

An Experimental Study to Assess the Effectiveness of a Structured Teaching Program on Binge-Watching Phenomenon in Terms of Knowledge of Nursing Students in Selected College of Nursing, Delhi.

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Abstract

A Study was conducted to assess the effectiveness of a Structured teaching program on Binge-Watching Phenomenon in terms of knowledge of nursing students in a selected college of nursing, Delhi.

Objectives: The objectives of the study were: 1) To assess the level of knowledge of Binge-Watching Phenomenon among nursing students. 2) To develop and administer a structured teaching program among nursing students to increase their knowledge about binge-watching phenomenon. 3) To determine the association between knowledge of nursing students on Binge-Watching Phenomenon with selected socio-demographic variables. 4) To evaluate the effectiveness of the structured teaching program in terms of knowledge of nursing students.

Methodology: A quantitative research approach was adopted for the study using one group pre-test post-test design. 140 samples were selected using the Quota sampling technique. A structured knowledge questionnaire was developed and administered among nursing students. The reliability of the structured knowledge questionnaire was calculated using Cronbach's alpha method. The value of 'r' was found to be 0.8.

Results: Data analyzed from the structured knowledge questionnaire among 140 samples showed that 95.7% were having good knowledge, 4.2% were having average knowledge and none of the sample had poor knowledge regarding Binge-Watching Phenomenon at 0.05 level of Significance. There is significant association between Age, Course of Instruction, Religion, Mother's Education, Mother's Occupation, Father's Occupation, Family income, previous knowledge of Nursing students and their pretest score.

Conclusion: The study concluded that the structured teaching programme was effective in improving the knowledge of students.

Keywords: Binge watching phenomenon, structured teaching programme, Pre-test post-test design, knowledge assessment, nursing students.

PROBLEM STATEMENT

An Experimental Study to Assess the Effectiveness of a Structured Teaching Program on Binge-Watching Phenomenon in Terms of Knowledge of Nursing Students in Selected College of Nursing, Delhi.

OBJECTIVES

1. To assess the level of knowledge on Binge-Watching phenomenon among nursing students.
2. To develop and administer structured teaching program to nursing students to increase the knowledge about Binge-Watching phenomenon.
3. To determine the association between knowledge on Binge-Watching phenomenon and selected socio-demographic variables.
4. To evaluate the effectiveness of the structured teaching program in terms of Knowledge of nursing students.

Background of the study

Binge-Watching may be a relaxing and enjoyable activity as well as an obsession and a coping mechanism. People have a variety of reasons for Binge-Watching, including those that are social and cognitive in nature, ones that involve being transported into the story or a desire to pass the time, as well as reasons to get away from problems in their daily lives, ways to control their negative emotions, and ways to feel immediate gratification. Excessive Binge-Watching, notably, can lead to signs of addiction, including loss of control, detrimental consequences on one's physical and social well being, feelings of guilt, and abandonment of obligations¹. Watch several shows in a row can feel more relaxed and stress levels will be lower. Binge-Watching is a risk factor for stress, loneliness, insomnia, despair, and anxiety². The method of continuously watching three or more episodes of the same show in a single session is known as Binge-Watching. It's still unclear where Binge-Watching falls on the spectrum from recreational activity to harmful behavior, despite some detrimental effects on mental health. It was shown that Binge-Watching was linked to worse mental health, there was a clear negative linear trend from Binge-Watching in recreational activity. Binge-Watching may have a maladaptive behavior orientation that could be identified as a behavioral addiction in certain mental health problem.

HYPOTHESES

RESEARCH HYPOTHESES

H1-The post-test knowledge score of nursing students regarding Binge-Watching phenomenon will be significantly higher than the pretest knowledge score as measured by structured knowledge questionnaire at 0.05 level of significance.

H2-There will be significant association between the pretest knowledge score of nursing students regarding Binge-Watching phenomenon and selected demographic variable as measured by demographic tools 0.05level of significance.

