



Binge-Watching Behavior and the Strategies Adopted to Overcome This among the Undergraduate Students

Sonia B. Dsouza¹ Sonal Aranha¹ Sushmita Chandekar¹ Teena G. V. M.¹ Teena George¹
Jubee Joseph¹

¹Department of Medical Surgical Nursing, Father Muller College of Nursing, Mangaluru, Karnataka, India

Address for correspondence Jubee Joseph, MSc, Department of Medical Surgical Nursing, Father Muller College of Nursing, Mangaluru 575002, Karnataka, India (e-mail: jubeejoseph@fathermuller.in).

J Health Allied Sci^{NU}

Abstract

Introduction Binge-watching is a popular activity among people of all ages. It involves watching a television series or movies for a longer duration. The activity pleases the viewers as it stimulates the “reward center” or “pleasure pathway” of the brain, which releases certain chemicals. However, excessive binge-watching can lead to internet addiction disorders, which is a growing concern among young people.

Objectives To address this concern, a study was conducted to identify binge-watching behavior and ways to overcome it among undergraduates in professional colleges.

Methodology The study involved 227 participants who were selected through a proportionate stratified simple random sampling technique. A descriptive survey design was adopted to collect data, and the participants were assessed using the “assessing binge-watching behavior—Binge-Watching Engagement and Symptoms Questionnaire” and a self-structured rating scale.

Results The results indicated that the majority of participants (78.9%) were engaged in binge-watching behavior. The highest percentage of binge-watching behavior was noted in the desire category (60.0%), and the lowest percentage was in positive emotions (44.0%). The mean percentages of dependency (57.7%) and loss of control (59%) were almost similar to the mean percentages of desire (60%) and engagement (59.2%). These results reflect the negative effects of binge-watching behavior. Moreover, the study revealed that 51.5% of binge-watchers were in the age group of 20 to 21 years, and 85% of them were female. This finding highlights the need to educate young people, particularly women, about the negative effects of binge-watching behavior.

Conclusion In conclusion, the study emphasizes the need to address the growing trend of binge-watching behavior among young people. The study recommends various strategies to overcome this behavior, such as limiting screen time, engaging in physical activities, and cultivating hobbies and interests.

Keywords

- ▶ Netflix addiction
- ▶ binge-watching strategies
- ▶ binge-watching behavior

DOI <https://doi.org/10.1055/s-0044-1789254>.
ISSN 2582-4287.

© 2024. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution License, permitting unrestricted use, distribution, and reproduction so long as the original work is properly cited. (<https://creativecommons.org/licenses/by/4.0/>)

Thieme Medical and Scientific Publishers Pvt. Ltd., A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

Key Message

Binge-watching is the instant pleasure-seeking behavior of today's world.

Introduction

Binge-watching, which is the practice of watching multiple episodes of a show or series in one sitting, has become increasingly popular among young people. It activates the release of dopamine and other neurochemicals in the brain leading to addiction, and it also causes neurological, psychological, and social problems. Although many people engage in binge-watching to relieve boredom or stress, it can cause serious health issues.¹

The popularity of web streaming services such as Netflix, Prime Video, and Hotstar has grown in recent years, mainly due to the increased availability of high-speed internet on mobile devices.¹ According to a poll conducted by the *New York Morning Journal*, 60% of adults who watch shows regularly reported binge-watching at least once a week, with 15% binge-watching daily and 28% several times a week. Binge television (TV) watching has become a new era of watching TV behavior among young adults, with the number of binge-watchers growing from 21.5 million in 2011 to 192.9 million in 2020.² Young people between the ages of 13 and 29 years are more likely to engage in binge-watching, with 60% of frequent binge-watchers in that age group. About 69% of respondents between the ages of 18 and 29 years admitted to binge-watching movies or TV shows in one sitting. Even adults between the ages of 30 and 44 years engage in binge-watching, with 70% of them watching movies or TV shows more frequently.³

Binge-watching has become a popular way for young people to consume media content, with many unable to engage in appointment viewing due to their busy lifestyles. Binge-watching is watching multiple episodes of a show in succession, regardless of the time spent or the number of episodes watched. Although they believed it could impact their daily routine, they reported almost no negative effects on their health.⁴ The culture of discussion surrounding binge-watching encourages interpersonal communication among fellow binge-watchers, thereby having a direct social impact.⁵ Ease of access to TV content, social interaction, and the desire to escape reality all motivate college students to spend more time watching TV shows in one sitting, also known as binge-watching.⁶ Binge-watching was a common stress-relieving activity during the coronavirus disease 2019 pandemic, with females binge-watching more than males.⁷ According to the review of the literature, students who watched more online series reported spending less time than planned on physical activities. The study found no negative impact of increased watching time on either the students' learning behavior or their grades.⁸

However, the act of binge-watching has been shown to have negative consequences on one's academic performance and ability to focus on studies. Students have reported that binge-watching has become a barrier to their academic

success, resulting in declining grades, absenteeism from school and work, and physical and psychological issues such as exhaustion, loss of appetite, sleep deprivation, loneliness, depression, and mental fatigue.^{9,10} Binge-watching can become an addictive behavior similar to internet or video game addiction, or problematic social media use. This behavior is highly engaging and provides instant gratification, which may lead to a loss of self-control and spending more time watching TV series than intended.¹¹ A systematic review of the phenomenon of binge-watching indicates an increasing trend of this behavior and found that many respondents self-reported binge-watching regularly. The review also mentioned the correlation between binge-watching and loneliness, depression, and deficient self-regulation.^{12,13}

Moreover, high TV use has been linked to an increased risk of cardiac diseases and low cognitive function later in life. So, it is important to be mindful of how much time we spend binge-watching and to prioritize our health.¹⁴ Additionally, developing countries showed a stronger association between binge-watching and mental health problems than developed countries. Therefore, it is crucial to consider and test programs and interventions aimed at reducing binge-watching to improve mental health.¹⁵

However, there is no clear evidence explaining the effects of binge-watching on young people. Some studies focus on the psychological impact, while others disagree. Therefore, the researcher wants to identify binge-watching behavior in undergraduate students to understand it better. Additionally, the researcher is interested in learning about the self-coping strategies adopted by the students to control this activity, as there is little information available on this topic. The study aims to assess the binge-watching behaviors among the undergraduates and to determine the strategies adopted by them. It also identifies the association between binge-watching behaviors and the selected baseline variables among the undergraduates.

Subjects and Methods

This study employed a descriptive research design to explore the experiences of undergraduates in selected professional medical colleges. To ensure that the study was conducted ethically, permission was obtained from the respective authorities of different colleges, and ethical clearance was obtained from the institutional ethics committee. The study aimed to investigate the experiences of students in BSc nursing, speech and hearing, medical laboratory technology, and physiotherapy.

To select the sample, the study used a proportionate stratified simple random sampling technique, which allowed for the selection of 227 students from the above-mentioned streams. The population was divided into different strata based on the year of study, and subjects were randomly selected from each stratum proportionately. The roll number of the students in each batch was obtained through the coordinator and the simple random sampling was done using the lottery method.

The inclusion criteria for sampling were students who are between the age group 18 to 23 and above years and excluded the students who did not have smartphones laptops/not accessible to internet sources. The sample size was calculated using a specific formula, ensuring that the sample selected was representative of the entire population.¹⁶

$$n = Z^2 \alpha \times (p) \times (1 - p) / e^2$$

$$n = 226.80$$

The study aimed to assess binge-watching behavior and the strategies to overcome it among the undergraduate students. The study employed two data collection instruments, namely, the baseline proforma and rating scale to assess binge-watching behavior, and a rating scale to assess strategies adopted to overcome binge-watching behavior. The participants were informed about the study and provided their consent through Google Forms. The Binge-Watching Engagement and Symptoms Questionnaire, a standardized tool, was used to assess binge-watching behavior, with a reliability score of 0.7. The investigator obtained permission to use the tool in this study before the data collection. The second rating scale was a self-constructed tool developed by the investigators to assess strategies adopted by the participants. The content validity of the tool was tested by seven experts in the field, with a 100% agreement for most of the items. The reliability of the tool was tested through the test-retest method and Cronbach's α with a score of 0.7.¹⁷

The baseline proforma and rating scales were administered to 227 students through Google Forms. The baseline proforma consisted of 10 items seeking information about age, gender, program, year of study, and primary information about binge-watching behavior. The Binge-Watching Engagement and Symptoms Questionnaire was a 40-item standardized questionnaire covering six areas related to engagement, positive emotions, desire, pleasure preservation, binge-watching, dependency, and loss of control. Each answer was given a score from strongly agree (4) to strongly disagree (1).

The rating scale for assessing strategies to overcome binge-watching behavior consisted of 15 questions, with each response being given a score from exactly true to me (3) to not at all true to me (1). The maximum score on the rating scale was 25 and was arbitrarily graded as strong

strategies (39–45), fair strategies (31–38), poor strategies (23–30), and no strategies (15–22). Before collecting data, the investigators familiarized themselves with the participants, and confidentiality was assured. This study aimed to provide an understanding of binge-watching behavior and the strategies adopted to overcome it among undergraduate students.

Results

The results of the study were analyzed using differential and inferential statistics. A master data sheet was prepared, and the coded data were entered. SPSS version 20 was used to analyze the coded data.

The data presented in **Supplementary Table S1** (online only) provides a detailed distribution of the baseline variables of the subjects. It is based on a sample of 227 subjects who were selected using a proportionate stratified simple random sampling method from different years of various programs. Among the different programs, the BSc nursing program had the highest percentage of 48.8% (111), while the MLT program had the lowest percentage of 9.7% (22). The age group of the subjects was also taken into account, and it was found that the majority of 51.5% (117) of the undergraduates belonged to the age group of 20 to 21 years. The data also revealed that the subjects were predominantly female, with 85% (193) of the sample being female. A significant proportion of the samples, 78.9% (179), were found to be binge-watchers, and 72.2% (164) of the subjects enjoyed binge-watching. The majority of the subjects were found to be watching serials, with a percentage of 41% (93) compared with other programs. It is worth noting that around 18.5% (42) of the subjects had adopted some measures to avoid binge-watching.

The data presented in **Table 1** depicts an in-depth analysis of binge-watching behavior by area. The data highlight the mean percentage of binge-watching behavior in various areas, which includes desire, engagement, pleasure preservation, binge watching, dependency, and loss of control. The findings reveal that the highest percentage of binge-watching behavior was observed in the desire area (60), indicating that the primary driving force behind binge-watching is the desire to consume more and more content. On the other hand, positive emotions (44) had the lowest

Table 1 Areawise analysis of binge-watching behaviors by using mean, standard deviation, and mean percentage ($n = 227$)

Area	Mean	Standard deviation	Minimum	Maximum	Mean %
Engagement	18.9	5.1	8.0	32.0	59.06
Positive emotions	13.2	3.8	5.0	30.0	44.0
Desire	16.2	4.0	6.0	27.0	60.0
Pleasure preservation	7.3	2.2	3.0	16.0	45.6
Binge-watching	14.0	4.1	6.0	24.0	58.3
Dependency	11.5	3.4	5.0	20.0	57.5
Loss of control	16.5	4.5	7.0	28.0	58.9

percentage, suggesting that individuals do not necessarily binge-watch to enhance their positive emotions. The mean percentages of other areas such as engagement (59.06), pleasure preservation (45.6), binge-watching (58.3), dependency (57.5), and loss of control (58.9) were also analyzed. The results indicate that binge-watching behavior is prevalent among undergraduate students, with high mean percentages observed in engagement (59.06), dependency (57.5), and loss of control areas (58.9). The mean percentages of dependency and loss of control areas were close to the mean percentages of desire and engagement, which reflects the adverse impact of binge-watching behavior. Overall, the findings suggest that binge-watching is a prevalent behavior among undergraduate students, and it can have a detrimental impact on their mental and physical well-being.

Strategies Adopted among the Undergraduate Students

The data presented in **Table 2** provide a detailed analysis of the various strategies that undergraduates have adopted to overcome binge-watching behaviors. The findings reveal that the percentage of strategies was highest in turning off the autoplay feature (33%), keeping free phone day (29.5%), etc. indicating that students were trying to take their minds off binge-watching. On the other hand, the lowest percentage was observed in other activities, art, music, dance (14.5%), reducing hours of binge-watching (15.4%), and opting for a new hobby (18.9%). Further analysis of the data reveals that undergraduates have employed several other strategies to curb their binge-watching behavior. These include minimizing the use of streaming apps (23.8%), allocating a fixed viewing period (20.7%), keeping a timetable (26.9%), not upgrading their data plan (27.3%), playing outdoor or indoor games (19.4%), involving in fitness planning (20.3%), going

for a walk (21.6%), involving in household chores (20.3%), indulging in recreational therapies (27.3%), and participating in religious activities (18.9%). Overall, the study highlights the various strategies that students have adopted to overcome binge-watching behaviors. The findings indicate that students are taking proactive steps to curb their excessive viewing habits, and are using a variety of methods to do so.

The strategies adopted by the undergraduates to overcome the binge-watching behavior were studied. The results show that 21.6% of the subjects adopted strong strategies, almost 42.3% adopted good strategies, and a minor percentage of 11.9 with poor strategies noted. These data highlight that the majority of the students try one or the other ways to limit them from binge-watching behavior.

Association between Binge-Watching Behaviors and the Selected Baseline Variables among Undergraduates

Supplementary Table S2 (online only) presents the association between binge-watching behaviors and selected baseline variables using the chi-square test. The results showed that the *p*-values for gender (0.609), program you would like to binge-watch (0.067), and measures to control binge-watching (0.121) were more than the 0.05 level of significance, making them not significant. However, the *p*-values for "have you binge-watched," "do you enjoy binge-watching," "episodes of binge-watching," and "hours of binge-watching" were 0.000, indicating their significance. Additionally, age (0.002), program (0.003), and year of studying (0.010) also had *p*-values less than 0.05 level of significance. Therefore, the research hypothesis is rejected, and the null hypothesis is accepted for the insignificant baseline variables. It can be inferred that there was a significant association between binge-watching behavior and the selected baseline variables.

Table 2 Itemwise analysis of strategies adopted among the undergraduate students (*N* = 227)

Items	Exactly true to me		Hardly true to me		Not at all true to me	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Turning off autoplay feature	75	33	82	36.1	70	30.8
Free phone day	67	29.5	92	40.5	68	30
Minimize streaming apps	54	23.8	87	38.3	86	37.9
Allotting specific time period	47	20.7	82	36.1	98	43.2
Reducing hours	35	15.4	81	35.7	111	48.9
Taken up a new hobby	43	18.9	89	39.2	95	41.9
Keeping timetable	61	26.9	92	40.5	74	32.6
Not to upgrade data plan	62	27.3	82	36.1	83	36.3
Play outdoor or indoor games	44	19.4	86	37.9	97	42.7
Involving in fitness planning	46	20.3	91	40.1	89	39.2
Go for a walk	49	21.6	81	35.7	97	42.7
Involving in household chores	46	20.3	90	39.6	91	40.1
Other activities (art, music, dance)	33	14.5	72	31.7	122	53.7
Recreational therapies	62	27.3	86	37.9	79	34.8
Religious activities	43	18.9	98	43.2	86	37.9

Discussion

Binge-watching has become a great concern among the youth nowadays. So, the purpose of the study is to assess binge-watching behavior, the strategies adopted to overcome it, and to find the association between binge-watching behaviors and the baseline variables which will have immense significance in today's scenario. The study found that the majority of undergraduates were aged between 20 and 21 years and belong to females, 72.2% of them enjoyed binge-watching. The findings of this study are consistent with a similar study conducted in Patna, which aimed to assess the effects of web series and streaming content on Indian youth. The study sample included undergraduate and postgraduate students and young professionals, with the majority of 72.4%, belonging to the age group between 18 and 22 years. Among the study group, 50.5% were female, and 49.5% were male.¹⁸

Most of the subjects in the present study had a habit of watching for 1 to 3 hours daily which is consistent with the findings of another Indian study where 80% of them watched 1 to 2 hours.¹⁸

Binge-Watching Behaviors

The undergraduate students expressed varied responses toward the statements related to binge-watching behaviors, in which the mean percentages of dependency and loss of control were almost near to the mean percentages of desire and engagement which reflect the ill effect of binge-watching behavior. Out of the total subjects, ~49.3 and 44% of them had more than 60% of the scores in items related to dependency and loss of control behavior, respectively. This was evident among those who binge-watched more. Hence, it can be concluded that while students find binge-watching as a medium for pleasure and entertainment, they end up with issues such as dependency and loss of control.

