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# **“Phone Power, Unleashed”- THE PSYCHOLOGICAL IMPACT OF SMARTPHONE ON MENTAL HEALTH: A SCOPING REVIEW**

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## **ABSTRACT**

Smartphones are now considered to be an indispensable part of an individual's life. Even though it has transformed the way communication, learning and entertainment takes place, however, the “smartphone generation” as they are now known due to the preoccupation with their smartphones, has been a major contributor towards their mental health, in the present context. An addition to it is the pandemic period which had recently jolted the lives of every individual and also on the other hand had led to a spike in smartphone usage. It has created significant challenges as well as exciting opportunities. The proposed research strives to be a small but meaningful contribution to the overall knowledge gathered so far in this area. Therefore, this paper aims to make a genuine attempt to understand and provide a detailed analysis of the prevailing research studies on the impact of smartphone on mental health so as to provide a framework for further rigorous research in this area. For serving the purpose of this study, required data has been collected from journals and reports. The present study will help in identifying the gaps in our current knowledge thereby, paving a way towards the healthy usage of smartphones. A total of 15 studies, from 2015-2024, has been reviewed in this paper.

**Keywords:** Mental Health, Smartphone, Psychological Impact.

## **Introduction**

The landscape of technology, in the recent years, has evolved rapidly, with smartphones playing a major role in the lives of each and every individual. There is an increase in smartphone usage with an estimated 7.2 billion users, globally (Howart, J., 2024). India ranks second in being the country with most smartphone users accounting for a total of 659 million users worldwide. The advent of such an essential device has led to significant changes, with major implications towards an individual's mental health. Right from the age of almost 2-3 years children are seen to be exposed to screens. Rideout, V. (2017) found that per day children aged two years, in US, spend an average of 42 minutes with smartphones. The impact of a smartphone is multifaceted. On one hand, it offers ample apps and resources like social media, web browsing, camera etc which helps in communication, learning and networking, while on the other hand it has

detrimental effects leading to lowered self-esteem, decreased concentration, disrupted sleep and poor psychological wellbeing.

The omnipresence of smartphones has led to the creation of an increasingly complex environment to navigate for individual concerned, their parents, healthcare providers and policymakers. Not just numerous challenges and risks for mental health is its byproducts but it has also led to considerable opportunities as well as benefits. Despite the growing consequences, research on the impact of smartphone on mental health remains a neglected issue. Thus, this paper is an attempt for a deeper and holistic understanding of the concept along with its pros and cons paving a way towards the healthy usage of smartphones.

## **Literature Review**

### **International studies**

Daniyal, M. et al. (2022) studied the association between use of cell phone and wellbeing of 400 university students and found a significant link between excessive use of cell phone and adverse effects of wellbeing, both physical and mental. High cell phone usage significantly correlated with eye strain, neck pain, back pain, weight gain, depression, loneliness and mood disorders.

Thomee, S. (2018) carried out a review on the association between use of mobile phones and mental health from behavioural and psychological perspective. Significant association was found between the frequent use of smartphone and mental health effects such as depression and sleep issues. Bedtime cell phone usage was linked to poor quality and reduced sleep time.

### **National studies**

Chaudhary, P. & Hasan, Z. (2024) studied the impact that smartphone has on mental health and self-esteem among 104 individuals and found that even though the usage of smartphones among the sample was high, however, it was not the only factor impacting mental health and self-esteem. Other factors such as perception of social support, coping and differences may also play important role.

Nath, A. & Mukherjee, S. (2015) studied the impact that mobile phone has on human psychology, health, business, education and social life. It was found that the individual's used smartphones for entertainment, communication and news purpose. It was mostly considered to be their personal item and used it for maintaining privacy and having private conversation.

## **Need for the study**

In the present context, an indispensable part of an individual's life is the Smartphone, the advent of which has brought about significant changes with profound implications on mental health. It has completely transformed the way we learn, communicate and entertain ourselves. However, their omnipresence is seen to contribute towards a sense of dependency and a fear of missing out, which originates from its compulsive use. The unprecedented development of smartphones with changing exposure patterns has raised questions about its potential psychological impacts. However, there is still a huge paucity of research in this topic. Therefore, this study has been carried out with an aim to gain proper knowledge about these aspects which will not only help the stakeholders work towards the negative impacts but will also contribute towards the judicious use of smartphone.

## **Objectives**

- I. To study the landscape of smartphone usage and its psychological impact on mental health.
- II. To study the factors paving way towards the judicious use of smartphone.

## **Research Methodology**

The present research was carried out to explore the literature available on the Impact of Smartphone on Mental Health and to eventually give new recommendations based on these findings. In order to fulfil the above stated objectives a systematic review was carried out. The study was exploratory as well as qualitative in nature. The data required for the study has been collected from secondary sources which includes journal articles, scholarly books and reports from Scopus, Web of Science, EBSCO and varied renowned libraries from all over India. Research articles which are fully available and those which satisfies the objectives of the paper were the main focus. Those articles which were duplicate, not pertinent to the field of investigation and focused on population with previous pathologies were excluded from the study. Utmost care was taken in order to collect relevant data from these sources for fulfilling the above stated objectives. A total of 15 studies, from 2015-2024, has been reviewed in this paper.