NULL HYPOTHESES

H01-There will be no difference between the pre-test knowledge score and post knowledge score regarding Binge-Watching phenomenon among the nursing students as measured by structured knowledge questionnaire at 0.05level of significance.

H02- There will be no association between the pre-test knowledge score of nursing students regarding Binge-Watching phenomenon and selected demographic variables as measured by demographic tool at 0.05level of significance.

STUFFLEBEAM'S CIPP MODEL

(CONTEXT, INPUT, PROCESS AND PRODUCTMODEL)

It was used in the present study to assess the effectiveness of structured teaching programme in terms of knowledge of the nursing student regarding Binge-Watching. The CIPP Model is a simple system's model applied to programme evaluation.

Context Evaluation - Context evaluation facilitates the assessment of opportunities and needs within a particular setting or context. In study, the improvement in the understanding of the Binge-Watching phenomenon among nursing students is needed. The importance and effectiveness of developing and evaluating a structured teaching program is identified.

Input Evaluation - Comprises developing tools that assess students understanding of Binge-Watching. Self-structured knowledge questionnaire was prepared and a Structured teaching program was developed on the Binge- watching Phenomenon. With the goal to improve the understanding of Binge- watching among nursing Students.

Process Evaluation-It entails identifying designs, limitations, and documenting activities and events, offering decision-makers insights into program implementation. In the current study, this involves:

- Assessing knowledge through a self-structured knowledge questionnaire.
- Administering the structured teaching program.

Product Evaluation- The assessment process known as "product evaluation" is used to assess the outcomes of the program's planned execution. The final outcome is the enhancement of knowledge. The level of knowledge regarding Binge-Watching is elevated after the structured teaching program. The post-test result is improved compared to the pre-test result. The enhancement of knowledge of nursing students regarding Binge-Watching phenomenon is achieved after the administration of Structured teaching program.

Review of literature

Zainab Ali Moradil⁴ conducted a systematic study on binge watching and mental health problems in 2022 at Yale University. The present study aimed to investigate the association between binge watching and five mental health concerns including depression, loneliness, sleep, anxiety and stress. The New Castle-Ottawa Scale was used to assess the methodological quality. A meta-analysis was performed on Fisher's Z values as effect sizes, using a random effect model. It was found that binge watching was significantly associated with the five types of mental health concerns with the most robust correlations found with stress (0.32) and anxiety (0.25). The associations between binge watching and mental health concerns were significant and positive.

Yen-Jung Chang⁵ conducted a qualitative study exploring experiences of binge watching and perceived addictiveness among binge watchers in 2022. This qualitative behavior study aimed to explore experiences and perceptions of binge-watching behavior. We recruited 25 self-identified binge watchers in Taiwan and conducted seven focus-group interviews with them in 2019 and 2020. Before their interview, the participants were asked to complete a brief questionnaire to collect information on their sociodemographic characteristics and binge-watching frequency. It was found that the participants define binge watching behavior as consecutively watching episodes shows with continuous content, rather than based on the time spent watching or the number of episode watch. Notably, while most participants considered binge watching to be an addictive behavior, they denied that they themselves were addicted.

Anahays H Aghababian⁶ conducted an associative study on binge watching during Covid-19: association with stress and body weight in 2021. The research investigated the relationship between COVID related stress and binge-watching behavior and potential variation in this relationship by body weight. Adults (n=466) completed a cross-sectional online survey assessing binge watching behavior during and before the pandemic, COVID related stress, and body weight. Participants reported an increase in binge watching frequency before to during the pandemic ($F_{1,401}=99.970$, $p<0.001$), with rates of high binge watching (“3-4 times per week” to “3 or more times per day”) increasing from 14.6% to 33.0% the increase in binge watching frequency was greatest in individuals with obesity and high stress ($F_{4,401}=4.098$, $P=0.003$). Participants reporting high stress reported higher frequency of eating while binge watching, as well as higher level or negative emotional triggers, consequences to binge watching, and lack of control over binge watching (all $p<0.001$)^s.

