

# Impact of Structured Education Program on Knowledge and Attitude Among Adolescent School Children Regarding Cyber Addiction

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**Abstract:** Background: Cyber addiction is the among the adolescent due to the excessive use of internet and computer use. Due to growth and development, the physiological changes happen in the adolescent which have psychological and self-esteem will be changed. The aim is to assess the impact of structured education program regarding cyber addiction towards knowledge and attitude among adolescents.

Methodology: A pre-experimental research study was conducted among school going adolescents at selected school Puducherry. Totally 81 sample in participated with purposive sampling techniques. The modified internet addiction scale for assessing knowledge and attitude inventory scale with 5 points likert scale used for the data collection.

Results: The results revealed that majority of sample 46(56.8%) had moderate knowledge and 63(77.8%) had moderate favorable attitude after structured teaching program towards cyber addiction. Further the level of knowledge is significant with type of school ( $\chi^2 = 14.844$ ,  $p = 0.022$ ) at the level of  $p < 0.05$  by using Chi Square test. This research concluded that effective teaching program about cyber addiction as improved the level of knowledge and change in perception among school going adolescent.

Keywords: Cyber addiction, Internet use, Teaching program

## 1. INTRODUCTION

The human life has different stages of changes starting from birth till death<sup>(1)</sup>. The changes in the growth and development which means the person has the physical growth and development towards the psychological, emotional cognitive and somatic factors will have changes<sup>(2)</sup>. The behaviors of a person kept on changing according to time and situation and even with the factors which there being in the life time changes<sup>(3,4)</sup>.

When a person is performing or observing the particular things, may have changes of observing to be worked out or it may change into the different in the perception of oneself and others. Similarly, during the it may be physical or psychological aspects. This give away to the behavior to attention attraction into a addiction Nowadays the addiction is found among all age groups<sup>(5,6)</sup>.

But addiction towards internet work habits like eating, drinking alcohol and smoking also<sup>(7)</sup>. The toxicity level of the thing is more common in the internet addiction which is present among adolescent<sup>(8,9)</sup>.

When 1990 Internet Addiction globally, worldwide – 4.28 million , North America -2.05million , Europe -399,647 million , Oceanic -99,747million , Asia -40,687million , Africa – 0 , South America – 0 .But now 2020, internet Addiction globally, worldwide – 4.70 billion , North America -2.55 billion , Europe -632.25 million , Oceanic -480.34 million , Asia -451.62 million , Africa – 313.03 million , South America – 27.68 million still young only 60% of world's population was online in 2020<sup>(10)</sup>.

**Silvana Karacic Stjepan Oreskovic (2017)** conducted a survey to evaluated regarding phases of internet addiction among adolescent among schools (Croatia, Finland and Poland). Totally 1078 sample size by using sample

technique. The tool used was young's Internet Addiction scale consists 20 statements with 5-point Likert scale. The result revealed that the students between 15- 16 years and 11-12 years had showed high level of addiction. Further the association of age with level of addiction to the Internet is statically significant at ( $P=.001$ ) with Chi square test<sup>(11)</sup>.

**Sharmitha Krishnamurthy, Satish Kumar Chetlapalli (2016)** conducted a cross- sectional study to evaluated regarding online addiction for finding the prevalence and risk factors among college students, Bengaluru. Totally 600 samples were recruited in this study and sampling technique where convenient sampling technique was used. The data was collected by using Young's 20 –item for internet addiction with 5-point Likert scale. The result revealed that college student aged 16-26 years with high female representation (56%). The level of addiction is 34% in mild and 8% moderate internet users. Further the result revealed that the Binary logistic found internet addiction  $P=0.001$ <sup>(12)</sup>.

## 2. NEED FOR THE STUDY

**Vandana Goswami, Divya Rani Singh (2016)** reviewed the internet addiction among adolescent the study explored that internet addiction is currently one silent crisis which needed to addressed in our society. The study concluded that internet addiction is caused both physical and psychology destruction and it becomes one of the most important information resources for adolescent and also it makes innumerable disturbance in academic performance, social relationship and emotional wellbeing of adolescent<sup>(14)</sup>.

