create intentional boundaries; by teaching coding or digital skills in designated labs or classes; but avoiding screens altogether during core subjects like literature or history.⁴

Finally, while one of our authors, being an ophthalmologist cannot speak enough on the hazards of screen use on the eyes; the larger issues like privacy protection and developmental safeguards remain and may compound to long-term educational and workforce harm in the decades to come. Indeed, Justice Anup Jairam Bhambhani from the Delhi High Court in a recent judgement has laid guidelines to regulate and monitor student smartphone use, balancing educational benefits with potential risks.⁵

To conclude, as very well put by Jared Horvath; this is not a debate about rejecting technology. But as elders, it is our responsibility to optimize screen exposure and to take steps to maximize the cognitive capacity and long-term flourishing of Gen Z and the generations beyond.

How to cite this article: Moreker MR, Tiwari NK. Scrolling Away Our Intelligence – The Smartphone Generation’s Cognitive Challenge. *Bombay Hosp J* 2025; 67(4):1-2.

Conflicts of Interest: None. **Source of Support:** None.

REFERENCES

1. FP Explainers. Is Gen Z less intelligent than millennials? What the study reveals [Internet]. Firstpost; [cited 2026 Mar 23]. Available from: <https://www.firstpost.com>
2. Horvath JC. Doctor on how screen time hurts kids’ cognitive development [Internet]. YouTube; [cited 2026 Mar 23]. Available from: <https://www.youtube.com>
3. Horvath JC. Written testimony before the U.S. Senate Committee on Commerce, Science, and Transportation [Internet]. Washington (DC): United States Senate; [cited 2026 Mar 23]. Available from: <https://www.commerce.senate.gov>
4. Jonas E. Imagine a classroom without screens: Is a tech-free learning space the future? [Internet]. [cited 2026 Mar 23]. Available from: https://www.thinkingineducating.com/imagine-a-classroom-without-screens-is-a-tech-free-learning-space-the-future/#google_vignette
5. Sourav S. Delhi High Court issues new guidelines on smartphone use in schools, rejects complete ban [Internet]. LawStreet Journal. 2025 Mar 3 [cited 2026 Mar 23]. Available from: <https://lawstreet.co/judiciary/delhi-high-court-issues-new-guidelines-on-smartphone-use-in-schools-rejects-complete-ban>

© The Author(s). 2025 Open Access. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits unrestricted use, distribution, and non-commercial reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated.