

EFFECT OF VIDEO ASSISTED PLANNED TEACHING ON PRACTICE REGARDING PREVENTION OF HEALTH HAZARDS RELATED TO ONLINE ACTIVITIES AMONG STUDENTS OF SELECTED SCHOOLS IN JAIPUR

Nursing

**Pheba Anna
Maalayil**

Msc Nursing Student 2020-2022, L.T. College of Nursing, S.N.D.T. Women's University, New Marine Lines, Churchgate, Mumbai-400020

**Dr. Shobha
Gaikwad**

Assistant Professor, L.T. College of Nursing, S.N.D.T. Women's University, New Marine Lines, Churchgate, Mumbai-400020

ABSTRACT

Background: Online activities like gaming, surfing social media, etc. is now booming the market attracting many students, and also the social factors associated with them that are socializing, making new friends, chatting, and working in a team also attracts the students. Also, children are given assignments from schools which has to be done online which also makes them exposed to digital screen for a longer period of time. Many research studies which are done on online activities addiction have shown the concern of various negative consequences of increased and prolonged online activities such as poor ergonomics, lack of physical activities, lack of sunlight exposure, and poor diet contributing to calcium and Vitamin D deficiency leading to muscle cramps and strain and many more. Health education plays major role in imparting knowledge and promoting healthy practices. Hence, the researcher felt the need to study this topic and make awareness among school students regarding health hazards related to online activities and adopting healthy practices to prevent the same. **Aim:** To enhance and promote the practices regarding prevention of health hazard related to online activities among school students after video assisted planned teaching. **Objective:** To assess post-test practice scores of students between control and experimental group regarding prevention of health hazards related to online activities after video assisted planned teaching. **Material and Methods:** True experimental pre-test- post-test control group design. 100 students of the age group 13-15 years were selected from school in Jaipur and divided equally in control and experimental group. Simple random sampling was used by the researcher. Data collection was done by using video assisted planned teaching, self-reporting questionnaire and observation checklist. **Analysis:** It was observed that the comparison between control and experimental group post-test practice scores 't' (62.19) was significantly greater than the tabulated value. Therefore, the post-test practice means scores of the experimental group after administering video-assisted planned teaching is significantly greater than the post-test practice mean scores of the control group. Co-relation between knowledge and practice scores in the control group was 'r' (-0.08284) and for students of the experimental group it was (-0.13704) which was poor in co-relation. Thus, there was no correlation between knowledge and practice. Association of post-test practice scores of students with their selected demographic variables: gender was 't' (0.86) for the control group and 't' (0.29) for the experimental group. The calculated value of 't' of both the control and experimental group was less than the table value at 0.05 level of significance. Thus, there was no association between the practice of students regarding the prevention of health hazards related to online activities and their gender. Association of post-test practice scores of students with their selected demographic variables: education was 't' (0.266) for the control group and (0.130) for the experimental group was less than the table value at 0.05 level of significance. Thus, there was no association between the practice of students regarding the prevention of health hazards related to online activities and their education. Association of post-test practice scores of students with their selected demographic variables: hours spent on screen was 't' (0.66) for the control group and (0.05) for the experimental group was less than the table value at 0.05 level of significance. Thus, there was no association between the practice of students regarding the prevention of health hazards related to online activities and their hours spent in online activities. **Conclusion:** Practices scores depicted marked improvement in the experimental group students than that of control group students which proved the effectiveness of video assisted planned teaching. **Implications:** Video assisted planned teaching can be used as an effective teaching aid to promote healthy practices regarding prevention of health hazards related to online activities, can be used in community and school to spread awareness. In nursing education, it can serve as a guideline to use video assisted planned teaching as an effective method to disseminate information and impart knowledge to others. In nursing research, tools and technique can be used for further references, other researchers may use the suggestions and recommendations for conducting the study and the findings can be added to the literature.