**Hatice Odact, Ozkan Cikrikci (2014)** conducted a descriptive survey study to evaluated regarding issues due to internet use with gender distribution , lifestyles and well-being among adolescent at selected universities in turkey. Totally 380 samples participated by using convenient sampling technique. The totally three questionnaires are problematic scale as 33 items was prepared under 5-point Likert scale, relationship scales questionnaire consists of 17 items on 7 points scale, subjective well-being was assessed with 46 items on a 5 point Likert scale. Finally the result showed that association between problematic internet use with sex distribution ( $F(1,372) =9.37, P<05$ ) and lifestyle ( $F(3,372) =2.73, P,<.05$ ) by using Bonferroni test<sup>(15)</sup>.

**Jon E. Grant, Marc N.Potenza, Aviv Weinstein, David A.Gorelick (2010)** conducted a review article regarding changes of behavior due to addiction . This study revealed by the American psychiatric Association Diagnostic and Statistically manual of mental Disorders. The study concluded that addiction resemble substance in different domain, including character history, phenomenology, tolerance level, contribution towards genetic makeup, neurological mechanism, and treatment outcome as shown different aspects of addiction and also not having addiction without the use of drugs and opioids<sup>(18)</sup>.

### Statement of the problem

A Study to Evaluate the Impact of Structured Education Program on Knowledge and Attitude among Adolescent School Children regarding Cyber Addiction at Dr Ambedkar Govt Higher Secondary Schools, Puducherry.

## 3. OBJECTIVES

- To assess the level of Knowledge and Attitude of Adolescent School Children regarding Cyber Addiction.
- To Evaluate the Impact of Structured Education Programme on Knowledge and Attitude of Adolescent School Children regarding Cyber Addiction
- To find out the association between post-test level of Knowledge and Attitude of Adolescent School Children regarding Cyber Addiction with selected demographic variables.
- To compare the impact of Structured teaching module on addiction among Adolescent.

## 4. RESEARCH METHODOLOGY

The pre-experimental research design with quantitative research approach. The questionnaire consists of mainly two section which includes Section A: Demographic variables (Name, age, sex, address, residence, educational qualification, religion, habits of internet using, previous Knowledge regarding). Section B: The questionnaires to assess the Knowledge and Attitude and internet addiction test. Section-B - 1 Knowledge was assessed by using internet addiction scale with 20 items. Each Knowledge questionnaires consist of 6 option such score 0 was given to not applicable, 1 for rarely, occasionally with 2 score, frequently was scored with 3 , often is determined with score 4

, always is 5. Section-B -2 Attitude was assessed by using 5 points Likert scale from score +2 to score -2. Purposive sampling technique was used. The data were collected among school students at Dr. Ambedkar government higher secondary school, Puducherry. The sample are given the instruction about the research and also with the teaching programme regarding cyber addiction. The participants were instructed to sit in the class room within 5 minutes. The researcher explained about the research. Then the tool and consent were obtained from the participant. The prior consent was obtained and pre-test was collected from the sample within 45 minutes. After pre-test, intervention was given by using Structured teaching Program regarding Cyber Addiction. The post test was conducted among the samples according the research plan after 7 days. The collected data was organized in the master sheet and proceed for analysis of the data.

**Ethical consideration;**

The research proposal was presented to IRC and IEC. Further settings permission was obtained from the Educational ethical board, Puducherry. Before data collection, prior permission and intimation was given to the Principal and Head master of the school.

**5. RESULT & DISCUSSION**

**According to the demographic variables of Adolescents.**

Regarding most of the Adolescents, 25(30.9%) were aged between 13 – 14 and 15 – 16 years, 41(50.6%) were male, 29(35.8%) were Studying 9th standard, 42(51.9%) were Hindus, 60(74.1%) belonged to nuclear family, 31(38.3%) were Studying in government School, 81(100%) were staying in hostel, 63(77.8%) were residing in rural area, 47(58%) had family monthly income of below Rs.5000 and 46(45.8) had known Tamil language.

One of the Study is similar with Study conducted by **Silvana Karacic (2017)** about internet use with age of the average age of participants of 14.9 years (SD 1.9, range 11-18) with an average discrepancy of 1.9 years, which is small dispersion (variance coefficient 13%)<sup>(11)</sup>.

