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A Pre-Experimental Study To Assess The Effectiveness Of Planned Teaching About Knowledge Regarding Nomophobia Among Junior College Students In Selected College.

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Abstract
The term „nomophobia" or „no mobile phone phobia" is used to describe a psychological condition when people have a fear of being detached from mobile phone connectivity. Objective of the study is to assess the existing knowledge, evaluate the effectiveness of planned teaching, determine the association regarding nomophobia among junior college students in selected college. The evaluative research approach was considered as appropriate. One group pre-test post-test design has been used to find the effectiveness of planned teaching on knowledge regarding nomophobia. The comparison between the mean of pretest and post test for knowledge showed that the mean of differances was 10.3, the calculated „t" value was 19.76. With respect to this the null hypothesis H0 is rejected and the research hypothesis H1 is accepted. Among all the demographic variable named type of family got significance, so knowledge is associated with type of family. The findings of the present study have implication in areas like nursing service, nursing education, nursing administration, nursing research.

Keywords: *Nomophobia, junior college students, planned teaching, mobile phone connectivity*

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I. Introduction

Mobile phone is now a days very essential thing for the people to be in contact with other people also to get the information in the form of internet network connection. Modern mobile telephone services use a cellular network architecture and therefore, mobile telephones are called cellular telephones or cell phones, in North America. In addition to telephony, 2000s-era mobile phones support a variety of other services , such as text messaging, multimedia messaging services, email, internet assess, short-range wireless communications, bluetooth, business applications, video games, and digital photography.

A phobia is a type of anxiety disorder, defined by a persistent and excessive fear of an object or situation. The phobia typically results in a rapid onset of fear and is present for more than six months. The affected person goes to great lengths to avoid the situation or object, to a degree greater than the actual danger posed. If the feared object or situation cannot be avoided, the affected person experiences significant distress. Usually a person has phobias to a number of objects or situations. [1]

Mobile phones offering only those capabilities are known as feature phones; mobile phones which offer greatly advanced computing capabilities are referred to as smartphones.[2] The utilization of technical knowledge has a worldwide importance due to its contributions to human existence and due to the strengthening of socioeconomic relations universally. Telecommunications has been revealed as one of the rapidly spreading media on the planet, encouraging an emergent “mobile culture” in younger generation. A mobile phone also known as a cellular phone, cell phone and a hand phone has made our life easier by making and receiving telephone calls over a radio link to the farthest places of the world irrespective of our presence at any place.[3] Nomophobia is defined as “fear of being without your phone;” is an emerging problem of the modern era in India. In olden times, individuals were dependent on phone just for communication purpose but now they have a thirst for it due to countless benefit it provides. Nomophobia which refers to discomfort, anxiety, nervousness or anguish caused by being out of contact with a mobile phone.[4]

The term, an abbreviation for "no-mobile-phone phobia", was coined during a 2008 study by the UK Post Office who commissioned You Gov, a UK-based research organization, to evaluate anxieties suffered by mobile phone users. The study found that nearly 53% of mobile phone users in Britain tend to be anxious when they "lose their mobile phone, run out of battery or credit, or have no network coverage". The study, sampled 2,163 people, found that about 58% of men and 47% of women suffer from the phobia, and an additional 9% feel stressed when their mobile phones are off. 55% of those surveyed cited keeping in touch

with friends or family as the main reason that they got anxious when they could not use their mobile phones. There are less research conducted on nomophobia in India. But the percentage of nomophobia increases in India day by day as youngsters in India feel it as a need. If they have that feeling they may show panic attacks which comes under psychiatric emergencies. These occurrence is all because of urbanization. `There are many ill effects of nomophobia on the health so to create its awareness is very essential. Researcher think that prevention is better than cure and by creating awareness nomophobia can be prevented.

