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A Study to Assess the Effectiveness of Structured Teaching Programme (STP) on Knowledge Regarding Internet Gaming Disorder Among Adolescent's in a Selected Higher Secondary School Maharashtra

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Abstract
A Study to Assess the Effectiveness of Structured Teaching Programme (STP) On Knowledge Regarding Internet Gaming Disorder Among Adolescent's in a Selected Higher Secondary School Maharashtra.

Objectives

1. To assess the existing level of knowledge regarding internet gaming disorder.
2. To evaluate the effectiveness of structured teaching programme regarding internet gaming disorder among adolescent's.
3. To find out the association between pre-test knowledge scores regarding internet gaming disorder among adolescent's with their selected socio demographic variable.

Material and Methods One group pre-test and post-test research design was used for this study. The independent variable in this study is structured teaching program on knowledge regarding internet gaming disorder. The dependent variable in this study is level of knowledge regarding internet gaming disorder among adolescents of higher secondary school. The study were conducted at selected higher secondary school. Sample includes 60 adolescents who fulfils the inclusion criteria were selected by non-probability purposive sampling technique use.

Results
Pre-test knowledge score mean 10.3 and SD was 4.80, and in the post test, the mean 20.16 and SD was 2.06. The comparison of pre-test and post-test knowledge score revealed a "t" value was t = 13.1 and p value was p=0.000. Which showed a high statistical significance at 0.05 level. The comparison of pre-test and post-test practice score revealed a "t"value was t = 13.1 which showed a high statistical significance at 0.05 level.

Conclusion
The analysis of the findings indicated that, Structured teaching programme is very effective in increasing the level of knowledge at $p<0.05$ level. From the findings of the study, the investigator concluded that structured teaching program has an important role in increasing the level of knowledge regarding internet gaming disorder among the adolescent in a selected higher secondary school.

Keywords: Structured Teaching Programme, Internet Gaming Disorder, Adolescent

Introduction

Adolescents are susceptible to a range of mental health problems associated with prolonged Internet gaming, including depression, social anxiety, and loneliness. Online gaming and risky online behaviour have been used as methods to cope with psychological difficulties caused by real- life problems that generate depression and loneliness. Psychological resilience may serve as an essential element to mitigate these psychological risks and challenges during puberty. To address these timely but unexplored issues, this study investigated how psychological resilience would mediate the association of depressive symptoms with both IGD and risky online behaviour. The findings advance the understanding of emergent issues that enable the development of preventive strategies for IGD and risky online behavior in adolescents.

Internet gaming disorder (IGD) has been included in the 5th edition of The Diagnostic and Statistical Manual of Mental Disorders (DSM-5). At present, many cases are encountered because of the disruption of this internet game, including in various age groups. Internet gaming addiction is a common disorder and often accompanies depression, hostility and social anxiety.

The harmful consequences of excessive gaming were also recognized by the World Health Organization (WHO), and internet gaming disorder (IGD) was included in their 2018 release of the 11th revision of the International Classification of Diseases (ICD-11). According to the WHO, diagnostic criteria for IGD are needed, in light of public health and treatment strategies that have been implemented worldwide to address the condition. In the ICD-11 definition, IGD is categorized as a disorder due to addictive behaviors, and is "a pattern of persistent or recurrent gaming behavior, which may be online (i.e., over the Internet) or offline, and manifested by the following three criteria: impaired control over gaming (e.g., onset, frequency, intensity, duration, termination, context), and increasing priority given to gaming to the extent that gaming takes precedence over other life interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences. For gaming disorder to be diagnosed, the behavior pattern must be of sufficient severity to result in significant impairment in personal, family, social, educational, occupational, or other important areas of functioning. The pattern of gaming behavior may be continuous or episodic and recurrent. The gaming behavior and other features are normally evident over a period of at least 12 months in order for a diagnosis to be assigned, although the required duration may be shortened if all diagnostic requirements are met and symptoms are severe.

