

## A STUDY TO ASSESS THE EFFECTIVENESS OF EDUCATIONAL MODULE TO ASSESS THE LEVEL OF KNOWLEDGE REGARDING IMPACT OF SMARTPHONE ADDICTION AMONG THE ADOLESCENTS AT SELECTED SCHOOLS, PUDUCHERRY.

**Dr.V.Revathy.V<sup>1</sup>,Dr.V.Uma<sup>2</sup>**

1. Associate professor, Mother Theresa Post Graduate & Research Institute of Health Sciences, Puducherry, India.
2. Associate professor, Mother Theresa Post Graduate & Research Institute of Health Sciences, Puducherry,

### **Abstract:**

*Communication is the transfer of information from person to person. A smartphone is a cellular telephone with an integrated computer and other features not originally associated with telephones, such as an operating system, web browsing and the ability to run software applications. Adolescents are strongly attached to their smartphone, and they regard a smartphone as their second self. Adolescents are trying to be independent of their parents, to establish their identity and to create an independent space for themselves. The study was undertaken with the objective to assess the pre-test and post-test knowledge level of adolescents by educational intervention on knowledge regarding impact of smartphone addiction & to evaluate the effectiveness of educational intervention on level of knowledge impact of smartphone addiction among adolescents. Pre Experimental with One group pretest post test design was used to assess the Knowledge level of adolescents regarding impact of smartphone addiction by a structured questionnaire . Educational intervention on knowledge regarding impact of smartphone addiction was given. The findings of the present study concluded that 44(62.85%) had inadequate knowledge, followed by 26(37.14%) had moderate knowledge and no one had adequate knowledge regarding prevention of pneumonia in children. In post-test, all adolescents 61(87.14%) had adequate knowledge, 09( 12.85%) had moderately adequate & no one had inadequate knowledge regarding impact of smartphone addiction and the mean knowledge score was 20.68 in pre test raised to 38.32 in post test. There is a significant difference between pre-test and post test knowledge scores of adolescents regarding impact of smartphone addiction.*

**Key Words: Educational intervention, Adolescents , Impact of smartphone addiction**

## INTRODUCTION

Today the fastest growing group of smartphone users is the children and young people. This growth is actively encouraged by the professional advertising campaign from the smartphone industry in which the use of smartphone can't be separated from their lifestyle. A smartphone is a cellular telephone with an integrated computer and other features not originally associated with telephones, such as an operating system, web browsing and the ability to run software applications

The advantages of smartphones nowadays are instant communication, camera for taking pictures and videos, GPS, privacy, entertainment, productivity apps, educational uses, web surfing.

The major disadvantages are costly, poor social interaction, distraction, health issues, addiction, privacy threats, uncensored content.

The common physical hazards of smartphone usage for adolescents are eye strain, eye defects, sleeplessness, eye pain, problem with ear drum, pain in wrist, neck and joints, backpain, hearing problem, nerve damage, risk for cancer, brain tumor, occipital neuralgia, carpal tunnel syndrome.

Psychological hazards includes disturbed brain activity, decreased academic performance, aggressive behavior, prolonged stress, fatigue, nervous disturbances, weakening of the immune system, negative emotions, increased anxiety level, change in attitude in college, loneliness, depression and withdrawal is painful.

Social hazards includes poor social interaction, decreased interpersonal relationship, decreased peer group interaction, decreased involvement in peer group activities, increased risk for accidents, inappropriate usage of internet, academic malpractice, game addiction.

The number of smartphone users is forecast to reach 4.68 billion. Among 97.4% of the males uses smartphone more than 8 hours per day and 89.3% of the females uses smartphone more than 7 hours per day (**World Wide Statistics, 2019**).

The average time spent on smartphones is 171 minutes a day (2 hours 51 minutes), the average time spent on smartphones and tablets is 261 minutes a day (4 hours 33 minutes), the average user spends 76 minutes a day (1 hour 16 minutes) on the top 5 social media apps, the average user will tap, swipe, click, their phone 2,617 times a day and out of 18-29 years old smartphone owners surveyed, 22% check their phone every few minutes, 51% check a few times an hour. (**India's smartphone addiction Statista, August, 2018**).

