



## EFFECTS OF BINGE WATCHING ON SLEEP DEPRIVATION & MENTAL HEALTH

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### Abstract

**Purpose:** Investigating the consequences of binge viewing on lack of sleep and general health was the aim of this study. In recent years, binge viewing has become more prevalent, with many people watching several episodes of a TV show or film at once. Although binge watching can be a fun activity, it can also be detrimental to one's sleep and general health. In order to better understand the effects of binge viewing on individuals, this study looked at the connections between binge watching, sleep deprivation, and overall health.

**Methodology:** For this study, 100 participants altogether were gathered. Convenience sampling was used to choose the participants, who ranged in age and educational attainment. The purpose of the survey instrument was to gather data on binge watching habits, sleep patterns, and general wellness. A secure platform was used to administer the survey online, and respondents had two weeks to complete it.

Pearson correlation and descriptive statistics were used to analyse the survey data. The mean values and standard deviations of binge viewing, lack of sleep, and general health were examined using descriptive statistics. The association between these factors was investigated using Pearson correlation to see if there was a connection between binge viewing, lack of sleep, and overall health.

**Findings:** According to the study's findings, binge viewing had a higher mean value than both poor sleep and overall health. When compared to lack of sleep and general health, binge watching had a higher standard deviation. Additionally, all three variables showed positive correlations, suggesting that binge watching was linked to both sleep deprivation and a decline in general health.

Overall, the study shows that binge viewing has a detrimental impact on overall health and sleep deprivation. According to the research, binge watching should be limited by individuals, and its harmful effects should be addressed by healthcare experts.

**Keywords:** Binge Watching, Sleep Deprivation, General Health, Effects, Mental Health

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## INTRODUCTION

“It starts with one episode, Then two, Then a few more... Suddenly it’s a whole season. Before you know it, it’s the next morning and you’re lying sideways on your couch covered in sandwich crumbs over a thin blanket with remote falling from your grasp as you turn off the TV.” (Pena L.2015). In today's digital era, binge watching, defined as viewing multiple episodes of a TV show or streaming content in a single sitting, has become a prevalent form of entertainment. With the widespread availability of online streaming platforms and the convenience of on-demand content, binge watching has become a common pastime for many individuals. However, the effects of binge watching on sleep deprivation and mental health have garnered increasing attention from researchers and healthcare professionals.

### Binge Watching

Binge Watching is the practice of Watching entertainment or informational content for a prolonged time span, usually a single television show. The distinct uses of binge-watching in different sub-fields of television studies makes it a term that can be deployed in a variety of ways, suggesting that there can be no ‘one’ definition, also allowing for its resilience in the face of constant change of the medium (Jenner M 2020). The term "binge-watching" describes the currently popular practise of watching many episodes of a television programme in one sitting. The word has become more common in recent years due to the growth of streaming entertainment platforms that frequently offer complete TV seasons or series with little to no commercial interruption. Studies have shown that prolonged binge-watching can lead to addictive characteristics. The type of instant gratification that it produces can be similar to that of gambling or computer/social media addiction. People who binge-watch regularly usually use it as an escape from reality and to take away from loneliness or boredom (Jolanta A.2020)

### Sleep Deprivation

The definition of partial sleep deprivation usually refers to preventing individuals from obtaining their usual amount of daily sleep. This is typically accomplished in humans by restricting time in bed at night and prohibiting daytime naps (Sleep Deprivation.2004).

The right amount of sleep can vary from person to person, but the Center for Disease Control and Prevention (CDC) recommend that adults get at least 7 hours each night.

Sleep deprivation is a well-established risk factor for various physical and mental health issues.

Adequate sleep is essential for cognitive function, emotional well-being, and overall health. Yet, binge watching has been shown to disrupt sleep patterns, leading to sleep deprivation. The prolonged and uninterrupted viewing of multiple episodes can result in delayed bedtimes, reduced total sleep time, and poor sleep quality. Consequently, this can have detrimental effects on mental health, including increased risk of mood disorders, such as depression and anxiety

### General Health

Not just the absence of illness or disability, but also whole physical, mental, and social well-being, is referred to as being in good health. Every human person, regardless of ethnicity, religion, political beliefs, economic situation, or social standing, has the fundamental right to the enjoyment of the highest degree of health that is reasonably practicable. In order to achieve peace and security, it is essential for all peoples to be healthy, which depends on the complete cooperation of both individuals and states. Any State's success in promoting and protecting health is valuable to everyone. A common risk is the disparate advancement of many nations in the promotion of health and control of illnesses, particularly communicable diseases. The capacity to live in harmony in a constantly changing environment is crucial to a child's healthy growth, which is of the utmost significance. To achieve health to the highest extent possible, it is imperative that the advantages of medical, psychological, and associated information be made available to all individuals.