Review of Literature

A cross-sectional study was conducted on Internet Gaming disorder among degree college students from India; exploring the pattern and correlates. The sample size was 306 degree student by using Internet gaming disorder Scale-Short Form (IGDS9-SF) and Patient Health Questionnaire-9 (PHQ- 9). A semi-structured questionnaire was used to collect information. The result shows that 173 (55.6%) current gamers, with 11 (3.6%) Internet gaming disorder. It's concluded that there is an urgent need to create awareness about it among students and concerned authorities. Further, there is a need to develop effective screening and treatment strategies suited for our population [16].

A cross sectional study was conducted on prevalence of internet gaming disorder in India a technological hazards among adolescents. The sample size was 400 high school students by using English version of the DSM-5 short (9-Items) dichotomus scale with cut-off point of five or more criteria was used for diagnosing the internet gaming disorder. The result shows that prevalence estimated of internet gaming disorder was 3.50 % among school children and it is higher among male students (8.8%) and it was found statistically significant with a p value of < 0.001. It's concluded that prevalence difference between age, groups, gender, class of students and availability of smart phones with internet facility act as important risk factors for the occurrence of IGD among adolescents [17].

A cross sectional study was conducted on Gaming addiction, gaming characteristics and personality traits among the health professionals undergraduates in Gujarat. The sample size was 225 intern doctors. Game addiction scale-short version was used to screen for game addiction. Self Esteem scales were used for assessment of personality factors. Descriptive statistics, independent t-test, chi- square test, multiple linear regressions were used for analysis data. The result shows that three fourth interns played online games, spent money on gaming, and playing for 5 years or more had GA. Nearly 70% of addicted interns were using multiple gadgets and 91.42% were playing games in other than leisure time also. It's concluded that the game addiction prevalent among intern doctors with certain gaming characteristics. it is associated with a high level of neuroticism, aggression, and sensation seeking and low level of extraversion, self esteem [27].

Results

Section A: Deals with analysis of demographic data of the adolescents in a selected higher secondary school Maharashtra in terms of frequency and percentage.

Table 1: Frequency distribution of the adolescents in a selected higher secondary school Maharashtra (*f=60*)

S. No	Variable	Groups	Frequency	Percentage
1	**Age**	15-16	31	51.67
		17-18	29	48.33
		19-20	0	0.00
		21-22	0	0.00
2	**Gender**	Male	33	55.00
		Female	27	45.00
3	**Occupation of parents**	Government employee	12	20.00
		Private employee	35	58.33
		Businessman	11	18.33
		Farmer	2	3.33
4	**Types of family**	Joint family	14	23.33
		Nuclear family	32	53.33
		Extended family	14	23.33
5	**Total monthly income of family**	Less than 10000	2	3.33
		11000 - 50000	29	48.33
		60000 - 100000	21	35.00
		above 1 lakh	8	13.33
		Mobile	***20***	33.33
		Computer	***15***	25.00
		IPad	***16***	26.67
		Laptop	***9***	15.00
		Yes	***16***	26.67
		No	***44***	73.33
		Social Media	***7***	43.75
		News Paper	***2***	12.50
		Articles	***2***	12.50
		Television	***5***	31.25

Table 2: Frequency and Percentage distribution of adolescents in a selected higher secondary school according to Age (f=60)

S. No	Variable	Groups	Frequency	Percentage
1	**Age**	15-16	31	51.67
		17-18	29	48.33
		19-20	0	0.00
		21-22	0	0.00

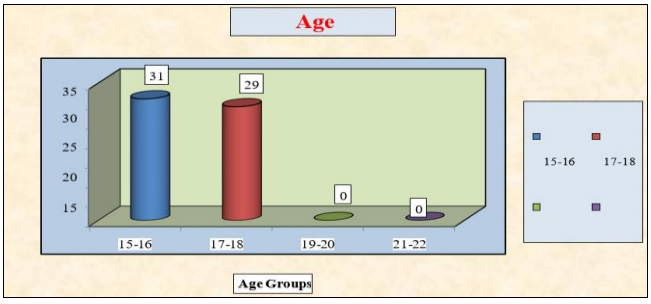

Fig 1: Distribution of adolescents in a selected higher secondary school according to Age

Rusult

In the study, according to age of the adolescents in a selected higher secondary school, 51.67% adolescents were from the age group 15-16 years of age, 48.33% adolescents from the 17-18 years of age, no one from the 19-20years and no one from the age group 21-22 years of age.

