

# The Impact of a Video-Assisted Teaching Program on the Prevention of Homicide Among Undergraduate Nursing Students at Selected Nursing Colleges in Bagalkot

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## Abstract

*Nomophobia, or the fear of being without a mobile phone, has emerged as a prevalent psychological concern in the 21st century, significantly affecting individuals' mental well-being, particularly among younger populations. This phobia can lead to feelings of anxiety, stress, and even depression, resulting from the constant dependence on mobile devices for communication and social interaction. The study aimed to evaluate the effectiveness of a video-assisted teaching program in preventing nomophobia among undergraduate nursing students in Bagalkot. The study involved 80 nursing students who were assessed using a pre-test and post-test to evaluate their knowledge regarding the symptoms, causes, and potential consequences of nomophobia. The participants were then exposed to a video-assisted teaching program, which provided detailed information about the psychological aspects of nomophobia, strategies for managing mobile device usage, and the importance of maintaining a healthy balance between technology use and personal well-being. After the intervention, the post-test scores revealed a statistically significant improvement in the participants' knowledge compared to their pre-test scores, indicating that the video-assisted teaching program was effective in increasing awareness and understanding of nomophobia. The findings suggest that such educational interventions could be beneficial in reducing the fear and anxiety associated with excessive mobile phone use, particularly in vulnerable groups like nursing students who may experience heightened stress due to academic pressures. This study highlights the potential of multimedia-based educational strategies in promoting mental health awareness and providing preventive measures against technology-related psychological issues like nomophobia. In conclusion, the video-assisted teaching program demonstrated significant effectiveness in enhancing knowledge and potentially mitigating the negative effects of nomophobia, offering a promising approach for similar interventions in other educational settings.*

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**Keywords:** Nomophobia, video-assisted teaching, nursing students, mental health awareness, mobile phone addiction

## INTRODUCTION

Nomophobia is a modern-day fear characterized by the anxiety of being without a mobile phone. It can lead to negative thoughts, feelings, and anxiety, but is not yet a clinically recognized condition, coined in 2009 in the UK [1]. Cell phone and social network abuse negatively impacts various aspects, prompting higher education institutions to promote proper use and spread awareness about this crisis [2]. Cell phone use can lead to various psychosocial problems, including family and social issues,

academic and work problems, health problems, legal issues, money problems, and personal integrity issues. These issues can include arguments, difficulty maintaining face-to-face communication, sleepiness, health problems, debts, and cyberbullying [3]. It is crucial to address these issues to maintain a healthy lifestyle and reduce the negative effects of cell phone use. 90% of college students use mobile phones during class, 88% text, 54% maintain connections, and 75% find smartphones easier to use, with 54% stating it maintains connections [4]. Harwood *et al.* found that 43.40% of individuals experience severe nomophobia, with most common symptoms including sleep disturbance, headaches, decreased social participation, academic performance, weight gain, and road traffic accidents [5]. This study aims to raise awareness about the increasing prevalence of nomophobia among nursing undergraduates, promoting appropriate gadget usage and public education on the topic [6].

## OBJECTIVES

The study aims to evaluate pre-test knowledge on nomophobia, plan and implement a video-assisted teaching program, compare pre-test and post-test scores, and investigate the association between pre-test knowledge and socio-demographic variables.

## METHODOLOGY

### Research Approach

The study uses a quantitative research approach to examine the efficacy of a video-assisted teaching program in preventing nomophobia among undergraduate nursing students.

### Research Design

The study utilized a pre-experimental one group pre-test and post-test design to achieve its objectives.

### Sample

The sample of the study consists of total 80 undergraduate nursing students at selected nursing colleges.

## RELIABILITY OF THE TOOL

Reliability is the consistency of a research tool across multiple measurements. After expert validation, a reliability test is conducted on a structured knowledge questionnaire, determining its reliability with a Cronbach alpha of 0.71.

## RESULT

The data is organized under the following sections:

1. *Section I:* Analysis of demographic characteristics.
2. *Section II:* Evaluation of pre-test and post-test knowledge scores of participants and the impact of the video-assisted teaching program:
  - Assessment of pre-test knowledge scores.
  - Evaluation of post-test knowledge scores.
  - Impact of the video-assisted teaching program on overall knowledge scores.
  - Impact of the video-assisted teaching program on knowledge scores by section.
3. *Section III:* Analysis of the relationship between demographic variables and post-test knowledge scores.

### Section I: Analysis of Demographic Characteristics

The study reveals that the majority of participants are 20 years old, with a majority of females and males. The majority of participants are Hindus, with 46.20% identifying as Hindu and 37.50% as Christian. Most participants come from nuclear families, with 87.50% living in such households. A significant number of participants own just one mobile phone, with 78.80% using phones valued between ₹ 10,000 and 30,000. Most participants spend 2 to 3 h on their phones daily, and 67.50% report spending between ₹ 201 and 300/month on mobile-related expenses. Additionally, most participants reside in hostels or at home, with many reporting frequent headaches.