On the contrary, the findings of a qualitative study show that participants generally had positive perceptions of the binge-watching behavior. They agreed that binge-watching can disrupt daily routines, but they did not believe it harms health. They felt that it has positive effects on emotional and social well-being. Their responses highlighted the idea that binge-watching is enjoyable and can improve social connections.⁴

The present study's findings are consistent with the study conducted in a southern private institution with 66 participants to find the association between binge-watching and positive and negative emotions. The study shows a positive association between binge-viewing and dependency, Mean (M) = 9.82, Variance (F) = 20.47 with binge-watching frequency of 24%. The other measures of binge-watching used were loss of control M = 15.79, F = 68.82 with the binge-watching frequency of 52% variance in loss of control. The positive emotions such as gratification and pleasure are also correlated to binge-watching.¹⁹

A few more studies noted the various effects of binge-watching. Young students like to binge-watch for belonging to friends and peer groups. The escape gratification is also another motive that forces them to indulge in this behavior.

In addition, curiosity and entertainment factors are also the reason for it.¹⁰

In another study, 43.21% of the respondents had reported experiencing repercussions on their physical and mental health due to binge-watching, 53% had reported a decline in productivity, 48.9% had reported developing antisocial behavioral traits, and 77.8% had reported disturbances in their sleeping patterns. While 75.6% of viewers had reported feeling a sense of satisfaction or a "high" after binge-watching, 31.1% said they felt more emotionally disturbed after consuming content due to this addiction.²⁰ Watching multiple episodes in a row can be a way to avoid reality, but it can lead to mental health problems, including depression, anxiety, and insomnia.²¹ Hence, it is so inevitable to make the young people aware of the importance of the optimal use of mobile to safeguard their physical, mental, and social health.

Strategies Adopted to Overcome Binge-Watching Behaviors

Interestingly, there was a great response from the students regarding the strategies adopted by them to limit the use of various entertainment platforms. The current study found that the students were making use of the turning off autoplay feature, free phone day, finding a new hobby, etc. to control the use of the available platforms which is a good attempt. Though the study shows the remarkable use of coping strategies adopted by the students, a majority of the students could not follow them regularly. Although research on coping strategies is limited, bloggers and authors often emphasize their importance through online media. According to an author from the Economic Times, the golden rule for watching TV shows is to stop watching midway through an episode. Additionally, it is recommended to set realistic daily limits. It is suggested that you start watching as a reward for yourself only after you have completed all your work and social obligations.²² Deleting the streaming apps is also suggested as an idea to control the use of it.²³

Hence, the administrators need to engage the students with community-oriented activities or other useful engagements to improve their skills and productivity. Providing outdoor facilities within the campus can improve interpersonal relationship, and physical and mental health as well.

The present study was also looked in to the association between binge-watching behaviors and selected variables. The associations between binge-watching behaviors and the variables such as program, year of study, have you binge-watched, do you enjoy binge-watching, episodes of binge-watching, and hours of binge-watching and year of studying were found in the study. A similar study finding stated that the continuous watching of more than one web series had a significant association to binge-watching.²⁴

Limitations

The researcher identified the binge-watching behavior of the undergraduates who belong to one parent institution only. The data regarding binge-watching behavior and the

strategies adopted were based on the self-reported responses of the undergraduates which may be questionable.

Conclusion

The widespread phenomenon of binge-watching has garnered significant attention on a global scale. This activity, which involves consuming multiple episodes of a TV series or other media content in a single sitting, has become increasingly popular. However, the impact of binge-watching on one's daily life can be detrimental. This study aims to elucidate the patterns of binge-watching and its associated adverse effects. Additionally, the study focuses on the various strategies that students can implement to curb binge-watching habits. This study is a valuable resource for students, academics, and professionals alike, providing a comprehensive overview of binge-watching. There is a scope for further research for raising awareness of this issue so that individuals can make informed decisions and take the necessary steps to lead a healthier lifestyle. The consequences of the binge-watching are also another area to explore in the future.

Conflict of Interest

None declared.