## **Discussion**

- I. To study the landscape of smartphone usage and its impact on mental health.

In the mainstream consumer markets all over the world the use of smartphone, has been tremendous. As of 2024, there are nearly an estimate of 4.88 billion smartphone users. India is considered to be the second largest seller of smartphones (Prafull, K. et al., 2024). Right from the world of business to education and finally to the human psychology, its impact cannot be ignored and as such it has now become the “need of the hour”. Smartphones make interaction with family and friends easy thus promoting social life (Das, B. et al., 2024). However, on the other hand, its compulsive use often contributes to addiction (Ting, C. H. et al., 2020). “Smartphone Addiction” is no longer a buzzword as researchers now consider it to be a serious “psychic problem” (Ting, C. H. et al., 2020). It is also seen that obsession with this device has even altered the brain functions (Chun, J. et al., 2017). High cell phone usage is seen to have significant correlation with eye strain, neck pain, back pain, weight gain, depression, loneliness and mood disorders (Daniyal, M. et al., 2022). Studies also found that there is a significant association between narcissism and addiction to smartphone suggesting that the more a person is narcissistic the more he is addicted to his phone (Pearson, C. & Hussain, Z., 2017). Smartphones are also capable of providing opportunities to live independently. Features like GPS and text to speech enable people to stay integrated in the society. Now staying connected with people all over the world has become very easy. It also provides quick access to banks and healthcare. Its impact is even seen in carrying out research and keeping up-to-date about daily routines. The special facility of Internet and social media has revolutionized the world. The constant flow of notifications and updates, however, often lead to a feeling of urgency and fear of missing out contributing towards stress, anxiety, depression to name a few. Social media platforms are even seen to contribute towards a feeling of low self-esteem and inadequacy (Nene, A., et al. 2023). The desire for validation from others through comments and likes usually leads to a distorted image of self and feeling of being worthless. A correlation has also been found between use of social media and depression, loneliness, anxiety and suicidal ideation (Lin, L., et al., 2016). Smartphones use algorithms making people addicted to it. Often at times the commercial ads shown is also seen to lead to overconsumption and financial stress as well. Therefore, through this review it is seen that the impact that smartphones possess is not only negative but also positive. As such it is very essential that stakeholders take into account both its pros and cons thereby paving way towards its healthy use.

## **II. To study the factors paving way towards the judicious use of smartphone.**

The concept of "use it or lose it" principle in Psychology is very old and according to this concept the key to keep your brain functioning in its peak condition throughout your life lies

in its smart use. The judicious and smart utilization of Smartphone not only increases brain function but also helps in gaining useful information. Studies have found that setting boundaries on the use of screen time and being mindful of the content that one engages in helps in effective use of smartphones (Muppalla, S., 2023). There are various tools available on the devices which helps in limiting and reducing the use of smartphone as well as exposure to harmful contents. “Healthy digital habits” have become the need of the hour for the children’s and its essential that they are educated about the potential risks associated with it. The technique of “sundown time” can be used where after a specific time in the evening one would be encouraged to put down the use of their smartphones. For those who are addicted to smartphones they can consult mental health professionals who with the help of therapies often helps in reducing screentime, addressing negative thoughts and promoting healthier digital habits. Through the systematic review done it is, thus, found that prioritising face-to-face interactions, setting boundaries, being mindful, using security locks, being a good digital citizen and being aware of the negative health effects from radiation paves the way towards responsible and productive use of smartphones.

### **Limitations and Suggestions for Future Research**

From an academic perspective, this study makes a contribution to the literature of the impact of smartphone on mental health thereby providing a scope for further research in this area. However, the findings of this study have to be seen in light of some limitations. The first is that it was conducted based on secondary data. The second limitation concerns the lack of previous research studies on this topic. Even though multiple researches have been carried out but when it comes to addressing the roots of such a major issue, there is still a huge gap, both nationally as well as internationally. Thirdly, cultural differences existed with respect to the studies concerned. Therefore, future research can be carried out keeping in mind and addressing the limitations of this study.

### **Conclusion**

In today’s world, smartphones are an indispensable part. The digital world can be a lot to adjust which can at times be overwhelming but is also a necessity. Like every invention, these devices have both a good and a bad side. Keeping in mind its impact, it is essential that smartphones are used in a judicious way thereby paving towards a healthier balance between positive mental health and overall wellbeing which would be beneficial for the individual and the society at large. Therefore, this review paper is a small but meaningful contribution towards the vast array

of knowledge as it carries out a detailed analysis of the prevailing research studies on the psychological impact of smartphones on mental health thereby providing a framework for further rigorous research in this area.

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