## Section II: Analysis of Pretest and Effectiveness of Video Assisted Teaching Programme

### Analysis of Pre-test knowledge level

Table 1 presents the section-wise mean scores, standard deviations (SD), and mean percentage of the pre-test knowledge scores of the respondents regarding the prevention of nomophobia. Table 1 provides an in-depth breakdown of participants' initial knowledge across different sections before the educational intervention, highlighting the areas of strength and weakness.

Table 2 provides a detailed description of the overall pre-test knowledge scores of the participants. This table summarizes the participants' baseline knowledge on the prevention of nomophobia, offering a comprehensive overview of their initial understanding prior to the intervention.

In this study it was found that overall pretest knowledge mean score was 15.76+3.71 and mean percentage was 52.53%.

Table 3 illustrates the distribution of participants according to their level of pre-test knowledge. It categorizes respondents into different knowledge levels, helping to assess their understanding of nomophobia before the intervention and identify the varying degrees of awareness across the sample group.

### Analysis of post-test knowledge scores

Table 4 presents the section-wise mean scores, standard deviations (SD), and mean percentage of the post-test knowledge scores of the respondents regarding the prevention of nomophobia. These results provide a detailed analysis of the participants' understanding of the subject matter across different sections after the intervention.

**Table 1.** Section wise pretest Mean, SD and mean % of knowledge scores of respondents on knowledge regarding prevention of nomophobia (N=80).

Section wise knowledge of nomophobia	No. of items	Mean	Standard Deviation	Mean %
Section A: Introduction, Meaning and definition	6	4	1	66.5
Section B: Causes and clinical manifestations	6	4	1	66.5
Section C: Assessment and management and prevention	17	8	3	49.5

**Table 2** description of overall pre-test knowledge scores (N=80).

Pre-test	No. of items	Mean	Std. Deviation	Mean %
Knowledge scores	30	15.76	3.719	52.53%

**Table 3.** Distribution of level of pre-test knowledge (N=80).

Level of knowledge	Frequency	Percentage
Inadequate (<15)	36	45.0
Moderate (16-22)	41	51.2
Adequate (23-30)	3	3.8

**Table 4.** Section wise post-test Mean, SD and mean % of knowledge scores of respondents on knowledge regarding prevention of nomophobia (N=80).

Section wise knowledge scores	No. of Items	Mean	Standard Deviation	Mean %
Section A: Introduction, Meaning and definition	6	5	1	83.3
Section B: Causes and clinical manifestations of nomophobia.	6	5	1	83.3
Section C: Assessment and management and prevention of nomophobia.	18	13	2	72.2

Table 5 provides a comprehensive description of the overall post-test knowledge scores of the participants. The table summarizes the overall improvement in knowledge following the intervention, reflecting the effectiveness of the teaching program on the participants' awareness and understanding of nomophobia.

Table 6 outlines the distribution of participants based on their post-test knowledge levels. It categorizes respondents into different knowledge levels, offering insight into the extent of knowledge gained after the intervention, and helps assess the effectiveness of the educational program in increasing awareness about nomophobia.

**Effectiveness of Video Assisted Teaching Program on Section Wise Knowledge Scores**

Table 7 shows the paired comparison of the pre-test and post-test section-wise knowledge scores, illustrating the improvement in participants' knowledge across various topics following the intervention.

**Effectiveness of Video Assisted Teaching Program on Overall Knowledge Scores**

In Table 8, the data was calculated by using paired t test, there was statistically significant difference between pre-test mean score (15.76±3.71) and post-test mean score (24.09±2.26). The calculated t value =-16.835, df=79, p=0.000\*\*.

**Table 5.** Description of overall post-test knowledge scores (N=80).

Post-test	No. of items	Mean	Std. Deviation	Mean %
Knowledge scores	30	24.09	2.268	80.3

*p* < 0.05 In this study it was found that overall post-test knowledge mean score 24.09±2.26 and mean percentage 80.3%.

**Table 6:** Distribution of based on level of post-test knowledge (N=80).

Level of knowledge	Frequency	Percent (%)
Inadequate (<15)	0	0
Moderate (16–22)	25	31.3
Adequate (23–30)	55	68.8

**Table 7.** Paired comparison of pre-test and post-test section wise knowledge scores (N=80).

Paired Samples Statistics							
Section wise knowledge scores	Mean	Std. Deviation	Mean difference	Std. Deviation difference	t	df	P value
pretest Section A	3.53	1.136	-1.900	1.446	-11.752	79	.000**
Posttest Section A	5.43	.792					
pretest Section B	3.70	1.174	-1.513	1.599	-8.460	79	.000**
Posttest Section B	5.21	.964					
pretest Section C	8.54	2.521	-4.913	2.904	-15.129	79	.000**
Posttest section C	13.45	1.728					

*p* < 0.05.

**Table 8.** Paired comparison of pretest and post-test overall knowledge scores (N=80).

Paired Samples t test							
Knowledge scores	Mean	Std. Deviation	Mean difference	Std. Deviation difference	t	df	p value
Pre-test	15.76	3.719	-8.325	4.423	-16.835	79	.000**
Post-test	24.09	2.268					

*p* < 0.05.