Jolanta Strosta⁸ conducted a study in 2021. The study examined the predictable value of anxiety depressive syndrome in explaining the symptoms of problematic binge watching and the tendency to adopt a specific motivation to watch series. Research group consisted of 645 Polish young adults. The State-Trait Anxiety Inventory, Depression Measurement Questionnaire, Viewing Motivation Scale, and Questionnaire of Excessive binge watching were used in the study. The result of the analysis showed that anxiety depressive syndrome and motivation to watch TV series were the significant factors in the manifestation of all symptoms of problematic binge watching.

Research Methodology

Research approach - Quantitative research approach

Research design – One group pre-test post-test design

Research setting –a selected College of Nursing, Delhi

Sampling technique - Quota sampling technique

Sample size – 140

Inclusion criteria – The study sample included nursing students pursuing General nursing & midwifery, B.Sc. (H) Nursing and Post Basic B.Sc. nursing.

Exclusion criteria – Students who are not available at the time of data collection and not willing to participate.

Data collection tool – The data collection tool consisted of two sections;

Section 1: Socio demographic data questionnaire

Section 2: Structured knowledge questionnaire on binge watching

Table 1.1: SYMBOLIC REPRESENTATION OF RESEARCH DESIGN

Study	Day-1		Day-7
Group	O1	X	O2
	O1: Pre-test	X-Structured Teaching Programme	O2: Post test

Analysis and interpretation

SECTION I: - Frequency & Percentage distribution of Socio-demographic characteristics of Nursing students.

SECTION II: - Comparison of frequency & percentage distribution of pre-test and post-test knowledge scores regarding Binge-watching phenomenon among Nursing students.

SECTION III: - Comparison of pre-test & post-test test knowledge scores of Nursing students regarding Binge-watching phenomenon by computing the mean, mean difference, standard deviation and 'Z' value.

SECTION IV: - Computing chi-square test to determine the association between the pre-test knowledge scores of Nursing students with Binge-watching Phenomenon in selected College of Nursing, Delhi.

SECTION I

Table 2.1(a) Frequency and percentage distribution of socio-demographic characteristics of Nursing students
N=140

Socio-Demographic variables	Frequency	Percentage
1. Age		
a. 18 - 19	56	40%
b. 20 - 21	67	47.8%
c. 22 - 23	17	12.14%
d. 24 or above	0	0%
2. Course of instruction		
a. GNM	81	57.8%
b. B.Sc (Hons) Nursing	57	40.7%
c. Post Basic Nursing	02	1.4%
3. Year of instruction		
a. First year	70	50%
b. Second year	40	28.5%
c. Third year	30	21.4%
4. Religion		
a. Hindu	49	35%
b. Muslim	19	13.5%
c. Christian	65	46.4%
d. Other	07	5%
5. Mother's Education		
a. Illiterate	14	10%
b. Matric	21	15%
c. 10+2	31	22.1%
d. Graduate/PG/Above	74	52.8%

6. Father's Education		
a. Illiterate	09	6.4%
b. Matric	20	14.2%
c. 10+2	36	25.7%
d. Graduate/PG/Above	75	53.5%
7. Area of Residence		
a. Urban	120	85.7%
b. Rural	20	14.2%
8. Mother's Occupation		
a. Housewife	14	10%
b. Service	21	15%
c. Self employed	31	22.1%
d. Any other	74	52.8%

Table 2.2(b) Frequency and percentage distribution of socio-demographic characteristics of Nursing students
N=140

Socio-Demographic variables	Frequency	Percentage
9. Father's Occupation		
a. Unemployed	03	2.1%
b. Service	78	55.7%
c. Self employed	41	29.2%
d. Any other	18	12.8%
10. Family income		
a. Rs. 123,322 or above	29	20.7%
b. Rs. 61,663 – 123,321	18	12.8%
c. Rs. 46,129 – 61,662	31	22.1%
d. Rs. 30,831 – 46,128	15	10.7%
e. Rs. 18,497 – 30,830	24	17.7%
f. Rs. 6,175 – 18,496	17	12.1%
g. Rs. 6,174 – or less	05	3.5%
11. Type of family		
a. Nuclear	106	75.7%
b. Joint	34	24.3%
c. Extended	0	0
12. Preferred OTT Platform		
a. Netflix	69	49.3%
b. Hotstar	11	7.9%
c. Amazon Prime	11	7.9%
d. Any Other	49	35%

