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A Study to Evaluate the Effectiveness of Video Assisted Teaching On Knowledge Regarding Online Game Addiction Among School Children at Selected School, Kannur District

Prof. Dr. Usha V[1], Prof. Dr. J Sathya Shenbega Priya[2], Ms. Amritha. S. Nair[3], Ms. Anaya. P. Sebastian[4], Mr. Anjaneyaraj. T. K[5], Mr. Anurag. K. K[6], Mr. Anugrah. K[7], Ms. Arathy Saju[8], Ms. Ashlin Anil[9], Ms. Aswathy. T. Biju[10], Ms. Cerin Mariya Joy[11], Ms. Devika Shibu[12]

[1]Vice Principal & HOD, [2]Principal, [3,4,5,6,7,8,9,10,11,12]BSc (N), 7th semester College of Nursing, Kannur Medical College, Anjarakandy

Abstract- The present study was conducted to evaluate the effectiveness of video-assisted teaching on knowledge regarding online game addiction among school children aged 11–13 years in a selected school at Kannur district. Excessive involvement in online games has been shown to negatively impact physical, emotional, and academic performance. A quantitative research approach with a pre-experimental one group pretest post-test design was used. 30 students from classes VI and VII were selected via convenience sampling. Data were collected using a semi structured questionnaire before and after a 13minute video intervention. Pre-test results showed 43.3% inadequate and 56.67% moderate knowledge. Post-test results significantly improved, with 86.67% achieving moderate knowledge levels. The study concluded that Video Assisted Teaching is an effective educational tool for enhancing awareness.

Keywords: Effectiveness, Knowledge, Online Game Addiction, School Children, Video-Assisted Teaching.

I. INTRODUCTION

Online gaming addiction is a pressing behavioural concern characterized by a loss of control over gaming, which takes precedence over daily activities. Identified as Internet Gaming Disorder (IGD) in the DSM-5, it is associated with psychological issues such as social anxiety, impulsivity, and depression. Rapid digitalization has increased the risk among adolescents. Despite its growth, there is a notable lack of structured awareness programs in schools. Engaging strategies like Video Assisted Teaching (VAT) can effectively improve attention retention and influence behaviour.

II. NEED FOR THE STUDY

Online gaming has become an increasingly dominant form of entertainment among school children, fueled by the widespread availability of smartphones and internet access. This shift has led to a rising prevalence of Internet Gaming Disorder (IGD) among adolescents in Kerala, with significant adverse effects on their mental, emotional, and social well-being. Studies have shown that IGD prevalence in the region is around 3.5%, with higher rates among males and those with increased daily gaming time.

Excessive gaming is also linked to a 30– 70% increase in screen time during the pandemic, resulting in sleep disturbances that disrupt children's cognitive functioning and emotional regulation. Despite these risks, there is a lack of structured awareness programs in school settings to educate children on safe gaming practices. Current research also primarily focuses on older adolescents, leaving a gap in understanding and intervention for younger school children. Therefore, there is an urgent need for innovative and engaging educational initiatives, such as video-assisted teaching, to improve knowledge and foster behavioural change among this vulnerable group.

II. OBJECTIVES OF THE STUDY

1. To assess the level of knowledge regarding online game addiction before and after administration of video assisted teaching among school children in selected school at Kannur district.
2. To evaluate the effectiveness of video assisted teaching regarding online game addiction among school children in selected school at Kannur district.
3. To find out the association between the level of knowledge regarding video assisted teaching on online game addiction among school children and selected variables (age, gender, mother's education, father's education, ration card status, use of screen time, outdoor play time, sleeping hours, money spend on games, most played games).

Hypothesis

H1: The mean post-test knowledge score among school children will be significantly higher than the mean pretest knowledge score regarding video assisted teaching on online game addiction among school children in selected school at Kannur district.
H0.1: There is no difference between the mean post-test knowledge score and mean pretest knowledge score regarding video assisted teaching on online game addiction among school children in selected school at Kannur district.

H 2: There will be a significant association between the level of knowledge regarding video assisted teaching on online game addiction among school children with selected variables (age, gender, mother's education, father's education, ration card status, use of screen time, outdoor play time, sleeping hours, money spend on games, most played games).