KEYWORDS

Practices, Online games, Health Hazards

INTRODUCTION:

Covid-19 and lockdown have impacted the lives of people especially children in an unprecedented manner. Interventions to Covid-19 infections have been isolation and social distancing strategies to protect against the risk of infection. The lockdown restricted people from setting out of their homes and all transport services were also suspended. On these grounds, one of the major measures which were taken during lockdown was the closure of schools, colleges and other educational institutes. These circumstances have led children to have more online activities like online classes, online assignments and online gaming too. Due to prolonged exposure to screens, the majority of children are facing mental stress, anxiety and physical problems. While schools have moved online, sometimes the students are feeling suffocated due to increased pressure and restrictions with no outdoor activities leading to less physical activities. Social media and online gaming have now become a common part of their life and leisure activities and users often spend a considerable amount of time in them. The higher screen time along with these online activities disrupts normal sleep patterns resulting in patterns of less sleep, longer time to fall asleep and more disturbances during sleep. Someone who plays online games or engaged in any other online activities for an extended period of time is more prone to migraines because of the intense concentration required and strain on the eyes. Backaches are common symptoms of prolonged online activities because of improper posture, lack of movement which causes stiffness and soreness leading to back problems. Screen time has also been blamed for physical inactivity

which is contributing to childhood obesity. Repetitive stress injuries are common among gamers. Gaming requires repetitive motion on the hands and wrist. These motions can cause inflammation and injury. Carpal Tunnel syndrome has long been associated with computer use which is caused when the main nerve between the forearm and wrist is pressed. Overuse of a computer mouse can cause irritation and swelling, same can be observed in online game players when playing for a prolonged period. Gamer's thumb is a condition, also called de Quervain's Tenosynovitis. It is a condition in which the tendons that move our thumb become inflamed, which leads to pain and limited movement. Tennis elbow also called Lateral Epicondylitis is a painful condition in which the tendons in the elbow get overloaded, usually due to repetitive movement of the wrist and arms.

Hence it is very important as well as a need of society in today's scenario, that children who are our country's future should be made aware of health hazards which are related to prolonged exposure to digital screens and online activities and should make them aware which will help to prevent these hazards and maintain a quality life without any ill effects of online activities.

Research Question?

Is there any effect of video assisted planned teaching on improvement and promotion of practices to prevent health hazards related to online activities?

OBJECTIVES:

To assess and compare post-test practice scores of control and experimental group after video assisted planned teaching.

MATERIALS AND METHODS:

True experimental pre-test- post-test control group design. 100 students of the age group 13-15 years were selected from school in Jaipur and divided equally in control and experimental group. Simple random sampling was used by the researcher. Data collection was done by using video assisted planned teaching, self-reporting questionnaire and observation checklist. Knowledge about screen time, associated physical health hazards and healthy practices to prevent the health hazards related to online activities were assessed by self-reported structured questionnaires. Practices were observed by self-reporting questionnaires and observation checklist. Video assisted planned teaching was given only to experimental group whereas control group was not given any intervention. Video assisted planned teaching involved; lecture cum discussion using power-point presentation, video of physical exercises related to eyes, wrists and posture recorded by the researcher herself. Post-test was administered on 7th day to both the groups by structured questionnaires and observation checklist.

Participants:

Target population comprised of students studying in school of age group 13-15 years of age. Students who have any physical ailments were excluded and those who were willing to participate were included in the study.

Ethical Considerations:

The study was a part of a research project approved by the members of Ethical Committee for Research of Leelabai Thackersey College of Nursing, S.N.D.T. University. Participant's as well as parent's consent were taken prior to data collection by making them aware regarding purpose of study and steps of data collection.

Quantitative Data Analysis:

The data collected were classified, analysed, and tabulated based on the study objectives in the following sections:

Section I: Deals with demographic data and screen time data of samples of control and experimental group under study.

Section II:

Deals with analysis and interpretation of knowledge scores of students in various areas of health hazards related to online activities and its preventive measures before and after video-assisted planned teaching under following subheadings:

- Knowledge about online activities
- Knowledge of hours spent in Online activities
- Knowledge regarding health Hazards related to Online activities
- Knowledge of preventive measures of health hazards related to Online activities

This part of the structured questionnaire consisted of twenty-one items which are multiple-choice questions with a total score of twenty-one. Each question has four options out of which one was correct. Correct response was given one mark and the wrong response got zero.

SECTION III:

Deals with analysis and interpretation of practices of students among control and experimental group regarding prevention of health hazards related to online activities after video-assisted planned teaching.

Observed practices in the following area:

- Exercises related to eyes – 9 items
- Exercises related to hands and wrists- 20 items
- Exercises related to posture – 33 items

Students performed the exercise and the researcher acted as an observer who scored on the checklist. The total score of the checklist was sixty-two.

Reported practices in the following area:

- Practices related to eyes – 4 items
- Practices related to ears – 3 items
- Practices related to posture – 4 items

The researcher asked the students to self-report the practices which the

researcher could not observe personally and scored accordingly. The total score of the checklist was eleven.

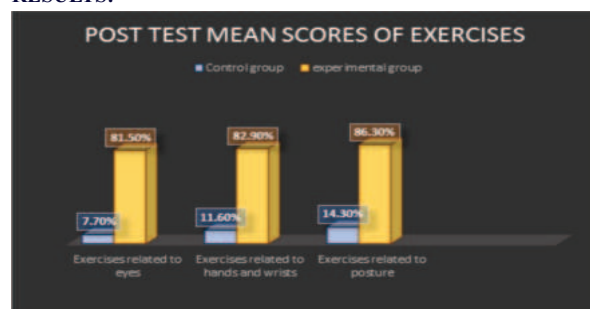
RESULTS:

Figure No: 1 Post-test Mean Scores Of Exercises After Planned Teaching

The above graph highlights the mean practice scores after video assisted planned teaching. The students in the control group scored 7.7 percent in exercises related to eyes whereas students in the experimental group scored 81.5 percent. Control group students scored 11.6 percent in exercises related to hands and wrists whereas experimental group students scored 82.9 percent which was much better than the control group scores. Control group students scored 14.3 percent in exercises related to posture whereas the score of the experimental group is 86.3 percent which was good compared to the control group.

Table I: Comparison Between Mean Practice Score Of Students From Experimental And Control Groups After Teaching

SR. NO.	POST-TEST SCORES	M	N	SD	S DD	S ED	t	Calculated value	Table value	SIGNIFICANCE
1.	CON TROL	8.76	50	2.615	3.509	0.701	62.19	2.62		Significant at 0.01 level
	EXPERIMENTAL	52.42	50	4.218						

The above table shows that the calculated 't' value is 62.19. The table value of 't' at 0.01 level of significance is 2.62, therefore the calculated value is greater than the table value at 0.01 level of significance, we can infer that the post-test practice means a score of the experimental group after administering video-assisted planned teaching is significantly greater than post-test practice means scores of the control group. Hence, it proves effectiveness of video assisted planned teaching.

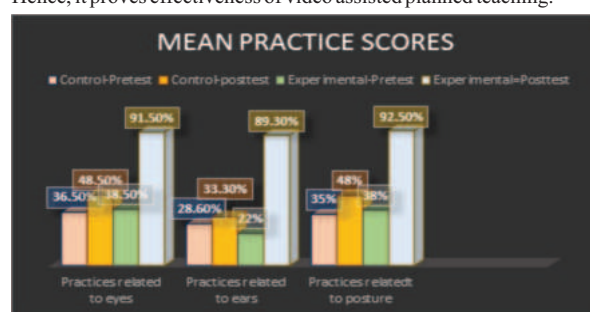


Figure No: 2 Mean Scores Of Areas Of Reported Practice Before And After Teaching

Above figure highlights the mean scores of practices of students in the experimental group and control group. Students in the control group scored 36.5 percent in the pre-test regarding practices related to eyes and in the post-test, score increased to 48.5 percent. Similarly, in the experimental group, the students scored 38.5 percent in the pre-test which improved to 91.5 percent in the post-test after video-assisted planned teaching. The control group students scored 28.6 percent in the pre-test regarding practices related to ears which increased to 33.3 percent in the post-test. In the experimental group, the student's scores increased from 22 percent to 89.3 percent after administering video-assisted planned teaching. In the pre-test regarding practices related to posture, the students of the control group scored 35 percent, and in the post-test scored 48 percent. In the experimental group, the students

scored 38 percent in the pre-test which improved to 92.5 percent in the post-test after video-assisted planned teaching. Hence, it proves effectiveness of video assisted planned teaching.

TABLE II: Co-relation Between Knowledge And Practice Scores

SR.NO.	POST-TEST	N	df	r	Significance
1	Control group		49	-0.08284	Not significant at 0.05 level
	Knowledge	50			
	Practice	50			
2.	Experimental group.		49	-0.13704	Not significant at 0.05 level
	Knowledge	50			
	Practice	50			

Table II shows the correlation between knowledge and practice scores of control group students calculated as 'r' was '-0.08284' and of experimental group students was '-0.13704' which was poor in correlation. Thus, there is no correlation between knowledge and practice of control and experimental group students.

TABLE III: Association Of Post-test Practice Scores Of Students Of With Selected Demographic Variables: Gender

SR. NO.	PRACTICE	M	N	SD	SDD	SED	T	Calculated value	Table value	SIGNIFICANCE
1.	Control group				2.62	0.75	0.86	2.01		Not significant at 0.05 level
	Males	9.03	29	2.35						
	Females	8.38	21	2.97						
2.	Experimental group				4.25	1.20	0.29	2.01		Not significant at 0.05 level
	Males	52.24	25	4.28						
	Females	52.6	25	4.23						

The above table shows that the calculated 't' value is 0.86 for the control group and 0.29 for the experimental group. The table value of 't' at 0.05 level of significance is 2.01, therefore the calculated value of 't' of both the control and experimental group is less than the table value at 0.05 level of significance. Thus, we may infer that there is no association between the practice of students regarding the prevention of health hazards related to online activities and their gender.

Table Iv: Association Of Post-test Practice Scores Of Students Of With Selected Demographic Variables: Education

SR. NO.	PRACTICE	M	N	SD	SDD	SED	t	Calculated value	Table value	SIGNIFICANCE
1.	Control group				2.64	0.74	0.266	2.01		Not significant at 0.05 level
	VIII	8.85	27	3.07						
	IX	8.65	23	2.01						
2.	Experimental group				4.26	1.27	0.130	2.01		Not significant at 0.05 level
	VIII	52.36	33	4.02						
	IX	52.52	17	4.07						

The above table shows that the calculated 't' value is 0.266 for the control group and 0.130 for the experimental group.

The table value of 't' at 0.05 level of significance is 2.01, therefore the calculated value of 't' of both the control and experimental group is less than the table value at 0.05 level of significance.

Thus, we may infer that there is no association between the practice of students regarding the prevention of health hazards related to online activities and their education.

V: Association Of Post-test Practice Scores Of Students With Selected Demographic Variables: Hours Spent In Online Activities

SR. NO.	PRACTICE	M	N	df	SD	SDD	SED	t	Calculated value	Table value	SIGNIFICANCE
1.	Control Group			44		2.59	0.848	0.66	2.01		Not significant at 0.05 level
	6-12 hours	8.51	33		2.20						
	>12 hours	9.07	13		3.40						
2.	Experimental Group			41		4.44	1.360	0.05	2.01		Not significant at 0.05 level
	6-12 hours	52.231	23		4.76						
	>12 hours	52.22	20		4.06						

The above table shows that the calculated 't' value is 0.66 for the control group and 0.05 for the experimental group. The table value of 't' at 0.05 level of significance is 2.01, therefore the calculated value of 't' of both the control and experimental group is less than the table value at 0.05 level of significance. Thus, we may infer that there is no association between the practice of students regarding the prevention of health hazards related to online activities and their hours spent in online activities.

Testing of Hypothesis:

The comparison of post-test practice scores after video assisted planned teaching showed significantly greater in experimental group students from control group students. The obtained value 't'(62.19) is greater than the table value at 0.01 level of significance, we can infer that the post-test practice means a score of the experimental group after administering video-assisted planned teaching is significantly greater than post-test practice means scores of the control group.

DISCUSSION:

In the present study it was shown that there was improvement in practice scores after video assisted planned teaching. In this study, it was also shown that there is no co-relation between knowledge and practice. It also showed that there is no association of practice scores with selected demographic variable.

According to the study done by Saranya L, Vijayasamundeesvari and Shanmugapiya, (2021) with the aim to assess the effectiveness of video assisted planned teaching on knowledge regarding weaning among mothers. Self-structured knowledge questionnaire was used to collect data in pre-test and post-test of 120 participants. Result of pre-test shows, three percent of mothers had inadequate knowledge, 93 percent had moderate knowledge and six percent had adequate knowledge. After that, video assisted planned teaching of 30 minutes was given to them. Post-test results showed 14 percent had moderate knowledge and 86 percent had adequate knowledge. Hence, it proved that video assisted planned teaching was effective in improving knowledge of mothers regarding weaning.

According to experimental study done by Saldon N. and Singarayan V. (2020) with the aim to compare the knowledge and practice among mothers regarding the post discharge care of high-risk babies between experimental and control group. 40 mothers were included in the study and divided equally in control and experimental group. An interview was done to collect data followed by video assisted teaching to experimental group. The findings revealed that mean practice score was 8.35 which was higher than that of control group's practice score 6.10. Hence, it depicts that video assisted teaching was effective method to impart knowledge and practice

CONCLUSION:

The result of the study clearly shows that video assisted planned teaching on prevention of health hazards related to online activities, had a positive effect on knowledge and practice of experimental group students than that from control group students to whom no video assisted planned teaching was given. Thus, it shows the effectiveness of video assisted planned teaching.

REFERENCES:

- Basvanthappa B.T. (2001) *Nursing Research*, New Delhi, Jaypee Brothers Pvt. Ltd.
- Negative health effects of excessive video gaming. (n.d.). Retrieved July 17, 2021, from

- <https://www.orthobethesda.com/blog/negative-health-effects-of-excessive-video-gaming/>
3. Polit and Hungler (1999) *Nursing Research and Methods*, Philadelphia, Lippincott Company.
 4. Ruzic-Baf, M., Strnak, H., & Debeljuh, A. (2016). Online video games and young people. *International Journal of Research in Education and Science*, 2(1), 94-103. Doi:10.21890/ijres.19610.
 5. Sharma S.K. 2018. *Nursing Research and Statistics*. Elsevier, New Delhi: Jaypee brothers.
 6. Saranya, L., Vijayasamundeeswari, P., & Shanmugapriya, A. (2021). Video assisted teaching on knowledge regarding weaning among mothers - pre-experimental non randomized one group pretest and posttest study. *Annals of the Romanian Society for Cell Biology*, 25(4), 9492-9496. Retrieved from <https://www.proquest.com/scholarly-journals/video-assisted-teaching-on-knowledge-regarding/docview/2598118601/se-2?accountid=28682>
 7. Saldon, N., & Singarayan, V. (2020). A study to assess the effectiveness of video assisted teaching on knowledge and reported practice among mothers regarding the post discharge care of high risk babies of the selected hospital, bangalore. *Asian Journal of Nursing Education and Research*, 10(2), 210-216. doi: <http://dx.doi.org/10.5958/2349-2996.2020.00045.2>
 8. Sri Swami Rama, "Joints and Glands Exercises", published by The Himalayan International Institute of Yoga Science and Philosophy of the U.S.A.
 9. What is Research Methodology? (n.d.) Retrieved January 5, 2022, from <https://paperpile.com/g/what-is-research-methodology/>