An Analytical Study of Mobile Phone Addiction among Students in relation to Gender and Educational Qualification

Dr. Leena P Gorhe

Ashoka Business School

Abstract—The rapid penetration of mobile phones has transformed communication, learning, and social interaction, especially among students. While mobile technology offers significant academic and social benefits, excessive use has given rise to behavioural issues commonly referred to as mobile phone addiction. The present study examines the prevalence of mobile phone addiction among students and analyses its relationship with gender and educational level. Primary data were collected from 670 students using a structured questionnaire based on a 10-item behavioural scale. The results reveal that more than seventy percent of students' exhibit symptoms of mobile phone addiction. Statistical analysis using the Chi-square test indicates that mobile phone addiction is independent of gender but significantly associated with the educational level of students. The study highlights the growing concern of mobile phone addiction among young learners and emphasizes the need for awareness and educational interventions.

Index Terms—Mobile Phone Addiction, Students, Gender, Educational Level, Behavioural Addiction

I. INTRODUCTION

Mobile phones have become an integral part of everyday life in the modern digital era. From basic communication to internet access, entertainment, academic assistance, and social networking, mobile devices offer multiple functionalities that were unimaginable a few decades ago. Prior to the introduction of mobile phones, communication was largely dependent on landline telephones, letters, and face-to-face interactions. The evolution of mobile technology has significantly altered human behaviour, particularly among students.

The convenience, portability, and multifunctional nature of mobile phones have resulted in their extensive usage among adolescents and young adults. However, excessive and uncontrolled use has led to behavioural dependency, often described as mobile phone addiction. Students tend to spend a considerable amount of time engaging in activities such as messaging, social media browsing, gaming, and video streaming, which may interfere with academic performance, interpersonal relationships, and mental well-being.

In recent years, mobile phone addiction has emerged as a serious behavioural concern worldwide. Studies suggest that constant connectivity and fear of missing out contribute to anxiety, stress, sleep disturbances, and reduced concentration among students. The present study focuses on understanding the extent of mobile phone addiction among students and examines whether such addiction varies according to gender and educational level.

II. REVIEW OF LITERATURE

Several researchers have explored the concept of mobile phone addiction and its psychological, social, and academic implications. Hooper and Zhou examined mobile phone usage patterns among students and concluded that while usage behaviour could not be strictly categorized as addiction, it reflected dependency and habitual behaviour. Nehra et al. studied excessive mobile phone use as an emerging behavioural addiction and highlighted its psychological consequences.

Leung investigated the association between psychological attributes and improper mobile phone use among adolescents and found that higher social engagement often led to increased mobile usage in inappropriate contexts. Schwittay analysed new media practices in India and emphasized the role of technology in bridging traditional and modern lifestyles. Bhatia identified cell phone dependence as

a growing behavioural disorder, especially among young individuals.

Research by Acharya et al. reported various health-related issues associated with prolonged mobile phone usage, including headaches, eye strain, sleep disturbances, and reduced academic performance. Studies conducted by Ahmed et al. and Tandon and Garg highlighted that college students exhibit a high level of dependency on mobile phones and internet services, often leading to addictive behaviour.

Despite extensive research on mobile phone addiction, limited studies have examined its association with demographic variables such as gender and educational level. The present study attempts to bridge this gap.

III. OBJECTIVES OF THE STUDY

1. To examine the concept and nature of mobile phone addiction among students.
2. To assess the prevalence and extent of mobile phone addiction among students.
3. To analyse the behavioural patterns and symptoms associated with mobile phone addiction.
4. To examine the relationship between mobile phone addiction and gender among students.
5. To analyse the association between mobile phone addiction and educational level of students.

IV. HYPOTHESES

The following hypotheses were formulated for the study:

- **$H0_1$:** Mobile phone addiction and gender are independent.
- **$H1_1$:** Mobile phone addiction and gender are dependent.
- **$H0_2$:** Mobile phone addiction and educational level are independent.
- **$H1_2$:** Mobile phone addiction and educational level are dependent.

V. RESEARCH METHODOLOGY

DATA COLLECTION

The study is based on primary data collected from 670 students belonging to different educational levels. A structured questionnaire was used as the research instrument. The questionnaire consisted of demographic questions and a 10-item behavioural scale designed to assess mobile phone addiction.

MEASUREMENT OF MOBILE PHONE ADDICTION

Each item in the scale had three response options: Yes, Neutral, and No. A score of 1 was assigned to 'Yes' and 0 to 'Neutral' and 'No'. The total score ranged from 0 to 10. Students scoring more than 5 were classified as having mobile phone addiction.

TOOLS FOR DATA ANALYSIS

Descriptive statistics and Chi-square tests were used to analyse the data and test the hypotheses.

VI. DATA ANALYSIS AND RESULTS

The analysis revealed that approximately 71.58% of the students were classified as mobile phone addicted, indicating a high prevalence of addiction among the sample.

GENDER-WISE ANALYSIS

The Chi-square test results showed that the calculated value was less than the table value at the 5% level of significance. Therefore, the null hypothesis was accepted, indicating that mobile phone addiction is independent of gender.

EDUCATION-WISE ANALYSIS

The Chi-square analysis for educational level revealed that the calculated value exceeded the table value at the 5% significance level. Hence, the null hypothesis was rejected, confirming that mobile phone addiction is significantly associated with the educational level of students. Higher addiction levels were observed among school and undergraduate students compared to postgraduate students.

VII. DISCUSSION

The findings of the study highlight the widespread nature of mobile phone addiction among students. The independence of addiction from gender suggests that both male and female students are equally vulnerable to excessive mobile phone use. However, the dependence of addiction on educational level indicates

that age, academic exposure, and maturity may influence usage patterns.

Younger students appear to be more susceptible to addiction due to increased engagement in entertainment and social networking activities. As students' progress to higher levels of education, a relative decline in addiction may be attributed to increased academic responsibilities and awareness.

VIII. CONCLUSION

The study concludes that mobile phone addiction is a significant behavioural issue among students, with more than two-thirds of the respondents exhibiting addictive tendencies. While gender does not significantly influence mobile phone addiction, educational level plays an important role. The findings emphasize the need for educational institutions, parents, and policymakers to promote responsible mobile phone usage and create awareness about the potential negative consequences of excessive use.

REFERENCES

[1] Hooper, V., & Zhou, Y. (2007). Addictive, dependent, compulsive? A study of mobile phone usage. *Proceedings of the 20th Bled eConference*, Slovenia.

[2] Nehra, R., Kate, N., Grover, S., Khehra, N., & Basu, D. (2012). Excessive mobile phone use and behavioral addiction. *Journal of Postgraduate Medicine, Education and Research*, 46(4), 177–182.

[3] Leung, L. (2007). Linking psychological attributes to addiction and improper use of the mobile phone among adolescents. *Journal of Children and Media*.

[4] Schwittay, A. (2011). New media practices in India. *International Journal of Communication*, 5, 349–379.

[5] Bhatia, M. S. (2008). Cell phone dependence: A new diagnostic entity. *Delhi Psychiatry Journal*, 11(2), 123–124.

[6] Acharya, J. P., Acharya, I., & Waghrey, D. (2013). Health effects of cell phone usage among college students. *Community Medicine & Health Education*.

[7] Ahmed, I., Qazi, T. F., & Perji, K. A. (2011). Mobile phone usage among youngsters. *African Journal of Business Management*, 5(32), 12512–12519.

[8] Tandon, A., & Garg, M. (2013). Mobile phone and internet usage among college students in India. *Elixir Marketing Management*, 55, 12754–12759.