

A Quasi Experimental Study to Assess the Effectiveness of Psycho-Education Regarding Nomo-Phobia and Mobile Phone Addiction among Academic Students Studying in Selected Colleges of District Hamirpur, Himachal Pradesh

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ABSTRACT

Background: Our lives now would be impossible without technology. People have used technological interventions to make their lives more adaptable and sensible so they can overcome future obstacles and be globally compatible. The aim of the study is to assess the effectiveness of psycho education regarding Nomophobia and mobilephone addiction among academic students.

Methods: A total of 100 participants were chosen using purposive sampling in a quasi-experimental study that employed quantitative research methods. Data was gathered using a standardized Nomophobia and mobile phone addiction scale, which demonstrated excellent internal consistency ($r=0.99$).

Results: The findings of the study indicated that the mean knowledge score for the experimental group regarding nomophobia was 66.88 before the test and increased to 83.72 after the test, while the control group had a pre-test mean knowledge score of 73.34 and a post-test mean score of 70.52. For mobile phone addiction, the experimental group's pre-test mean knowledge score was 28.64, which rose to 37.38 after the test. In contrast, the control group's pre-test mean knowledge score was 29.80, with a slight increase to 29.84 after the test. There was a significant difference in the knowledge scores before and after the tests.

Conclusion: The structural teaching method proved effective in raising awareness among participants regarding mobile phone addiction and nomophobia.

Key words: -Psycho-education, Mobile Phone addiction, Nomo-phobia.

INTRODUCTION

With the technology we use, the settings are completely intermingled, and the boundaries that were formerly clearly defined are now completely broken, which has contributed to the growth and development of humanity as a whole. Because of this, we can observe both the beneficial and negative impacts on the lives of the majority of people. Nowadays, we observe a new demand for patients with particular features, such as "technological dependents," who also require therapy in the offices of doctors and psychologists. However, as specialists in the Mental Health segment, we do not yet have a comprehensive profile of this population to establish an effective treatment model and prepare us for this kind of consultation.¹

Because of their constant availability and mobility, mobile phones have sparked a lot of interest among young people when compared to other forms of communication. They allow people to be online at all times, respond quickly, and use short message systems, whereas chat requires a computer, an internet connection, and the interaction of two people, one of whom may not be online at the same time. In recent years, internet and modern communication gadget addiction has been viewed as a mental illness.²

For many people nowadays, cell phones are their lifeline. Globally, there are an estimated 4.5 billion mobile phone users. And it should come as no surprise that young people make up a sizable portion of this number. For them, the cell phone is more of a need than a pleasure. Numerous surveys of young people throughout the world have revealed that many view their phones as essential to their survival, and some have even gone so far as to state that they would rather go a day without eating than without their phones.³

METHODOLOGY

A research study was conducted to assess the effectiveness of psychoeducation in addressing nomophobia and mobile phone addiction among students in specific colleges. A quantitative research method was utilized to carry out the study. Through this approach, the researchers were able to determine the responses of academic students to psychoeducation concerning nomophobia and mobile phone dependence.

Research design

The research adopts a quasi-experimental approach to assess the effectiveness of psycho-education regarding Nomophobia and mobile phone addiction among academic students studying in selected colleges of the district Hamirpur, Himachal Pradesh.

Sampling Method

The study employed purposive sampling to select a total of 100 sample directly relevant to the research objective, comprising a control group of 50 students and an experimental group of 50 students. Participants were chosen based on specific inclusion and exclusion criteria. The data were collected in the district of Hamirpur (HP) among academic students.

Data Collection Methods

Numerous scales were used to gather the data, including sociodemographic data such as age, gender, class, religion, marital status, family types, monthly income, mother and father occupations, education levels, and the amount of time spent on mobile phone education each day. Screening levels of nomophobia and mobile addiction were conducted using a standardized scale of 20 items for nomophobia and 10 items for mobile phone addiction.