Prevalence and incidence of nomophobia

Indian teens love their Smartphone. Nokia research reveals that an average person checks the phone every 6.30 min in a 16 hrs waking cycle. Of the 20-25 people, at least 10% face smartphone and computer-related injuries in the 20-45 age group. These are usually upwardly mobile patients who are constantly looking at their phone in a bent-forward position. They complain of their backs stiffening up, developing a stoop and text neck besides the tendons in their thumbs hurting when they text. Tendon injuries, carpal tunnel syndrome, radiation related problems, inattention blindness and computer vision syndrome are common ailments that stem from unrelenting mobile usage. Playing with smartphones also hinder toddler's brain development. A cartoon channel in India revealed that 95% of kids live in homes with a mobile phone while 73% of Indian kids are mobile phone users. Interestingly, of these, 70% fall under the age group of 7-10 years while 76% are in the age group of 11-14 years. Most families, especially in metros, do not use landlines at all. And since both parents have mobile phones, a child has access to it since a very young age. Addiction to technological gadgets at an early age also discourages kids to engage in physical activities, leading to instances of obesity. Experts believe that handing over the gadget to a kid who is as young as 7 years may not be a good idea as it can be detrimental to his/her physical and mental health. [5]

While the mobility of smartphones provides apparent benefits and help people satisfy their basic needs, it may also induce some problems associated with smartphone use. Studies have shown that smartphones may cause compulsive checking habits, that smartphones may lead to compulsive usage and increased distress and that smartphones can be addictive. Another problem exacerbated by smartphones is nomophobia. Nomophobia, or no mobile phone phobia, is “the fear of being out of mobile phone contact”. Although there has been an increasing academic interest in investigating the problems emanating from smartphone use, research into nomophobia has been scarce. [6]

A mobile phone is a device that can make and receive telephone calls by the mobile networking which is moving around the geographical area. It allowing assess to the public telephone network. This dependence has important psychological consequences. we have a source of near omniscience in our pockets. Indeed, this research finds that when it comes to the acquisition and retention of information, our brains treat our devices like relationship partners. So perhaps it is not surprising that we should experience such distress when this relationship is lost because your partner has slipped out of your pocket and on to the movie theater floor. [7]The incidence rate of nomophobia among the students was moderate i.e 3.1, and 73% of the students were moderate smartphone users. Nomophobia had a significant relationship with gender, age group, and level of education; and the frequency of using smartphones had a significant relationship with age group and level of education. There was a positive correlation coefficient between nomophobia and the frequency of using smartphones.[8]The prevalence of anxiety and depression at Year 3 was 7.5% and 9.4%, respectively. Correlation analyses showed that mobile phone dependence at Year 1, college adjustment at Year 2, and mental health status at Year 3 were significantly correlated with each other. The study concluded that interventions both on reduction of mobile phone dependency and improvement of college adjustment were possible and needed among new college students to prevent their future depression and anxiety. Recommendation was given that such interventions should be incorporated into regular education programs in universities. [9]

Older age, male gender, duration and frequency of smartphone usage, use for social networking, checking without reason, and checking smartphone after waking up in the morning were significantly associated with nomophobia. The study showed attributes of addiction among the students, like dependency and compulsive behavior.

[10] Quality of life in the physical, psychological, social, and environmental domains was negatively associated with mobile phone addiction. Negative impact on quality of life, appropriate measures for the prevention of mobile phone addiction should be developed. [11] In Korea, Korean girls tended to use their mobile phones more frequently and were at a higher risk of mobile phone addiction and depressive symptoms than Korean boys. The study contributed to expand the knowledge base of mobile phone addiction and depressive symptoms among Korean adolescent. [12]An epidemiological study was conducted in the year 2019 with the purpose to assess mobile technology addiction and its correlates among school students in rural India. The study was conducted among 885 school students in north India. Four schools were selected and participants aged 13-18 years, were enrolled randomly. A self-designed 45 item questionnaire was used to evaluate dependence syndrome as used for substance dependence in ICD-10. The mean age of the study participants was 15.1 years.