H 0.2: There is no significant association between the level of knowledge regarding video assisted teaching on online game addiction among school children with selected variables (age, gender, mother's education, father's education, ration card status, use of screen time, outdoor play time, sleeping hours, money spend on games, most played games).

III. MATERIALS AND METHODS

The rapid digitalization of entertainment has made online gaming a dominant activity among youth, leading to a significant rise in behavioural concerns such as Internet Gaming Disorder. Research indicates that excessive gaming among school children in regions like Kerala s linked to adverse physical and emotional outcomes, including sleep disturbances and impaired academic performance.

To address this, a quantitative study was conducted using a pre-experimental one group pre-test post-test design to evaluate the effectiveness of Video-Assisted Teaching (VAT) on the knowledge of 30 school children (aged 11-13) at a selected school at Kannur district. Using a convenience sampling technique and a semi-structured questionnaire, the study assessed baseline knowledge before implementing a targeted 13-minute educational video.

The findings revealed a substantial improvement in understanding, with the mean posttest score (14.4) significantly surpassing the pre-test score (11.67), resulting in a calculated 't' value of 6.4. These results demonstrate that VAT is a highly effective tool for enhancing awareness, suggesting that interactive digital interventions are essential for mitigating the risks of online game addiction in younger populations. Analysis was done by both descriptive and inferential statistics on the basis of objectives and hypotheses of the study. The plan for data analysis is as followed under sections:

Section 1: Frequency and percentage of selected variables of the school children.

Section 2: Effectiveness of video assisted teaching on knowledge regarding online game addiction among school children.

Section 3: Association between level of knowledge and selected variables of school children.

Section 1: Frequency distribution and percentage of selected characteristics of theschool children.

(N=30)

Sl NO	SELECTED VARIABLES	FREQUENCY	%
1.	**Age**		
	11-12	19	63.3%
	12-13	11	36.7%
2.	**Gender**		
	Male	14	46.7%
	Female	16	53.3%
3.	**Mother's Education**		
	No primary education	1	3.3%
	Highschool	11	36.1%
	Higher secondary	5	16.7%
	Graduate	5	16.7%
	Others	8	26.7%
4.	**Father's Education**		
	No primary education	1	3.3%
	Highschool	13	43.3%
	Higher secondary	5	16.7%
	Graduate	2	6.7%
	Others	9	30%
5.	**Ration card status**		
	Blue	14	46.7%
	Rose	8	26.7%
	White	7	23.3%
	Yellow	1	3.3%
6.	**Use of screen time**		
	1 hr	24	80%
	2-3 hr	6	20%
	4-5 hr	0	0%
	>5 hr	0	0%
7.	**Outdoor play time**		
	0-30 min	6	20%
	30 min-1 hr	2	6.7%
	1-2 hr	5	16.7%
	>2 hr	17	56.7%
8.	**Sleeping hours**		
	6-7 hr	5	16.7%
	7-8 hr	8	26.7%
	8-9 hr	12	40%
	>9 hr	5	16.7%
9.	**Money spend on games**		
	No money	28	93.3%
	Each game 100 rupees	2	6.7%
	Each game 200 rupees	0	0%
	Each game above 200	0	0%
10.	**Most played games**		
	MMORPH	6	20%
	Casino games	0	0%
	Battle royale games	3	10%
	Other games	21	70%

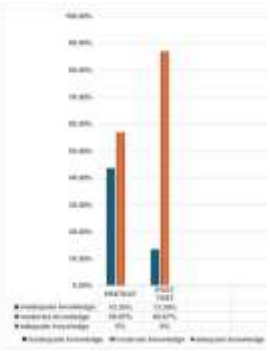
Section 2: Effectiveness of video assisted teaching on

knowledge regarding online game addiction among school children.

(N=30)

	MEAN	STANDARD DEVIATION	MEAN DIFFERENCE	CALCULATED 't' VALUE	DEGREE OF FREEDOM	't' VALUE
Pretest	11.47	1.5	2.73	6.4	29	0.05
Posttest	14.2	1.1				

The data in the table shows that mean post-test knowledge score 14.4 was higher than the mean pre - test knowledge score 11.67. The calculated 't' value 6.4 was greater than the table value (t 29 = 1.699) at p = 0.05 level of significance .