References

- Cash H, Rae CD, Steel AH, Winkler A. Internet addiction: a brief summary of research and practice. *Curr Psychiatry Rev* 2012;8(04):292–298
- Iqbal M, ed. Netflix Revenue and Usage Statistics. *Business of Apps*. Published October 30, 2020, Accessed August 13, 2024 at: <https://www.businessofapps.com/data/netflix-statistics>
- Share of adults who frequently binge-watch TV shows or films in a series back to back in the United States as of April 2020, by age group. *Statista*. Published October 2021, Accessed August 13, 2024 at: <https://www.statista.com/statistics/289559/binge-viewing-penetration-rate-us>
- Chang YJ, Peng CY. Exploring experiences of binge-watching and perceived addictiveness among binge-watchers: a qualitative study. *BMC Public Health* 2022;22(01):2285
- Ramayan S, Estella ALM, Bakar IA. The effects of binge watching on interpersonal communication among Department of Communication and Liberal Arts (DCLA) students. *Ideology J* 2018;3: 127–143
- Panda S, Pandey SC. Binge watching and college students: motivations and outcomes. *Young Consumers* 2017;18:425–438
- Brooks SK, Webster RK, Smith LE, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet* 2020;395(10227):912–920
- Steinbach EM. Binge-Watching and its Impact on Learning Behaviour and Important Daily Life Activities among University Students: A Study Using Ecological Momentary Assessment [Bachelor's thesis]. University of Twente; 2018
- Chambliss C, Gartenberg C, Honrychs D, et al. Distracted by binge-watching: sources of academic and social disruption in students. *ARC J Pediatr* 2017;3:14–17
- Dhanuka A, Bohra A. Binge-watching: web-series addiction amongst youth. *The Management Quest* 2019;2:2581–6632
- Starosta JA, Izydorczyk B. Understanding the phenomenon of binge-watching—a systematic review. *Int J Environ Res Public Health* 2020;17(12):4469
- Sung YH, Kang EY, Lee W. A bad habit for your health? An exploration of psychological factors for binge-watching behaviour?. *Indian J Psychol Med* 2019;***:41
- Tukachinsky R, Eyal K. The psychology of marathon television viewing: antecedents and viewer involvement. *Mass Commun Soc* 2018;21:275–295
- Priyalyer KB, Nishkala G. Analyzing binge-watching behavior using data mining techniques. *Think India J* 2019;22:2212–2223
- Alimoradi Z, Jafari E, Potenza MN, Lin CY, Wu CY, Pakpour AH. Binge-watching and mental health problems: a systematic review and Meta-analysis. *Int J Environ Res Public Health* 2022;19(15):9707
- Sharma S. *Nursing Research and Statistics*. e-Book. Elsevier Health Sciences; 2022
- Flayelle M, Canale N, Vögele C, Karila L, Maurage P, Billieux J. Assessing binge-watching behaviors: development and validation of the “Watching TV Series Motives” and “Binge-watching Engagement and Symptoms” questionnaires. *Comput Human Behav* 2019; 90:26–36
- Ahuja R. A study of effects of web-series & streaming content on Indian youth. *Int J Creative Res Thoughts* 2020;8:1042–1055
- Anozie V. Effects of emotion on binge-watching. *Modern Psychological Stud* 2020;25:9
- Fernandes AI, Pinto MS. Binge-watching behaviour among college students: a uses and gratifications perspective. *Int J Communication Stud* 2020;14:17–24
- Subramanian A, Seetharaman A, Maddulety K. Critical review of binge watching behaviour through the prism of Vroom's expectancy theory. *Acad Mark Stud J* 2020;24:1
- Griffiths M, ed. Addicted to the screen? Your binge-watching could be a problem. Here's what to do about it [Internet]. *The Economic Times*. 2021. Available at: <https://economictimes.indiatimes.com/magazines/panache/addicted-to-the-screen-your-binge-watching-habit-could-be-a-problem-heres-what-to-do-about-it/articleshow/88145364.cms?from=mdr>
- INSIGHT [Internet]. The Chicago School. 2021. Available at: <https://www.thechicagoschool.edu/insight/psychology/when-is-binge-watching-tv-an-addiction/>
- Srinivasan A, Edward S, Eashwar A. A study on binge watching and its association with sleep pattern—a cross sectional study among Medical College Students in Kancheepuram District, Tamil Nadu. *Natl J Community Med* 2021;12:400–404