**According to first objective assessment of level of Knowledge and Attitude regarding Cyber Addiction among Adolescents.**

Regarding the level of knowledge in pre-test, 69(85.2%) had inadequate Knowledge and 12(14.8%) had moderate Knowledge and in the post test after the intervention, 46(56.8%) had moderate Knowledge, 24(29.6%) had adequate Knowledge and 11(13.6%) had inadequate Knowledge regarding Cyber Addiction among Adolescents (Table-1)

Regarding the level of attitude in pre-test, 43(53.1%) had unfavorable Attitude and 38(46.9%) had moderately favorable and in the post test after the intervention, 63(77.8%) had moderately favorable Attitude and 14(17.3%) had favorable Attitude and 11(13.6%) had inadequate Knowledge regarding Cyber Addiction among sAdolescents. (Table-2)

**Table - 1:** Distribution of pre-test and post-test level of Knowledge regarding Cyber Addiction among Adolescents.

**N = 81**

Knowledge	Inadequate (≤50%)		Moderate (51 – 75%)		Adequate (>75%)	
	No.	%	No.	%	No.	%
Pre-test	69	85.2	12	14.8	0	0
Post-Test	11	13.6	46	56.8	24	29.6

**Table- 2:** Distribution of pre-test and post-test level of Attitude regarding Cyber Addiction among Adolescents.

**N = 81**

Attitude	Unfavorable (≤50%)		Moderately Favorable (51 – 75%)		Favorable (>75%)	
	No.	%	No.	%	No.	%
Pre-test	43	53.1	38	46.9	0	0
Post Test	4	4.9	63	77.8	14	17.3

**According to second objective impact of Structured teaching module on Knowledge and Attitude regarding Cyber Addiction among Adolescents.**

Regarding that the pre-test mean score of Knowledge among Cyber Addiction among Adolescents was 42.82±7.16 and the post-test mean score was 67.81±11.10. The calculated student paired ‘t’ test value of t = 18.832 was found to be statistically significant at p<0.001 level. (Table-3)

Regarding that the pre-test mean score of Attitudes among Cyber Addiction among Adolescents was 36.30±4.08 and the post-test mean score was 46.45±5.93. The calculated student paired ‘t’ test value of t=15.929 was found to be statistically significant at p<0.001 level.

These findings revealed that Structured teaching module on Knowledge and Attitude regarding Cyber Addiction administered among the Adolescents was found to be effective in improving the level of Knowledge and Attitude among the Adolescents in the post test.

**Table - 3:** Impact of Structured teaching module on Knowledge and Attitude regarding Cyber Addiction among Adolescents.

**N = 81**

Variables		Mean	S.D	Paired ‘t’ test & p-value
Knowledge	Pre-test	42.82	7.16	<b>t = 18.832</b> <b>p=0.0001, S***</b>
	Post-Test	67.81	11.10	
Attitude	Pre-test	36.30	4.08	<b>t = 15.929</b> <b>p=0.0001, S***</b>
	Post-Test	46.45	5.93	

\*\*\*p<0.001, S – Significant

**According to third objective is to associate the post-test level of Knowledge and Attitude with selected demographic variables.**

Regarding the demographic variable types of School (chi square =14.844, df=2, p=0.022) had shown statistically significant. None of the other demographic variables did not show statistically significant association with post-test level of Attitude regarding Cyber Addiction among Adolescents.

None of the demographic variables did not show statistically significant association with post-test level of Attitude regarding Cyber Addiction among Adolescents.

This Study is consistent with Study conducted by **Silvana Karacic (2017)** about internet use and gender is statistically significant (2 = 11.3; n= 1042; p= .0010)<sup>(11)</sup>

**6. CONCLUSION:**

The conclusion of this study that knowledge is improved among the students due to impact of structured teaching regarding cyber addiction among school going students. The sample had maintained increased level of knowledge regarding cyber addiction at selected school. The present study indicates the internet addiction very much danger for physical and psychological health also. So, the constant supervision of the parents and awareness regarding use of gadgets with internet needed to improve among the school students’

**Conflict of interest:** The authors declare that they have no conflict of interest related to the publication of this article.

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