(N=30)

VARIABLES	INADEQUATE KNOWLEDGE	MODERATE KNOWLEDGE	ADEQUATE KNOWLEDGE	CALCULATED χ^2 VALUE	CRITICAL VALUE	LEVEL OF SIGNIFICANCE	INFERENCE
11-12	3	16	0	0.3	5.991	0.05	NS
Age							
Male	3	13	0	0.9	5.991	0.05	NS
Female	1	13	0				
Mother's Education							
Male	0	11	0	3.5	15.31	0.05	NS
Female	3	13	0				
Father's Education							
No primary education	0	1	0	3.5	15.51	0.05	NS
High school	3	8	0				
Higher secondar	0	5	0				
Ration card status							
Blue	4	10	0	5.3	12.59	0.05	NS
Rose	0	8	0				
White	0	7	0				
Yellow	0	1	0		12.59	0.05	NS
0-30 min	1	5	0	0.1	12.59	0.05	NS
30 min – 1 hr	0	2	0				
1-2 hr	1	4	0				
>2hr	0	0	0				
Sleeping hours							
6-7 hr	3	2	0	13.7	12.59	0.05	*
7-8 hr	0	8	0				
>9hr	0	11	0				
Most played games							
Battle royale games	0	6	0	2	12.59	0.05	NS
Others	4	17	0				

Section 3: Association between level of knowledge and Selected variables of school children.

- **Section 1:** Frequency and percentage of selected variables of the school children.
- **Section 2:** Effectiveness of video assisted teaching on knowledge regarding online game addiction among school children.
- **Section 3:** Association between level of knowledge and selected variables of school children.
- ***Section 1:** Frequency and percentage of selected variables of the school children.

This section assesses the level of knowledge regarding online game addiction before and after administration of video assisted teaching among school children in selected school at Kannur district, Kerala.

The study involved school children at selected school, Kannur district, with a majority (63.3%) aged 11–12 years and a slight female to-male ratio (53.3% vs. 46.7%). Regarding parental education, most mothers (36.1%) and fathers (43.3%) had completed high school. Economic indicators showed that 46.7% held blue ration cards. Lifestyle data revealed that 80% used screens for one hour, while 56.7% engaged in outdoor play for over two hours daily. Sleep patterns varied, with 40% sleeping 8– 9 hours.Notably, 93.3% spent no money on games, and 70% preferred playing "other" types of games over specific genres like battle royale.

Section 2: Effectiveness of video assisted teaching on knowledge regarding online game addiction among school children. *: Significance
NS: no significance

IV. RESULTS

This section evaluates the effectiveness of video assisted teaching regarding online game addiction among school children in selected school, Kannur district through a semi structured knowledge questionnaire regarding online game addiction among h school children at selected school, Kannur district. The result of study findings obtained through analysis and interpretation of data which is collected from school children and selected variables (age, gender, mother's education, father's education, ration card status, use of screen time, outdoor play time, sleeping hours, money spend on games, most played games)There is statistically significant association with selected variables such as Father's Education and sleeping hours and no significant association with selected variables such as Age, Gender, Mother's Education, Ration card status, Screen use time, Outdoor play time, Money spends on games and most played games.

V. DISCUSSION

By evaluating the effectiveness of video assisted teaching on knowledge regarding online game addiction among the school children at selected school, Kannur district helps to bridge the gap between the lack of knowledge and thereby focusing on reducing the addiction towards online games.

- To assess the level of knowledge regarding online game addiction before and after administration of video assisted teaching among school children in selected school at Kannur district.

The participant pool was primarily female (53.3%; male: 46.7%) and aged 11–12 years (63.3%; 12–13 years: 36.7%). Parental education largely fell at the high school level for both mothers (36.1%) and fathers (43.3%), followed by "others" (mothers: 26.7%, fathers: 30.0%), higher secondary (both 16.7%), graduates (mothers: 16.7%, fathers: 6.7%), and no primary education (both 3.3%). Household ration card statuses were mostly blue (46.7%), followed by rose (26.7%), white (23.3%), and yellow (3.3%). Regarding daily habits, screen time was strictly 1 hour (80.0%) or 2–3 hours (20.0%), with no participants reporting 4 or more hours. Conversely, outdoor play typically exceeded 2 hours (56.7%), followed by 0–30 minutes (20.0%), 1–2 hours (16.7%), and 30–60 minutes (6.7%). Most subjects slept 8–9 hours (40.0%) or 7–8 hours (26.7%), while the remaining 33.4% were evenly split (16.7% each) between sleeping 6–7 hours and >9 hours. Financially, 93.3% spent no money on games, 6.7%

spent ₹100 per game, and none spent ₹200 or more. Finally, gameplay preferences were dominated by "other" games (70.0%), followed by MMORPH (20.0%) and battle royale (10.0%), with no participants engaging in casino games.

