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A STUDY TO ASSESS THE EFFECT OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING NOMOPHOBIA AND ITS PREVENTION AMONG STUDENTS IN SELECTED HIGHER SECONDARY SCHOOLS OF KAMRUP (M), ASSAM.

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Abstract : The term was introduced by the UK Post Office in 2008. It refers to the fear of being without a mobile phone or fear of inability to use it due to issues such as no network coverage, loss of signal, a dead battery or losing the device. The present study title: A study to assess the Effect of Planned Teaching Programme on Knowledge regarding Nomophobia and its Prevention among Students in selected Higher Secondary Schools of Kamrup (M), Assam. The study adopted a quantitative evaluative research approach, using a pre-experimental one group pre-test post-test design. A total of 142 samples were selected using Probability sampling technique, under that Simple Random Sampling technique was adopted using Lottery method. Structured self-administered questionnaire was developed to gather the data, and analysis was done using descriptive statistics and inferential statistics. The study findings revealed that in pre-test majority of students i.e.108(76%) had moderately adequate knowledge, 19(13.4%) had inadequate knowledge and 15(10.6%) had adequate knowledge whereas in post-test, all students i.e.142(100%) had adequate knowledge. For the effectiveness of planned teaching programme, the results showed that the mean post-test score was 17.61±1.0 which was higher than the mean pre-test score i.e.12.59±1.6 with mean difference 5.02 which was tested using paired t-test with a value 41.2 at df=141, was statistically significant at the $p<0.05$ level. Significant association was observed in terms of demographic variables such as type of family ($\chi^2=11.265$, $p=0.0237$), monthly income of family ($\chi^2=13.12$, $p=0.0412$) and previous knowledge ($\chi^2=8.70$, $p=0.0129$) at $p<0.05$ level of significance. The study concluded that planned teaching programme was effective in increasing the knowledge. It is important for the health personnel to take initiatives in educating students regarding nomophobia to raise awareness and promote positive health practices.

INTRODUCTION:

Communication forms the foundation of all relationships. Mobile phones have emerged as vital aspect of our daily lives. Over the past decade, they have become irreplaceable, connecting people across various parts of the globe, storing large amounts of data, and providing instant access to any information with just a single touch. [Error! Reference source not found.] Mobile phones, now equipped with a wide range of advanced features, allow users to store photos, videos, memories, personal information, and much more. These devices enable individuals to capture high-quality images and videos, and provide access to countless applications, whether integrated or accessible for download -either available at no charge or for a fee such as online gaming, social networking, navigation tools, music applications, wireless internet access, email, Skype, and many more. Mobile phones have become more than just a communication device. Nonetheless, in recent years, the total of problems arising from smartphones use has escalated markedly.[0] Smartphone addiction is so prevalent that it is now considered to be similar to any other addiction to harmful substances. Thus, it constitutes a public health challenge. As a result of the excessive use of this device and the dependency it fosters, a new condition known as nomophobia is developing and being categorized as a clinical disorder. [0]

NEED OF THE STUDY:

Mobile technology has rapidly expanded across the globe. According to the Pew Research Center (2019), younger generations in every surveyed country are much more likely to own smartphones, have internet access, and use social media. While smartphones assist with work, entertainment, and daily tasks, excessive usage can result in smartphone addiction. A recent study on smartphone addiction and sleep, published in Frontiers in Psychiatry (2021), found that 39% of young adults surveyed in the United Kingdom (U.K) were addicted to their phones.[4] India is now the second-largest smartphone market globally. A report from the Internet and Mobile Association of India (IAMAI) and Kartar reveals that, by 2021, India had approximately 692 million internet users, with projections suggesting this figure will rise to 900 million by 2025.[5] No one can deny the fact that mobile phones and the internet have opened a world of information with boundless opportunities, making it easier to access all kind of knowledge. However, using these technologies inappropriately can have a deteriorating effect on a person's health, not only physically but also psychologically. Over time, excessive use can lead to social isolation of person as well. Nomophobia is an advanced and emerging health hazard of technology and if it is not controlled in time, it could have a detrimental effect on the younger generation.[6] The Mobile phone is a double-edged sword, offering both benefits and challenges, as technology progresses. Given the rapid expansion of the smartphone market in India, it is concerning to consider how dependent Indians might become on their devices. The increasing trend of excessive smartphone use poses significant challenges to the wellbeing of the population. The self-observation of the researcher regarding nomophobia motivated to investigate and teach students on nomophobia and its prevention.