Table 9 presents the distribution of participants based on their level of knowledge, categorizing them into different knowledge levels to provide a clear overview of the participants' understanding before and after the intervention.

### Section III: Analysis of Association Between Demographic Variables with Post-test Knowledge Scores

The study revealed a noteworthy connection between sociodemographic factors and post-test knowledge scores, with the amount of time spent on mobile phones daily and data usage showing a significant correlation with the post-test results. Other factors like age, gender, religion, family type, year of study, number of mobile phones, and purpose were less significant (Table 10).

## DISCUSSION

The sociodemographic data was collected using a self-administered data sheet for participants, and the findings of these variables are included. The study reveals that the majority of participants are 20 years old, with a majority of them being females. The majority of participants are Hindus, with 46.20% being from Hinduism. The majority of participants are part of nuclear families, with 87.50% coming from joint families. The majority of participants use only one mobile phone, with 78.80% having phones priced between ₹ 10,000 and 30,000. Participants typically spend 2 to 3 h on their phones each day, while 30.00% spend over 3 h. Most participants reside in hostels, and 71.20% use their phones during classroom sessions [7–10].

### Objective 1: To assess the pre-test knowledge regarding nomophobia

The pretest knowledge score was 15.76±3.71, with a mean percentage of 52.53%, with 45.00% having inadequate knowledge, 51.20% having moderate knowledge, and 3.80% having adequate knowledge.

### Objective 2: To design and execute a video-assisted teaching program focused on the prevention of nomophobia

A 45-min video-assisted teaching program was developed for undergraduate nursing students to understand nomophobia, its causes, clinical features, management, and prevention using various AV aids.

### Objective 3: To evaluate the impact of the video-assisted teaching program on preventing nomophobia by comparing pre-test and post-test scores

The study found a significant difference in pretest and post-test mean scores, with 45.00% having inadequate knowledge, 51.20% having moderate knowledge, and 68.80% having adequate knowledge in the post-test.

### Objective 4: To find out association between post-test knowledge scores regarding prevention of nomophobia with their selected socio demographic variables

The study found a significant association between sociodemographic variables and post-test knowledge scores, with data spent per day and time on mobile phones being significantly associated.

**Table 9.** Distribution of participants based on level of knowledge (N=80).

Level of knowledge	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Inadequate (<15)	36	45.00%	0	0
Moderate (16–22)	41	51.20%	25	31.20%
Adequate (23–30)	3	3.80%	55	68.80%

**Table 10.** Association between demographic variables with post-test knowledge scores (N=80).

Sociodemographic variables	Categories	Knowledge post-test		Chi-square	df	P value
		Moderate (16–22)	Adequate (23–30)			
		F	f			
Age	19 years	13	29	.596	3	.897 NS
	20 years	0	1			
	21 years	1	3			
	22 years	11	22			
Gender	Male	36	14	.656	1	.418 NS
	Female	19	11			
Religion	Hindu	11	26	.102	2	.950 NS
	Muslim	10	20			
	Christian	4	9			
Type of family	Nuclear	22	48	.008	1	.927 NS
	Joint family	3	7			
Year of study	Ist semester	14	25	.765	1	.382 NS
	IInd Semester	11	30			
Number of mobile phones	1 phone	24	52	.077	1	.782 NS
	2> phones	1	3			
Cost of mobile phone (In Rupees)	<10000	3	10	.992	3	.803 NS
	10000–30000	21	42			
	30000–50000	1	2			
	50000>	0	1			
Time spent on mobile phone	<1.5 h	4	7	6.402	2	0.033* S
	2–3 h	17	28			
	>3 h	4	20			
Money spent per month	<Rs. 100	3	6	2.513	3	.473 NS
	Rs. 100–200	4	3			
	Rs. 200–300	15	39			
	Rs. 300>	3	7			
Data spent per day	<500 MB	2	2	7.872	3	0.042* S
	500–1000 MB	14	22			
	1000–1500 MB	2	3			
	>1500 MB	7	28			
Place of residence	Hostel	8	9	2.519	2	.284 NS
	Home	16	43			
	Others	1	3			
In classroom mobile phone is in	Silent or vibrate	6	9	.734	2	.693 NS
	Switched off	17	40			
	Not carrying to class	2	6			
Problems due to mobile usage	Disturbance in sleep	3	4	1.067	3	.785 NS
	Headache	12	30			
	Decreased social activities	3	4			
	All of the above	7	17			
Purpose of using mobile phones	Calling and texting	1	3	4.552	3	.208 NS
	Academic	1	0			
	Social media	1	0			
	All of the above	22	52			

NS=not significant \*S=significant  $p < 0.05$ .

## CONCLUSION

The video-assisted teaching programme significantly improved knowledge among under graduate nursing students about nomophobia prevention, with data spent daily and mobile phone usage significantly affecting post-test scores, and other sociodemographic variables also playing a role.

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