- To evaluate the effectiveness of video assisted teaching regarding online game addiction among school children in selected school at Kannur district.

The majority had moderately adequate knowledge (56.67%) before video assisted teaching. (43.3%) had inadequate knowledge and none of them had adequate knowledge. After administering video assisted teaching, majority of them (86.67%) had moderately adequate knowledge and (13.33%) had inadequate knowledge.

The above findings were supported by the study done by Zhang X. et al (2018) "The absence of preventive education in school curriculums contributes to poor knowledge on online game addiction among teenagers." The tool of the study was structured questionnaire and video assisted teaching. The findings of the study revealed that the video-based teaching was more effective than traditional lectures in improving knowledge and retaining information over time.

- To find out the association between the level of knowledge regarding video assisted teaching on online game addiction among school children and selected variables (age, gender, mother's education, father's education, ration card status, use of screen time, outdoor play time, sleeping hours, money spend on games, most played games)There is statistically significant association with selected variables such as Father's Education and sleeping hours and no significant association with selected variables such as Age, Gender, Mother's Education, Ration card status, Screen use time, Outdoor play time, Money spend on games and most played games. The above findings were supported by the study done by Jayalakshmi G., Ranganathan et.al to assess "Online game addiction is becoming a common phenomenon affecting adolescents' physical and mental health." Significant correlations were found between online game addiction and less physical activity, sleep disturbance, nervousness, abnormalities in social functioning, and depressed mood. The study revealed that the children had sleep disturbances due to online game addiction.

VI. IMPLICATIONS OF THE STUDY

The findings of the study have implications on the field of nursing service, nursing education, nursing administration and nursing research. It is discussed in following headings.

Nursing Practice

In nursing practice, it is essential to identify early signs of addiction through school health programs, provide health education to students and parents, and collaborate with educators to promote healthy digital behaviour. Nurses play a key role in prevention early intervention, and creating awareness to ensure the overall wellbeing of children in this age group.

Nursing Education

In the context of nursing education, understanding online game addiction among school children aged between 11 and 13 is vital for preparing future nurses to address emerging behavioural health issues. Incorporating this topic into the nursing curriculum enhances awareness, equips students with skills to identify addictive behaviours, and promotes the development of effective Strategies for prevention and intervention. Knowledge on psychological and mental health needs empower nursing students to contribute meaningfully to child and adolescent mental health care.

Nursing Research

Online game addiction among school children aged between 11 and 13 highlights the need for continued nursing research to explore its causes, consequences, and effective interventions. Through evidence-based studies, nursing research can provide valuable insights into the psychological and behavioural patterns associated with gaming addiction. This study addresses the need for the development of targeted strategies and policies,

ultimately enhancing child psychosocial and mental health.

Nursing Administration

Nursing administrators play a crucial role in developing policies to address online game addiction among school children aged between 11 and 13. They are responsible for organizing and supervising school health programs that include mental health screening and education. Ensure the availability of trained nursing staff to identify and manage early signs of addiction. Promote collaboration between nurses, teachers, parents, and mental health professionals. Support the implementation of awareness campaigns and preventive strategies within school settings. Allocate resources for continuous training of nurses on child behavioural issues related to technology use.

VII. CONCLUSION

Online game addiction among school children aged between 11 and 13 is a growing concern that can negatively impact their academic performance, social relationships, and mental wellbeing. Early identification and proper guidance from parents, teachers, and health professionals are essential to promote healthy gaming habits and ensure balanced development during this critical stage of growth. The pre-test assessed the knowledge among school children aged between 11 and 13 years regarding Online Game Addiction and found that the school children had inadequate knowledge on Online Game Addiction. After Video Assisted Teaching on Online Game Addiction, there was a significant improvement in level of knowledge among school children. The study concluded that the results shows that school children had improved their knowledge regarding Online Game Addiction through Video Assisted Teaching.

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