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"A Study To Assess The Effectiveness of Self-Instructional Module on Knowledge Regarding Prevention of Adverse Effects of Mobile Phone Games among Nursing Students At SRM College of Nursing, Kattankulathur, Chengalpattu District."

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ABSTRACT:

A study to assess the effectiveness of self-instructional module on knowledge regarding prevention of adverse effects of mobile phone games among nursing students at SRM College of Nursing, Kattankulathur, Chengalpattu District." The objective of the study were to assess the pre-test knowledge of students regarding prevention of adverse effects of mobile phone games, to evaluate the effectiveness of self-instructional module knowledge of students regarding prevention of adverse effects of mobile phone games and to find out the association between post-test level of knowledge with their selected demographic variables of student.To determine the sample (N = 130), an evaluative method using a pre-experimental one-group pre-test and post-test design was employed. The knowledge was evaluated using a systematic knowledge questionnaire, and the efficacy of SRM College of Nursing was determined. Analyses of the gathered data were conducted using both descriptive and inferential statistics. The knowledge mean score for the pretest was 12.84±4.51, while the knowledge mean for the posttest was 20.32±2.59. At the $p<0.001$ level, the computed paired "t" test value of t = 17.537 was determined to be statistically highly significant. This indicates unequivocally that giving nursing students a self-instructional module on the prevention of negative mobile phone effects was found to be successful in raising their post-test knowledge level. The pretest mean score of PPBS was 174.20±16.28 and the posttest mean score of FBS was 174.0±15.87 for the control group. At the $p<0.05$ level, it was determined that the computed paired "t" test value of t = 0.494 was not statistically significant. The study's findings showed that, when it came to preventing the negative impacts of mobile phones, 75 people (57.69%) had insufficient understanding and 25 people (19.23%) had moderate understanding during the pretest. On the post-test, however, 32(24.62%) and 68(52.31%) reported having adequate and moderate knowledge, respectively.

Keywords: Knowledge, mobile phone games, nursing students

1. Introduction

Cell phones, commonly referred as telephones, are sophisticated cellular modems Motorola initially demonstrated them They were first made public in 1973, and they were commercially available in 1984. [1] Cell phones in recent years, they've become an indispensable part of our lives. Year after the number of cell phone subscribers continues to increase year after year. In 2016, the global user base was estimated to be about seven billion people. The global percentage of people who use the internet rose sevenfold between 2000 and 2015, from 6.5 percent to 43 percent. Furthermore, from 18 percent in 2005 to 24 percent currently, the share of homes

having internet connection has grown. [2] Additionally, cell phone addiction is on the rise. A 2012 Time Mobility Poll revealed that 84% of participants "could not endure a single day without their cell phone devices."[3] As per them, the conclusions of 206 published surveys, 50% of teenagers and 27% of People realize that children are obsessed to telephones. [4] Mobile phone usage is on the rise, according to a recent study, which might lead to an increase in internet addiction. [5] Computer vision syndrome is characterized by symptoms such as dry eyes, feeling unsafe, delusions, auditory sleep problems, sleep deprivation ,low self-confidence, and issues with mobile phone addiction. [6] Wi-Fi radiation over time resulted in a change in behaviour. [7] According to Kesari et al., mobile device Radiation can lead to an increase in reactive oxygen species, which have been related to metabolic and neurological diseases. [8] The great majority of the world's people have in recent years. Smartphones have disadvantages such as diminished job productivity, personal attention, social irritation, and psychological addiction, despite their numerous benefits. Students' addiction to cellphones fluctuates between 24.8 and 27.8%, and it is continuing to rise. [9] Students are increasingly relying on their cellphones to manage crucial behaviour has the ability to degrade thinking abilities, cognitive processes, and lead to dependency[10] .Smartphone addiction manifests itself in the habit of checking. [11].Academics as a mental disability caused by contemporary technology. [12] Addiction to mobile phones and withdrawal from mobile networks can cause feelings of rage, stress, sadness, impatience, and restlessness, all of which can affect one's health.

2. Materials And Methods

Using a sample random sampling strategy, an evaluative approach with a pre-experimental one-group pre-test and post-test design was employed to choose the sample (N = 130). We used thirty items from a structured knowledge questionnaire to measure knowledge among students at SRM College of Nursing administered the questionnaire to assess its effectiveness. We conducted analyses of the gathered data using both descriptive and inferential statistics.

RESULTS

Table 1: Frequency and percentage distribution of demographic variables of Nursing Students.

N = 130

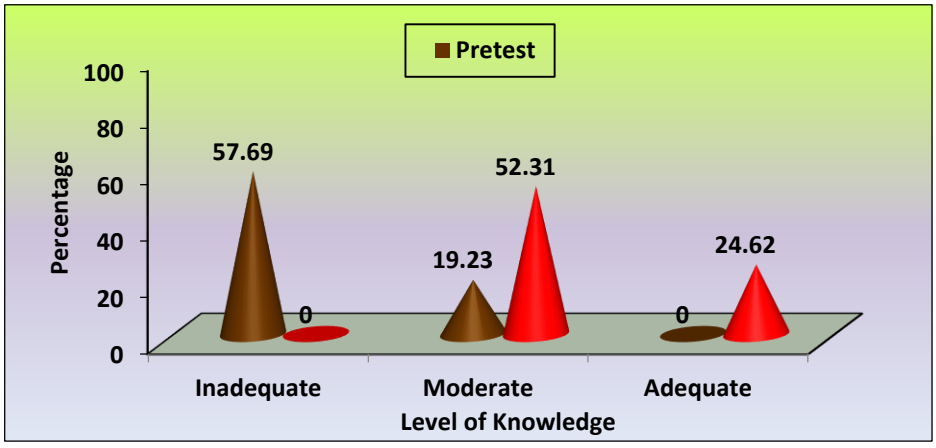
Demographic Variables	No.	%
Age in yrs		
15 – 17	9	6.9
18 – 20	121	93.1
Gender		
Male	31	23.8
Female	99	76.2
Type of family		
Nuclear	98	75.4
Joint	30	23.1
Extended	1	0.8
Others	1	0.8
Educational status of the father		
Primary education	59	45.4
P.U.C	22	16.9
Graduate and above	27	20.8