3.1Population and Sample

The entire group of individuals or object sharing some similar characteristics selected for a research study, sometimes known as the universe of the study. [Error! Reference source not found.] In this study, population includes the students studying in higher secondary schools. Sample size refers to the number of subjects, events, behaviours, or situation that are examined in the study. [Error! Reference source not found.] In this study, the sample consists of students from conveniently selected private English Medium Higher Secondary Schools of Kamrup (M), Assam.

3.2 Data and Sources of Data

Data collection is the precise, systematic gathering of information relevant to the research purpose or the specific objectives, questions or hypotheses of a study. [Error! Reference source not found.] Prior to data collection a formal written permission was obtained from Principal of Hindustani Kendriya Vidyalaya and Modern High School (Senior Secondary). The study was carried out during the month of April-May (29/04/2024 to 25/05/2024). The list of subjects was collected from their class attendance register. Simple random sampling technique was adopted using lottery method to select 142 subjects from the list of 224 students. An informed written consent was obtained from each participant. The structured self-administered questionnaire was administered to assess the pre-test level of knowledge regarding nomophobia and its prevention followed by the administration of PTP on nomophobia and its prevention. And after 7 days i.e. on 8th day, the post-test was conducted to assess the effect of PTP. The anonymity and confidentiality of the students was maintained. Data collection in both the schools was done as shown below

School	Pre-test and PTP	Post-test	Remarks
1. Hindustani Kendriya Vidyalaya	10/05/2024	17/05/2024	Both Class XI and XII were combined together
2. Modern High School (Senior Secondary)	11/05/2024	18/05/2024	Both Class XI and XII were combined together

3.3 Theoretical framework

Variables of the study contains independent, dependent and demographic variable. In this study the independent variable refers to PTP on knowledge regarding Nomophobia and its Prevention, the dependent variable refers to knowledge on Nomophobia and its Prevention, Demographic variables of this study include age, gender, religion, type of family, class of study, stream, monthly income of family and previous knowledge.

RESEARCH METHODOLOGY:

Methodology of research indicates the general pattern for organizing the procedure, for gathering valid and reliable data for problem under investigation. It is a systematic way to solve the problems. The details are as follows.

3.1 Research approach

In the present study, Quantitative evaluative approach was considered as an appropriate research approach to assess the Effect of PTP on Knowledge regarding Nomophobia and its prevention among students in selected Higher Secondary Schools of Kamrup (M), Assam.

3.2 Research design

In the present study, pre-experimental one group pre-test post- test design was adopted to assess the effect of Planned Teaching Programme on Knowledge regarding Nomophobia and its prevention among students in selected Higher Secondary Schools of Kamrup (M), Assam".

3.3 Research setting

The study was carried out in selected Private English Medium Higher Secondary Schools of Kamrup (M), Assam. The total number of Private English Medium Higher Secondary Schools in Kamrup (M), Assam is 48 out of which for the present study 2 schools were conveniently selected namely Hindustani Kendriya Vidyalaya and Modern High School (Senior Secondary).

3.4 Population

In this study, population includes the students studying in higher secondary schools.

3.5 Target population

In this study, target population includes the students studying in private English medium higher secondary schools of Kamrup (M), Assam.

3.6 Accessible population

In this study, the accessible population are the students of class XI and XII studying in two conveniently selected private English medium higher secondary schools of Kamrup (M), Assam namely Hindustani Kendriya Vidyalaya and Modern High School (Senior Secondary). The accessible population was found to be 224, as identified from the class attendance register.