The study result that, technology addiction was more among male students. The study concluded that, increased mobile phone access in rural India is leading to technology addiction among school students. Certain demographic and gadget specific factors predict addiction. The technology addiction possibly contributes to poor academic performance and depression. [13]

A study was done in the year 2019 to determine the prevalence of nomophobia, the discomfort or anxiety experienced from being without a cellphone, among student pharmacists. . A validated nomophobia questionnaire was administered to two groups of student pharmacists at two different Doctor of Pharmacy programs. There were 224 eligible students, 192 responded to the survey. Mean nomophobia scores were statistically similar between programs. The student pharmacists in the study all had scores consistent with some degree of nomophobia. The study concluded that nomophobia is a relatively new psychological phenomenon, and little is known about its potential implications. Recommendation was given in such a way that the researcher must continue to study smartphone use and help student pharmacists maximize the benefits of smartphones while avoiding the potential negative psychological consequences associated with their use. [14]

A comparative study was conducted to know the growing smartphone usage among global and Indian college students. The objective of this study is to find out the prevalence of nomophobia among smartphone using medical and engineering undergraduates of West Bengal and to compare the nomophobic behaviors. A study was conducted among 303 medical and 305 engineering undergraduates in West Bengal using. Nomophobic clusters among the two groups were identified using two-stage cluster analysis. Engineering students showed a higher proportion of nomophobics than medical students. A Higher proportion of nomophobics among both groups were females, those owning smartphone beyond 2 years. Recommendation was given that there should be use of standardized measures for identification and appropriate psychobehavioral therapy for those seeking help might alleviate the problem. [15] A cross sectional study was conducted in the year 2017 amongst 130 medical students of third year MBBS of Sri Aurobindo institute of medical sciences, Indore. The study aimed to assess the pattern of mobile phone usage and prevalence of nomophobia amongst third year medical students in north India. A pre-formed pre-tested questionnaire was used. Most of the students were in the age group of 22-24 years. 73% of students were nomophobics. 21% of nomophobics experienced anxiety. 83% of students experienced panic attacks when their mobile phone was misplaced. The study concluded that headache and lethargy were the commonest side effects that were experienced by students. [16]

The prevalence of Nomophobia in the students in 1st year MBBS. The study was done in medical college, Pune. A total of 145 students were monitored according to inclusion and exclusion criteria. Mild Nomophobia was found in 17.9% students whereas 60% had moderate and 22.1% had severe Nomophobia. Amongst the males, 56.06% and 24.24% had moderate and severe Nomophobia, respectively while in females, moderate and severe Nomophobia was found to be 63.25% and 20.25%, respectively. The study concluded that nomophobia was found to be prevalent in students of 1st year MBBS. [17] The significant predictive power of mobile usage attributes implies that, by collecting mobile usage statistics, mental health mobile applications can continuously screen for depressive symptoms for initial diagnosis or for monitoring the progress of ongoing treatments. [25]

Knowledge regarding nomophobia

The term nomophobia or no mobile phone phobia is used to describe a psychological condition when people have a fear of being detached from mobile phone connectivity. The term nomophobia is constructed on definitions described in the DSM-IV. Various psychological factors are involved when a person overuses the mobile phone, like low self-esteem, extrovert personality. The burden of this problem is now increasing globally. Other mental disorders like,social phobia or social anxiety, and panic disorder may also precipitate nomophobic symptoms.. The signs and symptoms observed in nomophobia cases include- anxiety, respiratory alterations, trembling, perspiration, agitation, disorientation and tachycardia. [33] The inappropriate use of these mobile devices was associated with low levels of motivation and practice of physical activity in their users. It emphasized that lack of scientific work dealing with this issue. [18]