13. Preferred Internet service provider		
a. Wifi	56	40%
b. Mobile internet	84	60%
c. Any other	0	0
14. Previous information about Binge-Watching		
a. Yes	85	60.7%
b. No	55	39.2%
15. If yes, then source of information		
a. Educational programme	7	8.23%
b. Mass media	23	27.05%
c. Social media	53	62.3%
d. Any other	2	2.35%

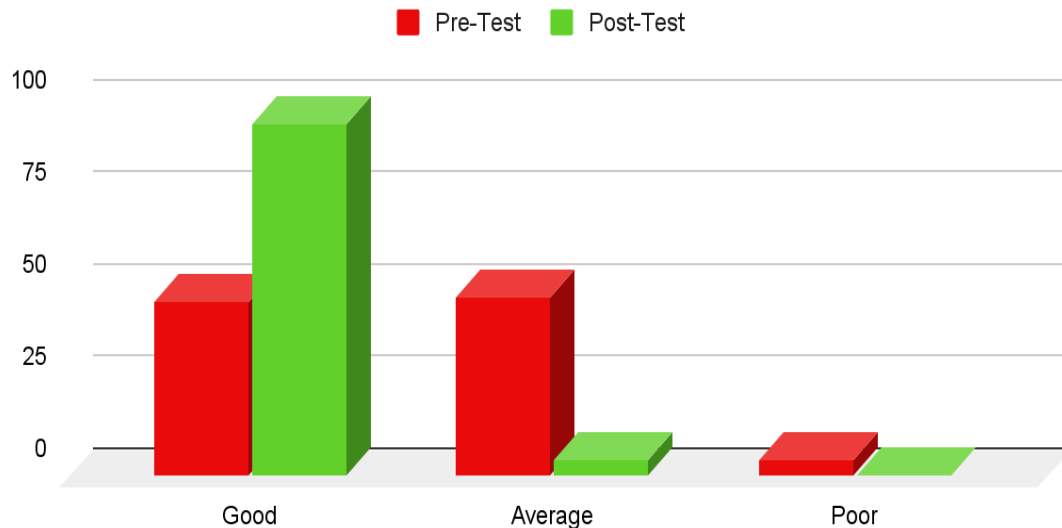
SECTION II

Comparison of frequency & percentage distribution of pre-test and post-test knowledge scores regarding Binge-watching phenomenon among Nursing students.

Table 3 : Comparison of Frequency and Percentage Distribution of Pretest and Post Test Knowledge Scores Regarding Binge-Watching Phenomenon among Nursing students.
N=140

Level of Knowledge	Range	Pre-Test		Post-Test	
		Frequency	Percentage	Frequency	Percentage
Good knowledge	18-25	66	47.14%	134	95.7%
Average knowledge	9-17	68	48.57%	6	4.2%
Poor knowledge	0-8	6	4.28%	0	0

Percentage Distribution of the Pretest and Post test Knowledge scores of the Nursing Students.



Percentage Distribution of the Pretest and Post test Knowledge scores of the Nursing Students.

Figure 1: Bar graph showing Percentage Distribution of the Pretest and Post test Knowledge scores of the Nursing Students

SECTION III

Comparison of pre-test & post-test knowledge scores of Nursing students regarding Binge-watching phenomenon.

Table 4: Mean, Mean Difference, Standard Deviation and 'z' value of Knowledge Scores of Nursing Students

N=140

Group	Score Range	Mean	Mean Difference	Median	Standard Deviation	Z Value
PRE-TEST	4-24	61.72	40.53	17	4.47	10.66*
POST-TEST	13-25	21.19		21.5	2.15	

*The calculated Z-score is greater than the critical value at 0.05 level of significance. Hence, the null hypothesis(H01) is rejected and the research hypothesis (H1) is accepted.