Demographic Variables	No.	%
No formal education	22	16.9
Educational status of the mother		
Primary education	130	100.0
P.U.C	-	-
Graduate and above	-	-
No formal education	-	-
Monthly income of the family		
1000 – 2000	13	10.0
2001 – 4000	14	10.8
4001 – 6000	24	18.5
6001 above	79	60.8
Resident of the student		
Rural	67	51.5
Suburban	15	11.5
Urban	48	36.9

Most of the nursing students 121(93.1%) were aged 18 – 20 years, 99(76.2%) were female, 98(75.4%) belonged to nuclear family, 59(45.4%) of fathers had primary education, 130(100%) of mothers had primary education, 79(60.8%) had a family monthly income of 6001 above and 67(51.5%) were residing in rural area.

Pie diagrams reflecting Percentage distribution of knowledge regarding prevention of adverse effects of mobile phone games among Nursing Student

N = 130



The knowledge level of students regarding prevention of adverse effects of mobile phone games, 57.69% of students are having inadequate knowledge and 19.3% of student having moderate knowledge and 0% of student having adequate knowledge in pre-test. 0% of student are having inadequate knowledge, 52.31% of student having moderate knowledge and 24.62% of student having adequate knowledge in post-test.

Table 2: The efficacy of a self-education module on mobile phone safety for nursing students in terms of information acquisition. N = 130

Knowledge	Mean	S.D	Paired 't' test Value
Pretest	12.84	4.51	**t = 17.537**
Post Test	20.32	2.59	**p = 0.0001**

			S* **

***p<0.001, S – Significant

The effectiveness of the SIM on prevention of adverse effects of mobile phone games considering the overall accepts, of pre-test mean knowledge score and post-test mean knowledge score that obtained t= value is 17.537, p= value is 0.0001 and it is highly significant.

Table 3: Association of pre-test level of knowledge regarding prevention of adverse effects of mobile phone among Nursing Students with their selected demographic variables.

N = 130

Demographic Variables	**Inadequate**		**Moderate**		**Adequate**		**Chi-Square Value**
	No.	**%**	**No.**	**%**	**No.**	**%**	
Age in years							χ^2=0.319 d.f=1 p = 0.572 N.S
15 – 17	6	4.6	3	2.3	-	-	
18 – 20	69	53.1	52	40.0	-	-	
Gender							χ^2=0.777 d.f=1 p = 0.378 N.S
Male	20	15.4	11	8.5	-	-	
Female	55	42.3	44	33.8	-	-	
Type of family							χ^2=2.420 d.f=3 p = 0.490 N.S
Nuclear	58	44.6	40	30.8	-	-	
Joint	16	12.3	14	10.8	-	-	
Extended	0	0	1	0.8	-	-	
Others	1	0.8	0	0	-	-	
Educational status of the father							**χ^2=11.954 d.f=3 p = 0.008 S****
Primary education	35	26.9	24	18.5	-	-	
P.U.C	9	6.9	13	10.0	-	-	
Graduate and above	12	9.2	15	11.5	-	-	
No formal education	19	14.6	3	2.3	-	-	
Educational status of the mother							-
Primary education	75	57.7	55	42.3	-	-	
P.U.C	-	-	-	-	-	-	
Graduate and above	-	-	-	-	-	-	
No formal education	-	-	-	-	-	-	
Monthly income of the family							χ^2=6.151 d.f=3 p = 0.104 N.S
1000 – 2000	11	8.5	2	1.5	-	-	
2001 – 4000	10	7.7	4	3.1	-	-	
4001 – 6000	13	10.0	11	8.5	-	-	
6001 above	41	31.5	38	29.2	-	-	
Resident of the student							χ^2=3.067 d.f=2 p = 0.216 N.S
Rural	43	33.1	24	18.5	-	-	
Suburban	9	6.9	6	4.6	-	-	
Urban	23	17.7	25	19.2	-	-	

**p<0.01, S – Significant, N.S – Not Significant

The association of pre-test level of knowledge regarding prevention of adverse effects of mobile phone game before administering SIM. Age of respondents significantly associated with their pre-test knowledge score and educational status of father is also significantly associated with their pre-test knowledge score.

3. Discussion

According to the study, of the 130 samples that took the pretest, 75 (57.69%) had inadequate information, 25 (19.23%), 18 (17.5%) had moderate knowledge, and 0 (0) had adequate knowledge regarding preventing the negative impacts of mobile phone gaming. According to the study, out of 130 samples, 0 had no information at all, 68 (52.31%) had some knowledge, and 32 (24.62%) had the necessary knowledge to prevent the negative impacts of mobile phones. The study's findings indicate that the mean knowledge score on the pretest was 12.844.51, and the mean knowledge score on the post-test was 20.322.59. We deemed the computed paired "t" test result of t = 17.537 to be statistically highly significant at the p0.001 level. Therefore, it is evident that offering a self-instructional module on how to avoid the negative impacts of mobile phones is essential.

4. Conclusion

The post-test knowledge score was higher than the pre-test knowledge score, indicating the study's effectiveness. The results show that the investigator's self-instructional module was successful in improving the samples' understanding of how to prevent the negative consequences of mobile games.

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