The nomophobia negatively affects personality, self-esteem, anxiety, stress, academic performance, and other physical and mental health problems therefore person faced with a health problem, which negatively affects a person, causing psychological problems and physical and behavioral changes. [19] The incidence of nomophobia was significantly lower in females. The pattern of nomophobia occurrence among cell phone users can facilitate the path to prevent its harms including discomfort, anger, anxiety, and feeling of insecurity among users of technology. [20] The rumination, catastrophising and blaming of others were the most important variables for distinguishing, along with gender and parental control outside the home. The importance of specific maladaptive strategies in problematic smartphone use and provide insight for relevant targets for intervention designs. [21]

The cooperation is a characteristic that significantly reduces nomophobic levels, Reward Dependence appears to be positively related to two of the factors involved in nomophobia, namely Mobile Phone Addiction

and Loss of Control, suggesting a relationship between Nomophobia and personality. [22] A cross sectional study was to analyze the relationship between the level of nomophobia and the distraction associated with smartphone use among nursing students during their clinical practicum. Study was carried out on 304 nursing students. The nomophobia questionnaire and a questionnaire about smartphone use were used. A positive correlation between the use of smartphones and the total score of nomophobia was found. In the same way, there was a positive correlation between opinion about smartphone restriction polices with each of the dimensions of nomophobia and the total score of the questionnaire. The study concluded that, nursing students who show high levels of nomophobia also regularly use their smartphones during their clinical practicum, although they also believe that the implementation of policies restricting smartphone use while working is necessary. [23]

An observational study was done in 2018 with the purpose to carry out a review of observational studies that consider links between mobile phone use and mental health from a psychological or behavioral perspective. Systematic literature searches in PubMed and PsycINFO for articles published until 2017 were done. A total of 4738 papers were screened by title and abstract, 404 were retrieved in full text, and 290 were included. Only 5% had any longitudinal design. One third of the studies included children or youth. A majority of adult populations consisted of university students and/or self- selected participants. The main research results included associations between frequent mobile phone use and mental health outcomes, such as depressive symptoms and sleep problems. The study concluded that, associations between mobile phone use and adverse mental health outcomes are found in studies that take a psychological or behavioral perspective on the exposure. Recommendation was given that, more studies of high quality are needed in order to draw valid conclusions about the mechanisms and causal directions of associations. [24]

The significant predictive power of mobile usage attributes implies that, by collecting mobile usage statistics, mental health mobile applications can continuously screen for depressive symptoms for initial diagnosis or for monitoring the progress of ongoing treatments. [25] The therapeutic interventions for improving social skills like emphatic thinking and increasing emotional expression may be beneficial in the treatment of adolescents with alexithymic traits which experience nomophobia. [26] The nomophobia subjects adopt maladaptive coping strategies when confronted with stress. The nomophobia subjects reaction to provide insight and introduces a focus for preventative and interventional measures in this population. [27] Mobile phone overuse is associated with poor sleep quality and unhealthy eating behaviors, and education and interventions for mobile phone use is essential among college students. [28]

Objectives

- To assess the existing knowledge regarding nomophobia among junior college students in selected college.
- To evaluate the effectiveness of planned teaching about knowledge regarding nomophobia among junior college students in selected college.
- To determine the association between knowledge regarding nomophobia among junior college students with their selected demographic variables.

II. Research Methodology

Research methodology defines what the activity of research is, how to proceed, how to measure progress, and what constitutes success. Methodology of research indicates the general pattern for organising the procedure for the empirical study together with the method of obtaining valid and reliable data for an investigation.

Research Approach

Present study was conducted with the primary objective of determining the effectiveness of planned teaching on knowledge regarding nomophobia among junior college students of selected college. Hence quantitative research approach was considered as appropriate. With this quantitative approach it would be possible to evaluate the knowledge regarding the nomophobia among junior college students of selected college.