Table 3: Frequency and Percentage distribution of adolescents in a selected higher secondary school according to gender (f=60)

S. No	Variable	Groups	Frequency	Percentage
2	Gender	Male	33	55.00
		Female	27	45.00

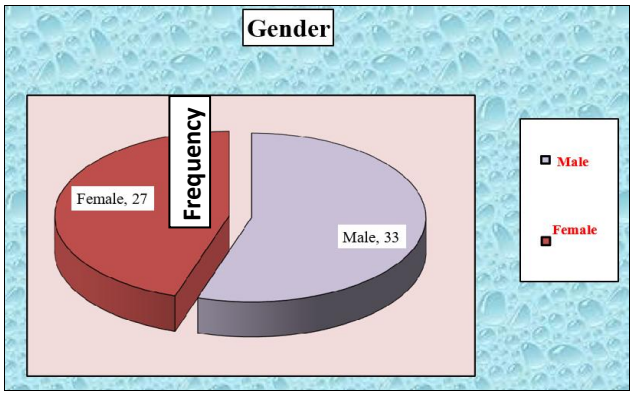

Fig 2: Distribution of adolescents in a selected higher secondary school according to gender

Result

In the study, according to gender of the adolescents in a selected higher secondary school, 55% adolescents were males and 45% females.

Table 4: Frequency and Percentage distribution of adolescents in a selected higher secondary school according to Occupation of parents f=60

S. No	Variable	Groups	Frequency	Percentage
3	Occupation of parents	Government employee	12	20.00
		Private employee	35	58.33
		Businessman	11	18.33
		Farmer	2	3.33

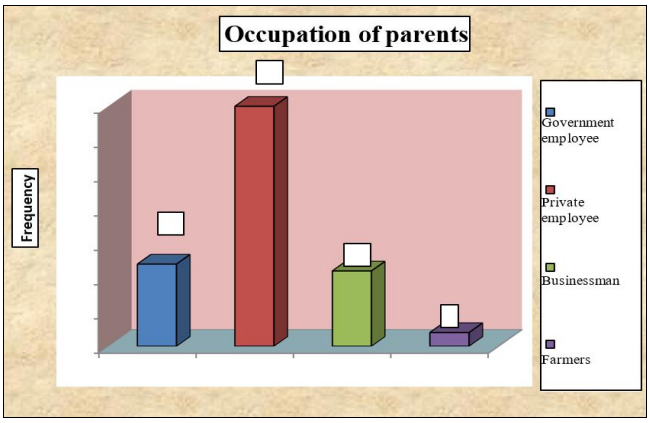

Fig 3: Distribution of adolescents in a selected higher secondary school according to Occupation of parents

Result

In the study, according to occupation of parents of the adolescents in a selected higher secondary school, 20% adolescent's parents were Government employee, 58.33% adolescent's parents were Private employee, 18.33% adolescent's parents were Businessman and 3.33% of the parents were farmers.

Table 5: Frequency and Percentage distribution of adolescents in a selected higher secondary school according to Types of family (f=60)

S. No	Variable	Groups	Frequency	Percentage
4	Types of family	Joint family	14	23.33
		Nuclear family	32	53.33
		Extended family	14	23.33

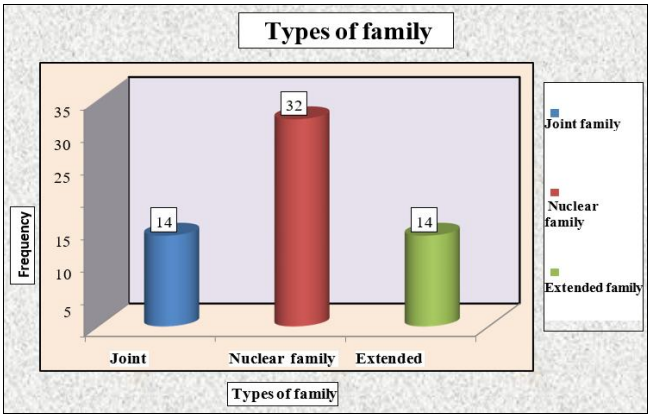

Fig 4: Distribution of adolescents in a selected higher secondary school according to Types of family

Result

In the study, according to type of family of the adolescents in a selected higher secondary school, 23.33% adolescents were from the joint families, 53.33% adolescents from nuclear families and 23.33% adolescents from extended type of families.