3.7 Sample and Sample Size

The sample consists of students from conveniently selected private English Medium Higher Secondary Schools of Kamrup (M), Assam. The accessible population was found to be 224, as identified from the class attendance register. The sample size was determined using Raosoft sample size calculator. Sample size of 142 students was taken for the study with 5 percent margin of error, 95 percent confidence level and population proportion of 50 percent.

3.8 Sampling Technique

The researcher has used simple random sampling technique to select the samples. There are total 48 private English medium Higher Secondary Schools in Kamrup (M), Assam. The list of private English medium Higher Secondary Schools was collected from the official website of AHSEC (The Assam Higher Secondary Education Council) and CBSE (Central Board of Secondary Education). Out of those, 2 higher secondary schools were selected conveniently namely Hindustani Kendriya Vidyalaya and Modern High School (Senior Secondary). The total number of accessible population from two selected higher secondary schools was found to be 224 which was identified from the class attendance register. Sample size of 142 was determined using Raosoft sample size calculator with 5 percent margin of error, 95 percent confidence level and population proportion of 50 percent.

Investigator had drawn the calculated sample of 142 using simple random sampling technique in proportionate number from class XI and class XII of both the schools. The student whoever fulfills the criteria were selected randomly by using Lottery method. The subjects from 2 schools were selected by Simple Random Sampling technique using Lottery method in proportionate number as shown below

Selection of desired subjects from 2 conveniently selected schools

School	Class	Total students	Proportionate number
1. Hindustani Kendriya Vidyalaya	XI	68	43
	XII	79	50
2. Modern High School (Senior Secondary)	XI	32	20
	XII	45	29
Total		224	142

3.9 Sampling Criteria

The following criteria was used in the present study to select the samples.

Inclusion Criteria

- Students who were available during data collection period.

Exclusion Criteria

- Students who were not willing to participate in the study

3.10 Variables

Variables of the study contains independent, dependent and demographic variable. In this study the independent variable refers to PTP on knowledge regarding Nomophobia and its Prevention, the dependent variable refers to knowledge on Nomophobia and its Prevention, Demographic variables of this study include age, gender, religion, type of family, class of study, stream, monthly income of family and previous knowledge.

3.11 Tools and Technique

The tool for collecting data was a structured self-administered questionnaire consisting of two sections: Section A and Section B.

Section A: Demographic Variable: This section deals with background information regarding demographic variables such as age, gender, religion, type of family, class of study, stream, monthly income of family and previous knowledge.

Section B: Structured self-administered knowledge questionnaire on nomophobia and its prevention: This section was prepared to assess the level of knowledge regarding nomophobia and its prevention. This section consists of 20 items of Multiple-Choice Questions with four options having only one correct. Each correct answer carries one mark and the wrong answer carry 0 mark. The maximum score is 20 and minimum score is 0. This section consists of 4 areas:

Area I: Introduction and definition of nomophobia
Area II: Sign and symptoms of nomophobia
Area III: Causes of nomophobia
Area IV: Diagnosis and prevention of nomophobia

The Range of the score is interpreted as follows:

- Score 0-10 = Inadequate knowledge
- Score 11-14= Moderately adequate knowledge
- Score 15-20= Adequate knowledge

3.12 Data Collection Procedure

Data collection is the precise, systematic gathering of information relevant to the research purpose or the specific objectives, questions or hypotheses of a study. [Error! Reference source not found.]

Prior to data collection a formal written permission was obtained from Principal of Hindustani Kendriya Vidyalaya and Modern High School (Senior Secondary).