The average smartphone owner unlocks their phone 150 times a day, 58 % of smartphone users don't go 1 hour without checking their phones, the average user touches their phone 5427 times a day, 71 % people usually sleep with or next to their mobile phone and 41 % of all adults check their phone a few times an hour, 80 % of the teens typically spend time on their phone after they go to bed, 75% of workers use their phones while at work, 36% of the millennials say that they spend 2 or more hours per workday looking their phones for personal activities. (**Puducherry Statistics, 2018**).

## OBJECTIVES OF THE STUDY:

- To assess the pretest and posttest level of knowledge regarding the impact of smartphone addiction among the adolescents
- To evaluate the effectiveness of educational intervention on knowledge regarding the impact of smartphone addiction among the adolescents.

## HYPOTHESIS

- **H<sub>1</sub>:** There will be a significant difference between pretest and posttest level of knowledge regarding the impact of smartphone addiction among the adolescents
- **H<sub>2</sub>:** There will be a significant difference in the effectiveness of educational intervention on knowledge regarding the impact of smartphone addiction among the adolescents

## METHODOLOGY

**RESEARCH APPROACH:** According to the statement of the problem and to accomplish the study quantitative research approach was adopted.

**RESEARCH DESIGN:** Quasi experimental one group pretest-post test research design was used in this study .

### RESEARCH VARIABLES:

- **Independent variable-** Educational intervention on the impact of smartphone addiction among the adolescents
- **Dependent variable-** knowledge regarding the impact of smartphone addiction among the adolescents

**RESEARCH SETTING:** The study was conducted at Blessed Mother Theresa school , Puducherry.

**POPULATION:** In this study, population comprises of all adolescents studying in Blessed mother Theresa school, Puducherry.

**SAMPLE:** The samples for this study were adolescents in the age group of 12 -15years and who fulfilled the inclusion criteria

**SAMPLE SIZE:** The sample size was 70 adolescents.

**SAMPLING TECHNIQUE:** Purposive sampling technique was used for this study.

**SAMPLING CRITERIA:**

**INCLUSION CRITERIA:**

Adolescents

- ✓ in the age group of 12-15 years
- ✓ who uses smartphone and utilizing it
- ✓ who know to read and write tamil or english
- ✓ Mothers who are willing to participate in the study

**EXCLUSION CRITERIA:**

Adolescents

- ❖ who were sick at the time of data collection.
- ❖ who do not uses smartphones

**RESULTS**

**Table 1:** Frequency and percentage distribution of demographic variables among adolescents

N = 70

AGE(years)	FREQUENCY (n)	PERCENTAGE (%)
12 – 13	21	30
14 – 15	49	70
<b>GENDER</b>		
MALE	18	25.7
FEMALE	52	74.3
<b>AREA OF RESIDENCE</b>		
URBAN	34	49
RURAL	36	51
<b>TYPE OF FAMILY</b>		
JOINT FAMILY	15	21.42
NUCLEAR FAMILY	55	78.57
EXTENDED FAMILY	0	
<b>FAMILY MONTHLY</b>		

<b>INCOME</b>		
BELOW RS. 3000	04	5.71
RS. 3001 – 5000	05	7.14
RS. 5001 – 7000	23	32.85
RS. 7001 AND ABOVE	38	54.28
<b>DURATION OF USAGE</b>		
LESS THAN 1 HOUR	08	11.42
1 – 2 HOURS	22	31.42
2 – 3 HOURS	11	15.71
MORE THAN 3 HOURS	29	41.42
<b>FREQUENCY OF SMARTPHONE USE</b>		
2 HOURS ONCE	02	2.85
WHEN NOTIFICATIONSOUNDS	10	14.28
BEFORE AND AFTER SLEEP	05	7.14
FREE TIME	51	72.85
OTHERS	02	2.85
<b>SOURCE OF INFORMATION</b>		
HEALTH PERSONNEL	06	8.57
FAMILY MEMBERS	08	11.42
MASS MEDIA	25	35.71
FRIENDS	22	31.42
NONE	09	12.85