Research Design

The research design is the arrangement of condition for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process. The research design is the conceptual structure on the basis of which the research is conducted. It constitutes the blue print for the collection measurement and analysis of data. One group pre-test post-test design has been used to find the effectiveness of planned teaching on knowledge and regarding nomophobia among junior college students in selected college and also to determine the association between knowledge of junior college students regarding nomophobia with their selected demographic variables.In the study independent variable is planned teaching on nomophobia.In the study dependent variable is knowledge

regarding nomophobia among junior college students. In the study extraneous variables are age, gender, education, occupation, type of family, annual income, previous knowledge and source of information.

Population

Population denotes the entire group of subjects under study. The population selected for the present study are junior college students.

Target Population

The entire population in which the investigator is interested and in which they would like to generalize the research findings. In this study, it includes the junior college students in selected college.

Accessible Population

The aggregate of cases that confirm to designated inclusion and exclusion criteria and that are accessible as subjects of the study. In this study, it refers to junior college students in selected college meeting the inclusion and exclusion criteria.

Sample And Sampling Technique

Sample

Sample is the proportion or subset of population. A sample is the most basic unit, about which information is collected. In the study sample is the junior college students who fulfill the inclusion and exclusion criteria.

Sampling technique

Sampling is the process of selecting samples from the target population to represent the entire population. Sampling technique used in the study is non probability convenient sampling. According to Polit and Beck non probability convenient sampling entails the selection of most readily available 100 individuals as subject in the study, it represents typical conditions and investigator‟s knowledge about population and its elements can be used to select cases. The investigator preferred to choose this sampling technique because of the constraint of time and in order to complete the data collection within the stipulated time.

Sample size

Sample size for this study is 100 junior college students 100 junior college students were the sample size for this study as mentioned in the inclusion criteria.

Sampling Criteria

Inclusion criteria

The criteria that specify the characteristics that the population does have.
In this study the inclusion criteria was

- Junior college students who are present in college during the period of data collection.
- Junior college students who are willing to participate in this study.
- Junior college students who are in the age group of 15-18 years.
- Junior college students who are admitted in the junior college situated in urban area.

Exclusion Criteria

The criteria that has a direct bearing on condition, intervention or results.
In this study the exclusion criteria was

- Junior college students who are not present in college during the period of data collection.
- Junior college students who are not willing to participate in this study.
- Junior college students who had attend any seminar regarding this topic previously.

Data Collection Method

It is a precise systematic gathering of information relevant to the research purpose or the specific objective, or hypothesis of a study. The procedure for collecting data is not a mechanical process that can be carefully planned prior to initiation.

III. Analysis And Interpretation

Analysis is defined as “the categorizing, organizing, manipulation and summarizing of the data in order to reduce it to an intelligible form, so that the research problem can be studied and tested, including the relation between the variables.” It is main purpose was to summarize and organize the data in the meaningful

way, so as to interpret and provide answer to the questions raised in the study. Interpretation of data means, the task of drawing conclusion or inferences and of explaining their significance, after careful analysis of the collected data.

Organization Of Findings

The analysis and interpretation of the observations are given in the following sections:
Section A: Distribution of junior college students in relation to demographic variables.
Section B: Assessment of knowledge score regarding nomophobia among junior college students.
Section C: Assessment of effectiveness of planned teaching regarding nomophobia among junior college students.
Section D: Association between the knowledge regarding nomophobia with selected demographic variables.

Section A

Distribution Of Junior College Students In Relation To Demographic Variables.

Table I- Distribution of students in relation to demographic variable

Sr no	Demographic variables		Frequency (n)	Percentage (%)
1	Age			
	A	15 years	11	11%
	B	16 years	38	38%
	c	17 years	44	44%
	D	18 years	7	7%
2	Gender			
	A	Male	42	42%
	B	Female	58	58%
3	Education			
	A	11^{th}	55	55%
	B	12^{th}	45	45%
4	Family income			
	A	20,000 – 40,000 / month	62	62%
	B	40,000 – 60,000 / month	33	33%
	C	60,000 – 80,000 / month	3	3%
	D	90,000 / month and above	2	2%
5	Type of family			
	A	Joint family	34	34%
	B	Nuclear family	50	50%
	C	Extended family	6	6%
	d	Single parent family	10	10%
6	Number of sibling			
	a	0	10	10%
	b	1	57	57%
	c	2	27	27%
	d	3 and above	6	6%
7	Religion			
	a	Hindu	74	74%
	b	Muslim	9	9%
	c	Christian	4	4%
	d	Other	15	15%