The study was carried out during the month of April-May (29/04/2024 to 25/05/2024). The list of subjects was collected from their class attendance register. Simple random sampling technique was adopted using lottery method to select 142 subjects from the list of 224 students. An informed written consent was obtained from each participant. The structured self-administered questionnaire was administered to assess the pre-test level of knowledge regarding nomophobia and its prevention followed by the administration of PTP on nomophobia and its prevention. And after 7 days i.e. on 8th day, the post-test was conducted to assess the effect of PTP. The anonymity and confidentiality of the students was maintained. Data collection in both the schools was done as shown below

School	Pre-test and PTP	Post-test	Remarks
3. Hindustani Kendriya Vidyalaya	10/05/2024	17/05/2024	Both Class XI and XII were combined together
4. Modern High School (Senior Secondary)	11/05/2024	18/05/2024	Both Class XI and XII were combined together

3.13 Plan for Data Analysis

The data collected from students were grouped and analyzed based on the objectives and hypotheses set for the study. The collected data were coded and transformed to the master sheet for statistical analysis. Analyzed data were presented in tables, graphs and figures.

The following plans for the analysis were.

- Frequency, and percentage distribution was used to summarize the demographic variables. Mean, Standard Deviation, Mean Percentage was used to assess and categorize the knowledge level.
- Paired "t- test" was used to evaluate the effect of PTP.
- Chi- square test was used to find out the association between knowledge level with selected demographic variables such as age, gender, religion, type of family, class of study, stream, monthly income of family and previous knowledge.

RESULTS AND DISCUSSION:

Section I: Description of sample characteristics

n=142

Demographic Variable	Frequency (f)	Percentage (%)
Age		
16-17 years	98	69
18-19 years	44	31
Gender		
Male	84	59.2
Female	58	40.8
Religion		
Hinduism	97	68.3
Islam	42	29.6
Christianity	03	2.1
Type of Family		
Nuclear	78	54.9
Joint	51	35.9
Extended	13	9.2
Class of Study		
Class XI	63	44.4
Class XII	79	55.6
Course stream		
Arts	27	19
Science	73	51.4
Commerce	42	29.6
Monthly income of family (in Rupees)		
68,967-92,185	13	9.2
46,095-68,961	42	29.6
27,654-46,089	82	57.7
9,232-27,648	05	3.5
Previous knowledge		
Yes	18	12.7
No	124	87.3

Section II: Comparison of pre-test and post-test level of knowledge regarding nomophobia and its prevention among students before and after the administration of planned teaching programme.

Table 3.1

Frequency and percentage distribution of pre-test and post-test level of knowledge regarding nomophobia and its prevention among students before and after the administration of planned teaching programme. n=142

Level of knowledge	Pre-test		Post-test	
	f	%	f	%
Inadequate knowledge (≤ 10)	19	13.4	-	-
Moderately adequate knowledge (11-14)	108	76	-	-
Adequate knowledge (≥15)	15	10.6	142	100
Total	**142**	**100**	**142**	**100**

The data presented in Table 3 shows that in pre-test majority i.e. 108 (76%) students had moderately adequate knowledge followed by 19 (13.4%) had inadequate knowledge and only 15 (10.6%) had adequate knowledge, whereas in post-test all the students i.e. 142(100%) students had adequate knowledge regarding nomophobia and its prevention, and none in inadequate or moderately adequate category of knowledge

Section III: Effect of planned teaching programme on knowledge regarding nomophobia and its prevention among students of higher secondary school.

Area wise paired t-test was computed to establish area wise significant difference in their mean pre-test and post-test knowledge score as presented in Table 4.1. Finally, an overall paired t-test was computed to examine the effect of planned teaching programme on the group in pre-test and post-test knowledge score. The findings are presented in Table 4.2.

Table 4.1

Area wise pre-test and post-test effect of planned teaching programme on knowledge regarding nomophobia and its prevention among students in selected higher secondary schools n=142

Area	Level of knowledge	Mean	SD	Mean difference	t test value	df	p value	Inference
Area I	Pre-test	2.78	0.83	1.79	22.2	141	0.001*	**S**
	Post-test	4.57	0.57					
Area II	Pre-test	3.8	0.88	0.40	9.35	141	0.001*	**S**
	Post-test	4.40	0.64					
Area III	Pre-test	2.65	0.69	0.79	13.01	141	0.001*	**S**
	Post-test	3.44	0.57					
Area IV	Pre-test	3.35	1.25	1.86	16.87	141	0.001*	**S**
	Post-test	5.21	0.85					