Table 6: Frequency and Percentage distribution of adolescents in a selected higher secondary school according to monthly income of family (f=60)

S. No	Variable	Groups	Frequency	Percentage
5	Total monthly income of family	Less than 10000	2	3.33
		11000 - 50000	29	48.33
		60000 - 100000	21	35.00
		above 1 lakh	8	13.33

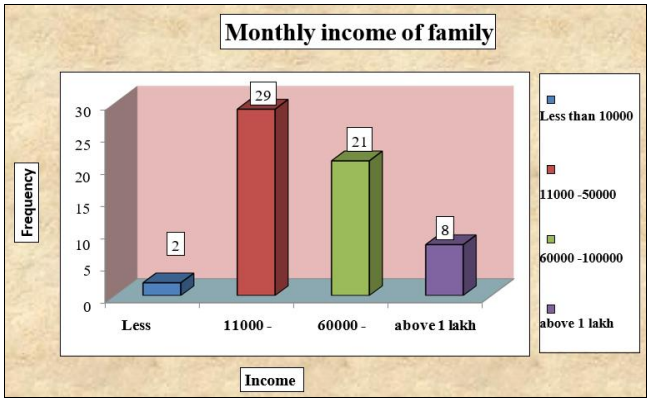

Fig 5: Distribution of adolescents in a selected higher secondary school according to monthly income of family

Result

In the study, according to Total monthly income of family of the adolescents in a selected higher secondary school, 3.33%

adolescents were from families with income less than 10000, 48.33% adolescents were from families with income 11000-50000 Rs, 35% from 60000 – 100000per month and 13.33% adolescents were from families with income above 1 lakh.

Table 7: Frequency and Percentage distribution of adolescents in a selected higher secondary school according to Internet using devices

S. No	Variable	Groups	Frequency	Percentage
6	**Internet using devices**	Mobile	20	33.33
		Computer	15	25.00
		IPad	16	26.67
		Laptop	9	15.00

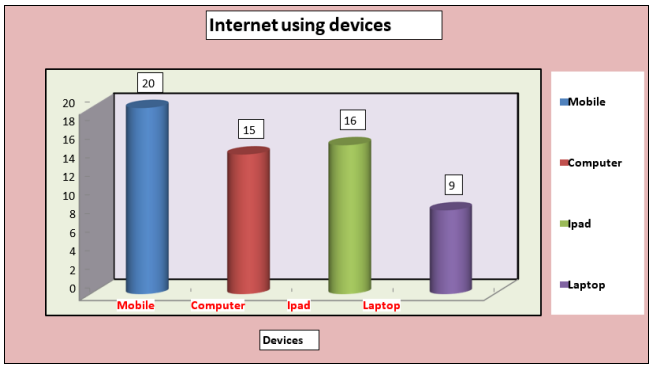

Fig 6: Distribution of adolescents in a selected higher secondary school according to Internet using devices

Result

In the study, according to type of Internet using devices of the adolescents in a selected higher secondary school, 33.33% adolescents were using mobiles, 25% of them using computer, 26.67% using IPad, 15% of adolescents in a selected higher secondary school using Laptop for use of internet.

Table 8: Frequency and Percentage distribution of adolescents in a selected higher secondary school according to previous knowledge (f=60)

S. No	Variable	Groups	Frequency	Percentage
7	**Previous knowledge about Internet gaming disorder?**	Yes	16	26.67
		No	44	73.33

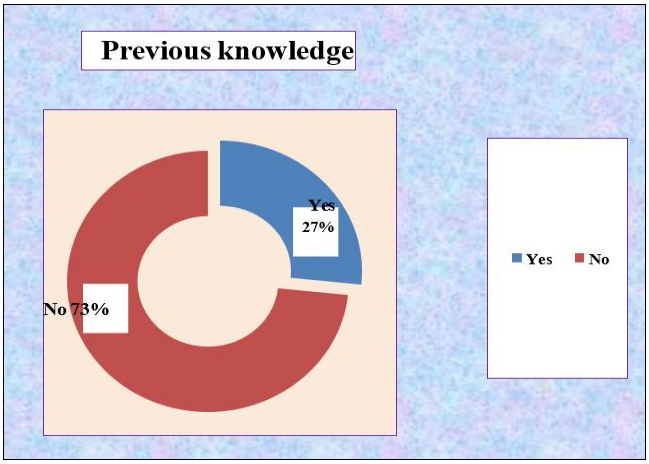

Fig 7: Distribution of adolescents in a selected higher secondary school according to previous knowledge