SECTION IV

Computing chi-square test to determine the association between the pre-test knowledge scores of Nursing students with Binge-watching Phenomenon in selected College of Nursing, Delhi

Table 4.1 : Chi-Square Test Showing Association of Pre-test Knowledge Scores of Nursing Students regarding Binge-Watching Phenomenon and Socio Demographic Variables

N=140										
S.no	Selected variables	Good knowledge		Average knowledge		Poor knowledge		Chi square value	d f	Table Value
		f	%	f	%	f	%			
	Age									
	18-19	21	15%	32	22.85%	3	2.14%			
1.	20-21	46	32.85%	18	12.85%	3	2.14%	14.83*	6	12.59
	22-23	11	7.85%	6	4.28%	0	0%			
	23 or above	0	0%	0	0%	0	0%			
2.	Course of instruction									
	GNM	2	15.71%	5	37.85%	6	4.28%	46.37*	4	9.49
	BSc Hons	2	%	1	7.85%	0	0%			
	Nursing	4	32.85%	1	1.42%	0	0%			
	Post Basic	60	0%	2						
3.	Year of Instruction									
	1st Year	27	19.28%	39	27.85%	41	2.85%	9.15NS	6	12.59
	2nd Year	2	14.28%	1	13.57%	1	0.71%			
	3rd Year	0	%	9	%		%			
		21	15%	8	5.71%		0.71%			
	Religion									
	Hindu	18	12.85%	26	18.57%	5	3.57%			
4.	Muslim	9	6.42%	3	2.14%	7	5%	35.92*	6	12.59
	Christian	47	33.57%	18	12.85%	0	0%			
	Other	4	2.85%	3	2.14%	0	0%			
	Mother's Education									
5.	Illiterate	3	2.14%	8	5.71%	3	2.14%			
	Matric	7	5%	13	9.28%	1	0.71%	18*	6	12.59

	10+2	1 3	9.28%	1 7	12.14%	1	0.71%			
	Graduate	4 5	32.14 %	2 8	20%	1	0.71%			

Table 4.2 : Chi-Square Test Showing Association of Pre-test Knowledge Scores of Nursing Students regarding Binge-Watching Phenomenon and Socio-Demographic Variables
N=140

S. no.	Selected variables	Good knowledge		Average knowledge		Poor knowledge		Chi square value	df	Table Value
		f	%	f	%	f	%			
7.	Area of Residence									
	Urban	58	41.42%	58	41.42%	4	2.85%	1.42	2	5.99
	Rural	10	7.14%	8	5.71%	2	1.42%	NS		
	Mother's Occupation									
8.	Housewife	25	17.85%	45	32.14%	6	4.28%			
	Service	38	27.14%	10	7.14%	0	0%	34.7*	6	12.59
	Self Employed	2	1.42%	7	5%	0	0%			
	Any Other	3	2.14%	4	2.85%	0	0%			
	Father's Occupation									
9.	Unemployed	2	1.42%	1	0.71%	0	0%			
	Service	44	31.42%	34	24.28%	0	0%	16.90	6	12.59
	Self Employed	14	10%	24	17.14%	3	2.14%	6*		
	Any Other	8	5.71%	7	5%	3	2.14%			
	Family Income									
	Rs.123,322 or Above	10	7.14%	19	13.57%	0	0%			
	Rs.61,663-123,321	11	7.85%	7	7%	0	0%			
	Rs.46,129-61,662	21	15%	10	5%	0	0%			
	Rs.30,831-46,128	10	7.14%	4	7.14%	1	0.71%			
10.	Rs.18,497-30,830	12	8.57%	10	%	2	1.42%	623.79*	14	23.69
	Rs.6,175-18,496	11	7.85%	6	2.85%	1	0.71%			
	Rs.6,174 Or Less	2	1.42%	1	%	2	1.42%			
					4.17%					
					4.28%					