Age as a demographic variable shows that 44 (44%) subjects were aged 17 years followed by 38 (38%) subjects were aged 16 years followed by 11 (11%) subjects were aged 15 years and 7 (7%) subject was in the age group of 18 yrs. Data related to gender shows that 58 (58%) subjects were belong to female category followed by 42 (42%) were belong to male category. Data related to distribution of samples according to their education shows that 55 (55%) subjects were studied in 11th standard followed by 45(45%) subjects were studied in 12th standard. Data related to distribution of samples according to their family income shows that 62(62%) subjects were having family income in between 20,000 – 40,000 / month followed by 33(33%) subjects were having family income in between 40,000 – 60,000 / month followed by 3(3%) subjects were

having family income in between 60,000 – 80,000 / month and 2(2%) were having family income in between 90,000 / month and above. Data related to distribution of samples according to their type of family shows that 50(50%) subjects were belong to nuclear family followed by 34(34%) subjects were belong to joint family followed by 10(10%) subjects were belong to single parent family and 6(6%) were belong to extended family. Data related to distribution of samples according to their number of sibling shows that 57(57%) subjects were having 1 sibling followed by 27(27%) subjects were having 2 siblings followed by 10(10%) subjects were having no sibling and 6(6%) were having 3 and above siblings. Data related to distribution of samples according to their religion shows that 74(74%) subjects were belong to Hindu religion followed by 15(15%) subjects were belong to other category of religion followed by 9(9%) subjects were belong to Muslim religion and 4(4%) were belong to Christian religion.

Section B

Assessment Of Knowledge Regarding Nomophobia Among Junior College Students

Table II- Frequency and percentage distribution of junior college students according to level of knowledge.

n=100

Sr no	Level of Knowledge	Pre test		Post test	
		Frequency n	Percentage %	Frequency n	Percentage %
1	Poor (1-7)	18	18%	0	0%
2	Satisfactory (8-15)	70	70%	6	6%
3	Good (16-23)	12	12%	60	60%
4	Excellent (24-30)	0	0%	34	34%

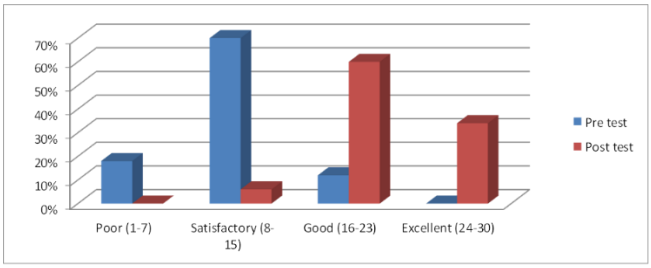

Figure 1. Pre-test and post test knowledge regarding the nomophobia

Data presented in table shows that in pre-test 18 (18%) subjects were having poor knowledge (1-7) regarding the nomophobia, while 70 (70%) had satisfactory knowledge (8-15), whereas 12 (12%) subjects had good knowledge (16-22), and none of the subjects had excellent knowledge about it. While in the post-test, 6(6%) have satisfactory knowledge (8-15), 60(60%) of the subjects had good knowledge and 34 (34%) subjects had excellent knowledge regarding the nomophobia.

Section C

Effectiveness Of Planned Teaching About Knowledge Regarding Nomophobia Among Junior College Students

Table III- Mean, standard deviation, mean of differences in scores and „t" value for knowledge regarding the nomophobia.