Result

In the study, to the question any previous knowledge about Internet gaming disorder, 26.67% of the adolescents in a selected higher secondary school answered yes and 73.33% of them answered no.

Table 9: Frequency and Percentage distribution of adolescents in a selected higher secondary school according to Source of Knowledge f=60

S. No	Variable	Groups	Frequency	Percentage
8	**Source of Knowledge**	Social Media	7	43.75
		News Paper	2	12.50
		Articles	2	12.50
		Television	5	31.25

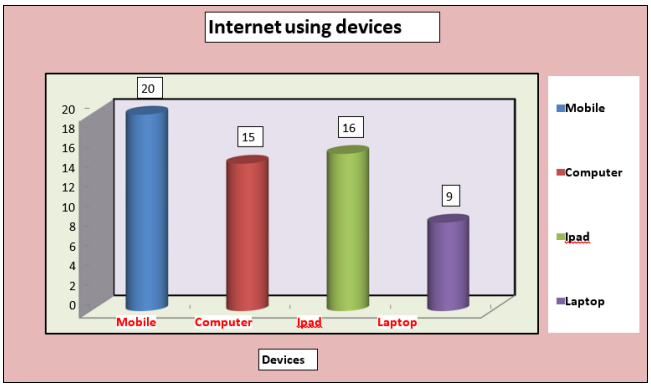

Fig 8: Distribution of adolescents in a selected higher secondary school according to Source of Knowledge

Result

In the study, to the question any previous knowledge about Internet gaming disorder, those who answered yes, out of these 43.75% of the adolescents from social media, 12.50% from newspapers, 12.50% from articles and 31.25% got the knowledge about Internet gaming disorder from the television.

Section II

Deals with analysis of data related to assessment of the knowledge regarding internet gaming disorder among adolescents in a selected higher secondary school Maharashtra in terms of frequency and percentage.

Table 10: General assessments of Knowledge PRE Test f=60

Variable	Groups	Score	Pre Test	
			Frequency	Percentage
Knowledge	Poor	0-8	39	65.00
	Average	9-16.	15	25.00
	Good	17-24	6	10.00
Knowledge	Minimum		7	
	Maximum		24	
	Average (SD)		10.03 (4.80)	
	Mean % knowledge score		41.79	
	Median		8	
	Mode		8	

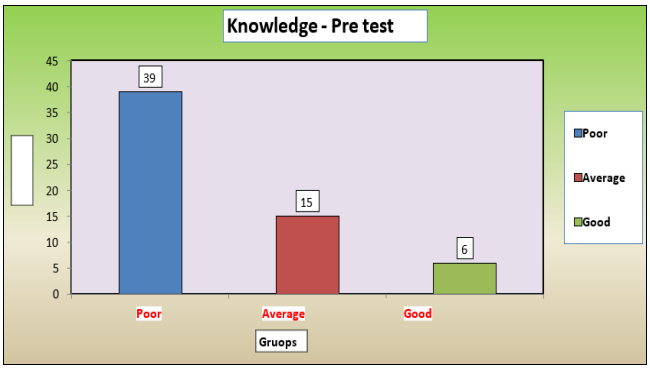

Fig 9: General assessments of Knowledge PRE Test

Result

At the time of pretest, assessment of the knowledge regarding internet gaming disorder, 65% of them adolescents had poor knowledge, 25% had average knowledge and 10% of them had good knowledge.

Average knowledge score at the time of pretest was 10.03 with standard deviation of 4.80. The minimum score of knowledge was 7 with maximum score of 24.