					0.71 %					
1	Type of Family									
1.	Nuclear	62	44.28%	38	27.1	6	4.28%			
	Joint	15	10.71%	19	4%	0	0%	3.63	4	9.49
	Extended	0	0%	0	13.57%	0	0%	NS		
	Preferred OTT									
	Platform									
1	Netflix	32	22.85%	36	25.7	1	0.71%	4.58	6	12.59
2.	Hotstar	3	2.14%	7	1% 5%	1	0.71%	NS		
	Amazon	8	5.71%	3	2.14 %	0	0%			
	Any Other	25	17.85%	20	14.28%	4	2.85%			
1	Preferred Internet Service Provider									
3.	Wifi	33	23.57%	22	15.7	1	0.71%	0.60	4	9.49
	Mobile	46	32.85%	33	1%	5	3.57%	5N		
	Internet Any Other	0	0%	0	23.57% 0%	0	0%			
14	If Yes, Then Source of Information							19.09 *	4	9.49
	Educational Programme	1	0.71%	6	4.28%	0	0%			
	Mass Media	14	10%	8	5.71%	1	0.71%			
	Social Media	35	25%	18	12.85%	0	0%			
	Any Other	1	0.71%	1	0.71%	0	0%			

The data presented in the above-mentioned table depicts:

There is significant association between Age, Course of Instruction, Religion, Mother's Education, Mother's Occupation, Father's Occupation, Family income, previous knowledge of Nursing students and their pretest score.

But there is no significant association between year of Instruction, Father's Education, Area of Residence, Type of Family, preferred OTT platform, preferred Internet Service Provider of Nursing students and their pretest score.

Discussion

The present study findings were consistent with the study findings of Jia Ji Sun and Alexander Ort:-

- **Jia-Ji Sun**, conducted associative study in 2018 among adults in Taiwan. A cross - sectional online survey was conducted in October 2018, in which data from 1488 participants were collected using the self-administered questionnaire. It was found that among the surveyed participants, the mean age was 28.3, and the most participants were women who had completed under graduate education. Multiple regression analysis demonstrative that, after adjustments for socio demographic characteristics and self- reported health statuses, the score on the problematic Binge-Watching scale was positively associative with the scores on the depression, social interaction anxiety and loneliness scales ($P < 0.001$ for each model)¹⁹.
- **Alexander Ort**, conducted a study in 2020 to show effects of motives for TV series use on the relationship between excessive media consumption and problematic view in habits. This study investigates the circumstances under which Binge-Watching can become a problematic behavior. Applying a user-centered perspective, it demonstrates how different motivations to engage in high dosage TV series consumption influence the occurrence of problematic view in habits. A quantitative online survey of N=415 media users with access to at least one streaming service was conducted. The questionnaire assessed current viewing habits, motivations, to watch series, and indicators of problematic viewing habits. The results suggest that frequency of use, motives to engage in high dosage viewing sessions, as well as the combine effect of these 2 factors helps to explain problematic viewing behavior.

Implications of the study

Nursing Research

- There is a necessity for nursing research in order to raise awareness and knowledge about Binge-Watching Phenomenon.
- Further research should be done on Binge-Watching Phenomenon to determine the prevalence and to develop tools.

Nursing Practice

- Counselling and support services can be given to patients, helping them address any anxiety, depression, or sleep disturbances.
- Health education can be given to the patients to increase their knowledge about Binge-Watching Phenomenon.

Nursing Education

- Education plays an important role in the modification of behavior and practice among the nurses as well as nursing students.
- Curriculum enhancement and incorporation of courses which focuses on health impact of behavior like Binge-Watching required to be added.
- Public health campaigns can be organized to raise awareness about the health impact of Binge-watching Phenomenon.

Nursing Administration

- The administration should develop new tools to assess the prevalence of Binge-watching Phenomenon and provide a research friendly atmosphere.
- The nursing administrators should be able to motivate and initiate the health personnel in organizing various educational programs and improve their skills and knowledge.

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