RESULTS

Table 1: Subject distribution and frequency based on demographic factors

Sample characteristics		Academic Student	
		Experimental Group f (%)	Control group f (%)
Age (in years)	17-18	32(64%)	25(50%)
	18-19	12(24%)	18(36%)
	19-20	4(8%)	7(14%)
	Above 20	2(4%)	0(0%)
Gender	Male	26(52%)	31(62%)
	Female	24(48%)	19(38%)
	Others	0(0.0%)	0(0%)
Class	BCA (1 st Semester)	11(22%)	10(20%)
	BCA (2 nd Semester)	8(16%)	9(18%)
	BCA (3 rd Semester)	16(32%)	14(28%)
	BCA (4 th semester)	15(30%)	17(34%)
Religion	Hindu	50(100%)	49(98%)
	Muslim	0(0%)	1(2%)
Marital status	Married	1(2%)	0(0%)
	Unmarried	48(96%)	50(100%)
	Others	1(2%)	0(0%)
Types of family	Nuclear family	17(34%)	29(58%)
	Joint family	32(64%)	19(38%)
	Extended family	1(2%)	2(4%)
Family monthly income	Below 10,000	10(20%)	16(32%)
	20,000	18(36%)	8(16%)
	30,000	8(16%)	11(22%)
	Above 30,000	14(28%)	15(30%)
Father education	12 th pass	28(56%)	23(46%)
	Graduated	7(14%)	15(30%)
	Post graduated	6(12%)	6(12%)
	Others	9(18%)	6(12%)
Mother education	12 th pass	26(52%)	24(48%)
	Graduated	9(18%)	12(24%)
	Post graduated	6(12%)	7(14%)

	Others	9(18%)	7(14%)
Father occupation	Farmer	8(16%)	6(12%)
	Govt. job	10(20%)	13(26%)
	Private job	25(50%)	23(46%)
	Others	7(14%)	8(16%)
Mother occupation	Housewife	48(96%)	44(88%)
	Govt. job	1(2%)	1(2%)
	Private job	0(0%)	4(8%)
	Others	1(2%)	1(2%)
Time spent on a mobile phone per day	Less than 2 hours	20(40%)	20(40%)
	3 hours	10(20%)	13(26%)
	4 hours	9(18%)	4(8%)
	Above 4 hours	11(22%)	13(26%)

The table presents the demographic and socio-economic characteristics of students in the experimental and control groups of an academic study. Most participants in both groups were aged 17–18, with the experimental group showing a slightly higher proportion in this age bracket (64% vs. 50%). Gender distribution was relatively balanced in the experimental group (52% male, 48% female), while males predominated in the control group (62%). All participants were pursuing BCA courses, distributed fairly evenly across semesters. Both groups were predominantly Hindu, unmarried, and from nuclear or joint families, though the control group had more nuclear family members (58% vs. 34%). A significant portion of families had monthly incomes above ₹20,000, and a majority of fathers were either 12th pass or employed in private jobs. Most mothers were housewives, with minimal engagement in formal employment. Daily mobile phone usage varied, though about 40% in each group used their phones for less than two hours per day.

TABLE 2: Distribution of sample based on pre- test and post-test interventional level of Nomo-phobia among academic students in the experimental and control group.

Outcome Variables	Mean	SD	t	df	P Value
Nomophobia					
Pre Test	66.88	17.82	-3.63	49	0.001
Post Test	83.72	27.32			
Mobile Addiction					
Pre Test	28.64	8.66	-3.82	49	0.000
Post Test	37.38	12.19			

The analysis of outcome variables reveals a statistically significant increase in both nomophobia and mobile addiction scores following the intervention period. For nomophobia, the mean score rose from 66.88 (SD = 17.82) in the pre-test to 83.72 (SD = 27.32) in the post-test. The computed t-value was -3.63 with 49 degrees of freedom, and the associated p-value was 0.001, indicating a significant difference. Similarly, mobile addiction scores increased from a pre-test mean of 28.64 (SD = 8.66) to a post-test mean of 37.38 (SD = 12.19). The corresponding t-value was -3.82 with 49 degrees of freedom, and the p-value was 0.000, also denoting a statistically significant difference. These results suggest a marked rise in both nomophobia and mobile addiction levels after the intervention or time period studied.

TABLE 3: Distribution of sample based on pre-test and post-test interventional level of Mobile phone addiction among academic students in the experimental and control group.