Table 11: General assessments of Knowledge POST Test f=60

Variable	Groups	Score	Post Test	
			Frequency	Percentage
Knowledge	Poor	0-8	1	1.67
	Average	9-16.	0	0.00
	Good	17-24	59	98.33
Knowledge	Minimum		8	
	Maximum		22	
	Average (SD)		20.16 (2.06)	
	Mean % knowledge score		84.00	
	Median		20	
	Mode		20	

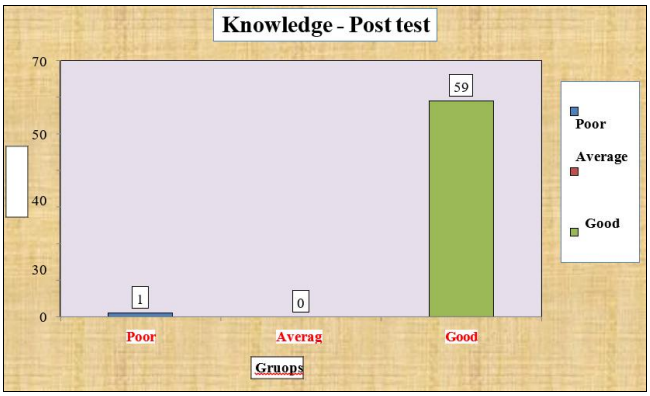

Fig 10: General assessments of Knowledge POST Test

Result

At the time of posttest, assessment of knowledge regarding internet gaming disorder among adolescents in a selected higher secondary school Maharashtra, 1.67% of them had poor knowledge, no one had average knowledge and 98.33% of them had good knowledge.

Average knowledge score at the time of posttest was 20.16 with standard deviation of 2.06. The minimum score of knowledge was 8 with maximum score of 22.

Table 12: General assessments of Knowledge- PRE& POST test (f=60)

Variable	Groups	Score	Pre Test		Post Test	
			Frequency	Percentage	Frequency	Percentage
Knowledge	Poor	0-8	39	65.00	1	1.67
	Average	9-16.	15	25.00	0	0.00
	Good	17-24	6	10.00	59	98.33
Knowledge	Minimum		7		8	
	Maximum		24		22	
	Average (SD)		10.03 (4.80)		20.16 (2.06)	
	Mean % knowledge score		41.79		84.00	
	Median		8		20	
	Mode		8		20	

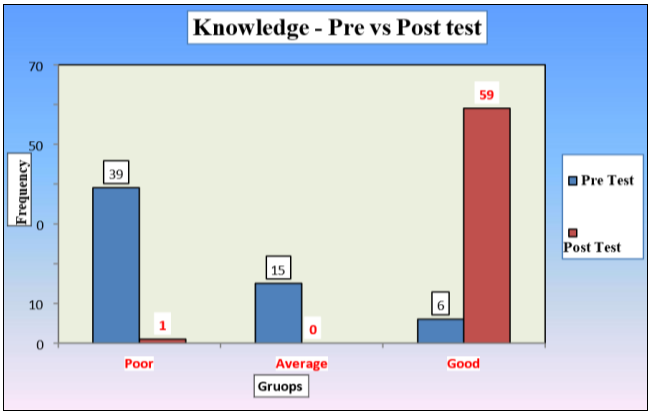

Fig 11: General assessments of Knowledge - PRE & POST test

Result

Deals with analysis of data related to assessment of the pre &posttestknowledge in terms of frequency and percentage.

For the assessment purpose the total score of knowledge was divided in to three groups like poor (0-8 score), average (9-16 score) and good (17-24 score).

Pre Test: At the time of pretest, assessment of the knowledge regarding internet gaming disorder among adolescents in a selected higher secondary school Maharashtra, 65% of them had poor knowledge, 25% had average knowledge and 10% of them had good knowledge.

Average knowledge score at the time of pretest was 10.03 with standard deviation of 4.80. The minimum score of knowledge was 7 with maximum score of 24.

Post Test:

At the time of posttest, assessment of knowledge regarding internet gaming disorder among adolescents in a selected higher secondary school Maharashtra, 1.67% of them had poor knowledge, no one had average knowledge and 98.33% of them had good knowledge.

Average knowledge score at the time of posttest was 20.16 with standard deviation of 2.06. The minimum score of knowledge was 8 with maximum score of 22.

