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Sanaa Moledina

Jinnah Sindh Medical University

Adeel Khoja

Aga Khan University, adeel.khoja@aku.edu

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Digital Dementia—Is Smart Technology Making Us Dumb?

Sanaa Moledina, MBBS,¹ Adeel Khoja, MBBS²

¹Jinnah Sindh Medical University, Karachi, Pakistan ²Department of Medicine, The Aga Khan University, Karachi, Pakistan

TO THE EDITOR

The hypothesis behind the term *digital dementia* is that overindulgence on the internet and internet-enabled devices causes cognitive impairment such as reduced attention and decreased memory span and can even expedite early-onset dementia.¹ The use of smartphones stimulates the left side of the brain, while the right side, which is linked with concentration, remains untapped and eventually degenerates.¹ Forgetfulness has surged, as users rely heavily on their smartphones to remember even the slightest bit of information for them.² Because search engines allow information to be easily accessed, users are more likely to remember where to find a fact instead of remembering the fact itself.³ Additionally, information on the internet is presented in hypertexts that allow users to scan documents superficially, resulting in poor memory recall.⁴ On the other hand, gadgets aid our memory by storing data externally, thereby freeing capacity in our long-term memory.⁵

The environment of social media has given rise to a pandemic of internet addiction, and its use can evoke a psychophysiologic state characterized by high positive valence and arousal.⁶ The internet is a realm of knowledge and opportunities that provides a platform where people from across the world can connect and exchange ideas and services. However, the peril of technology far outweighs its benefits. Teenagers have become great multitaskers; the interruption of their study time through interaction with technologic devices has resulted in poor academic progress for some.⁷ Children and adolescents are a high-risk population because of their massive technologic reliance while their brain maturation is ongoing.

We recommend that schools educate students regarding the ramifications of internet abuse and restrict the use of cellphones on school premises. Additionally, the initiative of digitalization of classrooms should be undermined. Parents should try to maintain a convivial environment at home and restrict the time their child spends online. An individual can occasionally go on a *digital diet* to counteract addiction by

participating in social activities and cultivating relationships offline. We also recommend that people memorize personal details instead of depending on their smartphones. Research studying the differences in cognitive profiles in natives of a developing country such as Pakistan, a country comparatively new to the technologic advent, and citizens of a developed nation could provide important insights.

It is undeniable that technology is pivotal to human development, but its repercussions need to be documented and propagated.

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