Outcome variables	Mean	SD	t	df	P value
Nomophobia Score					
Pre Post	73.34	19.70	0.581	49	0.564
Post Test	70.52	27.40			
Mobile Addiction Score					
Pre Test	29.80	10.01	-0.389	49	0.699
Post Test	29.84	9.81			

The data presented compares pre-test and post-test scores for nomophobia and mobile addiction among 50 participants. For the nomophobia scores, the mean score decreased slightly from 73.34 (SD = 19.70) in the pre-test to 70.52 (SD = 27.40) in the post-test. However, this change was not statistically significant, as indicated by the t-value of 0.581, degrees of freedom (df) = 49, and a p-value of 0.564. Similarly, the mobile addiction score showed a negligible increase from a mean of 29.80 (SD = 10.01) in the pre-test to 29.84 (SD = 9.81) in the post-test. This change was also statistically non-significant, with a t-value of -0.389, df = 49, and a p-value of 0.699. These findings suggest that there was no significant difference in the levels of nomophobia or mobile addiction before and after the intervention or observation period.

To conclude that the study findings indicate a significant increase in both nomophobia and mobile addiction scores from pre-test to post-test among the participants. The rise in nomophobia ($p = 0.001$) and mobile addiction ($p = 0.000$) was statistically significant, suggesting that over the observed period, participants exhibited greater dependency on mobile devices and heightened anxiety related to being without them. These results highlight the growing impact of mobile phone usage on psychological well-being and emphasize the need for awareness programs and interventions to mitigate the risks associated with excessive mobile phone use and digital dependency.

DISCUSSION

In the present study score of Nomo-phobia in the experimental group, i.e., 2% students had absent Nomo-phobia, 22% students had a mild level of Nomo-phobia, 68% students had a moderate level of Nomo-phobia, and 8% students had a severe level of Nomo-phobia. The score of Nomo-phobia in the control group, i.e., 0% students had absent Nomo-phobia, 34% students had a mild level of Nomo-phobia, 64% students had a moderate level of Nomo-phobia, and 2% students had a severe level of Nomo-phobia.

Rani G and Poonam examined a group of 60 students in District Hisar, Haryana, using a similar methodology. The results indicated that the mean pre-test knowledge score for the experimental group was 13.80 with a standard deviation of 4.730, while the control group had a mean of 13.267 and a standard deviation of 5.225. Only the experimental group utilized the self-instructional module, and a post-test was conducted one week later. The mean post-test knowledge score for the experimental group was 22.33 with a standard deviation of 5.827, compared to the control group's mean of 15.50 and a standard deviation of 4.918. The post-test scores exceeded the pre-test scores, and the mean difference between the experimental group's pre-test and post-test was 8.53, while the control group was 2.24, indicating a greater mean difference for the experimental group, which demonstrates the effectiveness of the self-instructional booklet. The paired T-test value was 7.661, and the findings were significant.⁴

In the present study score of mobile phone addiction in the experimental group, i.e., 16% students had a mild level of mobile phone addiction, 72% students had a moderate level of mobile phone addiction, and 36% students had a severe level of mobile phone addiction. The score of mobile phone addiction in the control group, i.e., 14% students had a mild level of mobile phone addiction, 76% students had a moderate level of mobile phone addiction, and 10% students had a severe level of mobile phone addiction.

A similar study was conducted by **Attri A, Gusain R, and Anamika** in Gurugram School on 100 students. The result showed that 65% had a mild level of mobile phone addiction, 26% had a moderate level of mobile phone addiction, 9% had a severe level of mobile phone addiction.⁵

CONCLUSION

This study looked at how homophobia and smartphone addiction are related, showing how social attitudes and behaviors can be reflected in and influenced by digital settings. The results imply that excessive usage of mobile phones may increase exposure to homophobic information through algorithm-driven echo chambers, online forums, and unmoderated social media interactions. People with greater degrees of homophobia were also shown to interact with digital settings in ways that confirmed their underlying biases, suggesting a potential reciprocal relationship.

Even though addiction to mobile phones is usually presented as a behavioral health problem, its societal ramifications—such as increased exposure to biased narratives—cannot be disregarded. The necessity of focused digital literacy initiatives and welcoming online spaces that counteract the mainstream of homophobia is highlighted by our research. Mental health treatments for mobile phone addiction should also include techniques for interacting with people online and addressing discriminatory content.

Future research should explore causality more directly and examine the role of demographic variables such as

age, education level, and cultural context in shaping both homophobia and digital dependence. Addressing these issues in tandem may offer more comprehensive strategies for promoting both psychological well-being and social inclusion in an increasingly connected world.

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