Section III

Deals with analysis of data related to the effectiveness of structured teaching programme (STP) on knowledge regarding internet gaming disorder among adolescents in a selected higher secondary school Maharashtra.

Table 13: Significant difference between the pre and post-test Knowledge (paired t test) f=60

Group	Frequency	Mean	S.D.	t value	P value
Pre Test	60	10.03	4.80	13.1	0.000
Post Test	60	20.16	2.06		

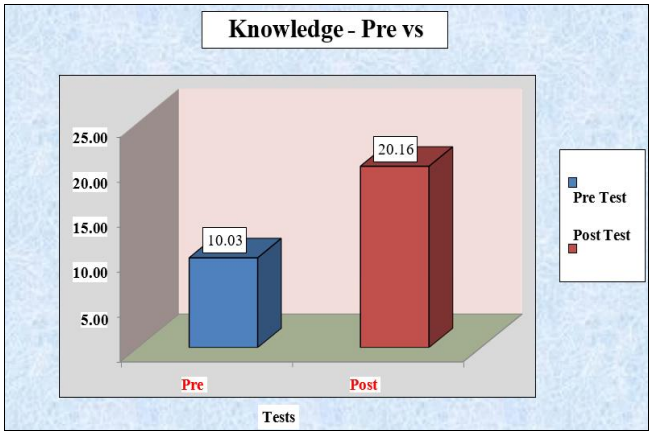

Fig 12: Significant difference between the average pre and post-test Knowledge score

Result

The significant difference beteen the pre-test and post-test means of the knowledge were done by the paired t test. The pretest average score was 10.03 with standard deviation of 4.80. The post- test average score was 20.16 with standard deviation of 2.06. The test statistics value of the paired t test was 13.1 with p value 0.00. The p value less than 0.05, hence reject the null hypothesis. That means there is significant difference in pre and post-test knowledge.

Shows that, structured teaching programme (STP) on knowledge regarding internet gaming disorder among adolescents in a selected higher secondary school Maharashtra was effective.

Section IV

Deals with analysis of data related to association between pre-test knowledge scores regarding internet gaming disorder among adolescent's with selected demographic variable.

Association of Pre-Test Knowledge Score in Relation to Demographic Variables

Table 14: Association of Knowledge with demographic variables (f=60)

Variable	Groups	Knowledge		Chi Squared	d.f.	p value	Significance
		Below Md	Above Md				
Age	15-16	18	13	1.35	1	0.24	Not Significant
	17-18	21	8				
	19-20	0	0				
	21-22	0	0				
Gender	Male	22	11	0.09	1	0.77	Not Significant
	Female	17	10				
Occupation of parents	Governmen t employee	6	6	3.42	3	0.33	Not Significant
	Private employee	25	10				
	Businessman	6	5				
	Farmer	2	0				
Types of family	Joint family	7	7	1.83	2	0.40	Not Significant
	Nuclear family	22	10				
	Extended family	10	4				
Total monthly income of family	Less than 10000	2	0	3.53	3	0.32	Not Significant
	11000 - 50000	18	11				
	60000 - 100000	12	9				
	above 1 lakh	7	1				
Internet using devices	Mobile	9	11	6.03	3	0.11	Not Significant
	Computer	10	5				
	IPad	13	3				
	Laptop	7	2				
Previous knowledge about Internet gaming disorder?	Yes	12	4	0.95	1	0.33	Not Significant
	No	27	17				
Source of knowledge	Social Media	5	2	8.38	3	0.039	**Significant**

Table 14 reveals that for the demographic variables previous knowledge about internet gaming devices and source of knowledge, the p value of the association test with knowledge was less than 0.05, hence reject the null hypothesis. Concludes that, there was significant association of the previous knowledge about internet gaming devices and source of knowledge, with pre-test knowledge score regarding the internet gaming disorder among adolescent in a selected higher secondary school Maharashtra. While the demographic variables age, gender, occupation of parents, types of family, total monthly income of family, internet using devices, the p value of the association test with knowledge was more than 0.05, hence accept the null hypothesis.

Thus, there was no significant association of these demographic variables, with knowledge regarding the internet gaming disorder among the adolescents in a selected higher secondary school Maharashtra.

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