Sr no	**Test**	**Mean**	**Standard deviation (S.D)**	**Mean of differences in score (M.D)**	**'t' value**
1	Pre test	11.27	4.02	10.3	19.76*
2	Post test	21.57	4.08		
P<0.05level *significant					

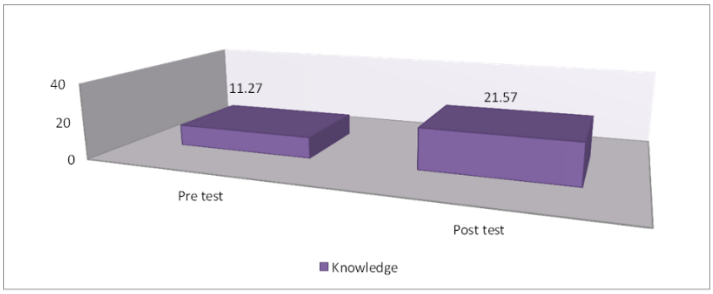

Figure 2. Comparison of mean pretest and post test knowledge score regarding nomophobia among junior college students

The data presented in the table shows that the mean pre-test score was 11.27 with the standard deviation of 4.02, whereas in post test it was 21.57 with the standard deviation of 4.08. The mean difference in pre-test and post test scores was 10.3. The calculated„t" value was 19.76. It shows that the calculated„t" value was much higher than the tabulated„t" value. It shows that there was a significant improvement in the knowledge of junior college students after planned teaching. As per this the research hypothesis is accepted.

Section D

Association Between The Knowledge Regarding Nomophobia Among Junior College Students With Their Selected Demographic Variables

Table VI- Association between knowledge with their selected demographic variables.

Sr no	Demographic variables	Knowledge score						Chi square (χ^2)
		Poor		Satisfactory		Good		
1	Age	N	%	N	%	n	%	
	a.15 years	2	2%	9	9%	0	0%	χ^2=**4.75** NS **df=6**
	b. 16 years	8	8%	23	23%	7	7%	
	c. 17 years	7	7%	32	32%	5	5%	
	d. 18 years	1	1%	6	6%	0	0%	
2.	Gender							
	a. Male	6	6%	30	30%	6	6%	χ^2=**0.95** NS **df=2**
	b. Female	12	12%	40	40%	6	6%	
3	Education							
	a. 11th	12	12%	36	36%	7	7%	χ^2=**1.37** NS **df=2**
	b.12th	6	6%	34	34%	5	5%	
4.	Family income							
	a. 20,000 – 40,000/ month	12	12%	39	39%	11	11%	χ^2=**6.84** NS **df=6**
	b. 40,000 – 60,000/ month	6	6%	26	26%	1	1%	
	c. 60,000 – 80,000/ month	0	0%	3	3%	0	0%	
	d. 90,000/ month and above	0	0%	2	2%	0	0%	
5	Type of family							
	a. Joint Family	6	6%	22	22%	6	6%	χ^2=**13.44*** **df=6**
	b.Nuclear Family	7	7%	37	37%	6	6%	
	c.Extended Family	4	4%	2	2%	0	0%	
	d.Single Parent Family	1	1%	9	9%	0	0%	
6.	Number of sibling							
	a. 0	2	2%	6	6%	2	2%	χ^2=**9.97** NS **df=6**
	b. 1	5	5%	44	44%	8	8%	
	c. 2	9	9%	16	16%	2	2%	
	d. 3 and above	2	2%	4	4%	0	0%	
7.	Religion							
	a. Hindu	14	14%	52	52%	6	6%	χ^2=**8.72** NS **df=6**
	b. Muslim	1	1%	6	6%	2	2%	
	c. Christian	2	2%	2	2%	0	0%	
	d. Other	1	1%	10	10%	4	4%	

*significant

n- Frequency NS- non significant

%- Percentage df-degree of freedom

The data presented in table shows that calculated chi square value of the knowledge in association to age was 4.75 which was less than the tabulated value at df= 6 at $p<0.05$, so knowledge is not significantly associated with age. Calculated chi square value for gender was 0.95, which was less than the tabulated value at df=2 at $p<0.05$, so knowledge is not significantly associated with gender.