Table 4.2

Effect of planned teaching programme on knowledge regarding nomophobia and its prevention among students in selected higher secondary schools

n=142

Level of knowledge	Mean	SD	Mean difference	t test value	df	p value	Inference
Pre-test	12.59	1.6	5.02	41.2	141	0.001*	Significant
Post-test	17.61	1.0					

*p<0.05 level of significance

H_1: There is significant difference between pre-test and post-test level of knowledge regarding Nomophobia and its prevention among students in selected higher secondary schools of Kamrup (M), Assam as measured by structured self-administered questionnaire at 0.05 level of significance.

In order to test the hypothesis H_1 a null hypothesis H_{01} is formulated as:

H_{01}: There is no significant difference between mean pre-test and post-test level of knowledge regarding Nomophobia and its prevention among students in selected higher secondary schools of Kamrup (M), Assam as measured by structured self-administered questionnaire at 0.05 level of significance.

Findings revealed that there is significant difference in pre-test and post-test level of knowledge score before and after implementation of planned teaching programme. It infers that planned teaching programme was effective in increasing the knowledge level regarding nomophobia and its prevention among the students. Hence null hypothesis H_{01} is rejected and research hypothesis H_1 is accepted.

Section IV: Association between pre-test level of knowledge regarding nomophobia and its prevention among students with selected demographic variables.

n= 142

Demographic Variable	Inadequate	Moderately adequate	Adequate	χ^2 value	df	Tabulated value	p value	Inference
Age								
16-17 years	15	72	11					
18-19 years	04	36	04	1.286	2	5.99	0.526	NS
Gender								
Male	10	63	11	1.613	2	5.99	0.446	NS
Female	09	45	04					
Religion								
Hinduism	15	73	09					
Islam	04	32	06	2.437	4	9.49	0.656	NS
Christianity	00	03	00					
Type of Family								
Nuclear	06	61	11	11.265	4	9.49	0.0237	***S**
Joint	08	39	04					
Extended	05	08	00					
Class of Study								
Class XI	09	44	10	3.667	2	5.99	0.160	NS
Class XII	10	64	05					
Course stream								
Arts	05	20	02	1.614	4	9.49	0.806	NS
Science	09	57	07					
Commerce	05	31	06					
Monthly income of family (in Rupees)								
68,967-92,185	05	05	03	13.12	6	12.59	0.0412	*S
46,095-68,961	04	33	05					
27,654-46,089	10	65	07					
9,232-27,648	00	05	00					
Previous knowledge								
Yes	06	09	03	8.70	2	5.99	0.0129	*S
No	13	99	12					

H_2: There is significant association between pre-test level of knowledge score regarding Nomophobia and its prevention among students in selected higher secondary schools of Kamrup (M), Assam with selected demographic variables as measured by structured self-administered questionnaire at 0.05 level of significance.

In order to test the hypothesis H_2 a null hypothesis H_{02} is formulated as:

H_{02}: There is no significant association between pre-test level of knowledge score regarding Nomophobia and its prevention among students in selected higher secondary schools of Kamrup (M), Assam with selected demographic variables as measured by structured self-administered questionnaire at 0.05 level of significance.

In this regard chi square were computed to determine the association between the pre-test level of knowledge with selected demographic variables. Overall statistical findings of data presented in table shows that the association between pre-test knowledge with demographic variables such as age, gender, religion, class of study, and stream were non-significant at the level of 0.05. Whereas demographic variables such as type of family (χ^2=11.265, p value = 0.0237), monthly income of family (χ^2 =13.12, p value = 0.0412) and previous knowledge (χ^2=8.70**,** p value = 0.0129) were statistically found significant at the level of 0.05. Thus, the null hypothesis H_{02} is rejected and research hypothesis H_2 is accepted in terms of type of family, monthly income of family and previous knowledge.

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