**Table 2:** Percentage distribution of knowledge levels of adolescents on impact of smartphone addiction in pre test and post test

**N= 70**

Levels of knowledge	Pre test		Post test	
	Frequency	Percentage	Frequency	Percentage
Adequate knowledge	00	00%	61	87.14%

Moderately adequate knowledge	26	37.14%	09	12.85%
Inadequate knowledge	44	62.85%	00	00%

Table 1: Frequency and Percentage Distribution of Pre-test Post-test Knowledge Score of adolescents on impact of smartphone addiction (N=70) reveals that, among all adolescents, in pre-test, 44(62.85%) had inadequate knowledge, followed by 26(37.14%) had moderately adequate knowledge and no one had adequate knowledge regarding impact of smartphone addiction. In post-test, majority of adolescents 61(87.14%) had adequate knowledge, 09( 12.85%) had moderately adequate knowledge and no one had inadequate knowledge.

**Table 2:** Distribution of mean knowledge score of adolescents  
N = 70

Group	Mean	SD	Mean difference	't' test	P value
Pretest	20.68	2.28	17.64	44.218	<0.001**
Post test	38.32	1.30			

Table 2: The mean knowledge score was 20.68 whereas in post test raised to 38.32 with the difference of 17.64. The 't' test value (44.218) revealed that there was a significant difference in the mean knowledge score of the adolescents between pretest & Post test at 0.001 level. So the stated hypotheses H1 (There is a significant difference between pre-test and post test knowledge scores of adolescents on impact of smartphone addiction) and H2 (There will be a significant effectiveness of educational module on knowledge regarding impact of smartphone addiction .) is accepted.

## DISCUSSION

On the basis of the study and the statistical analysis, it was found that educational intervention brought significant changes on knowledge among adolescents. The result shows that there was significant improvement in knowledge level of adolescents after the administration of educational intervention on impact of smartphone addiction . The result of the study showed that educational intervention improved the knowledge level of the subjects.

## CONCLUSION

- ✓ The pre-test study concluded that adolescents had inadequate knowledge in pre-test but after educational module on knowledge regarding impact of smartphone addiction, there was a significant improvement on knowledge of adolescents.
- ✓ There was a significant difference between pre-test and post-test knowledge score with respect to different variables.

## **BIBLIOGRAPHY**

### **BOOKS**

1. Polit Denise and Hungler. Nursing Research, Principles and methods. 4<sup>th</sup> edition. Published by Lippincott Williams and Wilkins, 2005. Pg.No: 133 - 134
2. Phil Barker. Psychiatric and Mental Health Nursing. 2<sup>nd</sup> edition. Published by Hodder Arnold, 2009. Pg.No: 113 - 115
3. Niraj Ahuja. A short textbook for psychiatry. 7<sup>th</sup> edition. Published by Jaypee brothers, 2011. Pg.No: 114 - 116
4. Ruth Elder. Psychiatric and Mental Health Nursing. 3<sup>rd</sup> edition. Published by Mosby Elsevier 2013. Pg.No: 2056 – 2057

### **JOURNALS**

- Christoph randler, Lucia wolfgang, and katharina Matt et al. Smartphone addiction proneness in relation to sleep and morningness - eveningness in german adolescents. Journal of behavioral addictions. Germany. 2016 Aug.
- Concetta De Pasquale. Smartphone addiction and dissociative experience. An investigation in Italian adolescents aged between 14 and 19 years. Int J Psychol Behav Anal. Italy. 2015 Dec.
- Fahad D. Alosaimi, Haifa Alyahya, et al. smartphone addiction among university students in Riyadh, Saudi Arabia. Saudi med J Saudi. 2016 Apr.

### **NET REFERENCES:**

1. <http://www.cellphonebet.com/entry-on-health-hazards-of-cell-phones>
2. <http://medind.nic.in/ibl/i3/iblt05i3pl>
3. <http://jech.bmj.com/content/62/2/120.full>
4. <http://ir.jkuat.ac.ke/handle/12346789/1050>
5. <http://article.sciencepublishinggroup.com/pdf/10.11648.j.ijnfs.20150402>.