The calculated chi square value for education was 1.37 which was less than the tabulated value at df=2 at $p<0.05$, so knowledge is not significantly associated with education. The calculated chi square value for family income was 6.84 which was less than the tabulated value at df=6 at $p<0.05$, so knowledge was not significantly associated with family income.

The calculated chi square value for type of family was 13.44 which was more than the tabulated value at df=6 at $p<0.05$, so knowledge is associated with type of family. This is the only variable where the significance is shown.

Calculated chi square value for number of sibling was 9.97 which was less than the tabulated value at df=6 at $p<0.05$, so knowledge is not significantly associated with number of sibling. Calculated chi square value for religion was 8.72 which was less than the tabulated value at df=6 at $p<0.05$, so knowledge is not significantly associated with religion.

IV. Implications Of The Study

The findings of the present study have implication not only in the field of nursing but also in allied areas. The information obtained could be utilized by the educators, curriculum planners and administrators in order to integrate nomophobia programs into the educational as well as training Programme as nomophobia remains a national priority and major problem. More research work needs to be conducted in this area in order to identify the problems related to nomophobia. The findings of the study may be helpful for the future studies.

Nursing Service

- Regular awareness program should be carried out by psychiatric and community nurse, in community areas.
- The mental health educators can assess needs of the junior college students regarding various aspects of nomophobia and provide services to them through organizing awareness at various level.
- Junior college students with a secure & healthy environment to avoid nomophobia and related complications.
- Organize awareness camps to identify high-risk junior college students for nomophobia in the junior college.
- Mental health nurses can suggest and organize the planned teaching to follow life style measures like exercise, stress management and yoga, which will promote healthy lifestyle.
- Mass awareness campaigns should be organized regularly by the health teams to provide education on nomophobia.

Nursing Education

- Nurse educators need to lay emphasis on nomophobia which should include- causes, effects, treatment and preventive aspects.
- Nurse educators need to lay emphasis on nomophobia which should include teacher should be taught regarding the various aspects of nomophobia using various A-V aids etc. Charts, puppet shows, flip charts and the actual devices so that they can educate the students in the schools,colleges and community people by motivating them to give awareness programmed to the people regarding nomophobia.
- Conducting in service education program for Nurses & health workers regarding, various aspects of nomophobia.

Nursing Administration

- Nurse administrators should take the initiative in organizing continuing education programs for Nurses and teacher regarding various aspects of nomophobia.
- Appropriate teaching / learning material needs to be prepared and made available for Nurses and teacher.
- Helping in early identification of nomophobia in the junior college students from other settings by providing proper tools and aids.

Nursing Research

- Research should be conducted to assess the knowledge of junior college students regarding the nomophobia and associated problems.
- We can develop awareness education packages related to nomophobia during school age.
- More research is needed to find out the causes and factors predisposing to nomophobia.
- It can also help in finding out better alternatives for the students and youngsters at risk and at the time when they are on the verge of becoming victims of nomophobia.

Limitations

This study is limited to those junior college students only who are readily available in the selected junior college.

Non probability convenient sampling was done which restrict the generalization of the study.

V. Recommendations

- Formal education Programme should be conducted in all schools regarding nomophobia .
- The study can be replicated on a large sample; and on various settings, so that findings can be generalized to a large population.
- Such studies can be carried out using other teaching strategies like planned teaching, computer-assisted instruction on nomophobia etc.
- Comparative surveys can be carried out to ascertain the knowledge of nomophobia among junior college students between urban and rural area of the community.
- Similar studies can be conducted on to evaluate the effectiveness of self instructional module on nomophobia.

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