### Mental health

Mental health is a condition of psychological well-being that helps individuals to manage life’s stressors, realise their potential, study and work effectively, and give back to their communities. It is a crucial element of health and well-being that supports both our individual and group capacity to decide, form connections, and influence the world we live in. A core human right is access to mental health. Additionally, it is essential for socioeconomic, communal, and personal development.

In recent years, there has been increasing acknowledgement of the important role mental health plays in achieving global development goals, as illustrated by the inclusion of mental health in the Sustainable Development Goals. Depression is one of the leading causes of disability. Suicide is the fourth leading cause of death among 15-29-year-olds. People with severe mental health conditions die prematurely – as

much as two decades early – due to preventable physical conditions (WHO).

### Objective of the study

- To investigate the relationship between binge watching and sleep deprivation.
- To investigate the relationship between binge watching and general health
- To investigate the relationship between sleep deprivation and general health.

### Hypothesis:

H1 Binge watching will be positively correlated with the sleep deprivation.

H2 Sleep deprivation will positively be correlated with the general health.

H3 Binge watching will be positively correlated with general health.

### Variables

**Predictor:** Binge watching

**Dependent:** Sleep deprivation and general health

## METHODOLOGY

### Sample

The present study was conducted on a sample of 100 Binge Watchers, aged between 18-60 Who streams different OTT platforms such as Netflix, Amazon Prime, Disney+ hot star etc.

### Psychometric Tools Used

Keeping in view, our variables, the aims of the study, and the nature of the sample, appropriate tools were selected. In this study we selected the following tools:-

- **Binge Watching Addiction questionnaire**

The study aims to validate a self-report questionnaire called the Binge-Watching Addiction Questionnaire (BWAQ), which focuses on assessing binge-watching behavior and determining whether it shows characteristics similar to addictive behavior. The questionnaire was administered to the general population through an online survey, and exploratory and confirmatory factor analyses were used to assess the validity and structure of the scale. The statistical analyses confirmed a four-factor model (i.e., "Craving", "Dependency", "Anticipation", "Avoidance") of the BWAQ with good psychometric properties. The BWAQ can differentiate between people who engage in maladaptive watching activities and those who use TV series as leisure and entertainment activities. This questionnaire may enable researchers to significantly improve their understanding of binge-watching behavior and its potential similarities to addictive behavior.

- **The Epworth Sleepiness Scale**

The Epworth Sleepiness Scale is widely used in the field of sleep medicine as a subjective measure of a patient's sleepiness. The test is a list of eight situations in which you rate your tendency to become sleepy on a scale of 0, no chance of dozing, to 3, high chance of dozing. When you finish the test, add up the values of your responses. Your total score is based on a scale of 0 to 24. The scale estimates whether you are experiencing excessive sleepiness that possibly requires medical attention.

- **General Health Questionnaire**

Developed in the 1970s, the General Health Questionnaire is a method to quantify the risk of developing psychiatric disorders. This instrument targets two areas – the inability to carry out normal functions and the appearance of distress – to assess well-being in a person. The format of the full GHQ is 60-item test with a four-point scale for each response.

### Inclusion Criteria

1. The inclusion criteria included a willingness to participate in the study.
2. Only People who are currently Binge Watching.
3. Married/Not Married, There is no gender restriction.
4. Having a minimum age of 18 and a maximum age of 60.

### Exclusion Criteria

1. There are also exclusion criteria such as use of Tobacco, alcoholic beverages, and herbal medicines.
2. People who don't binge Watches
3. Subjects will be excluded from the study if they are currently on any medication affecting sleep, prescription drugs, or other drugs that in the opinion of the research team may interfere with the results of the study.

### Procedure

Cross-sectional study using simple random sampling and purposive sampling was adopted using selection of suitable techniques, such as scales, to evaluate the variables to be measured. Following the evaluation of the variables, the appropriate statistical method was used to validate the findings for their significance. Finally, the suggested hypotheses as well as the previous literature were cross-checked with the initial findings to determine the intended outcome. The required sample was collected through online survey administration. Prior consent was obtained before filing the actual questionnaire. The participants were informed about the purpose and

necessity of the study. All the tools were administered individually. The participants were assured of the confidentiality of the obtained data, and they were further assured that their information would be used only for research purposes. The respondents took about 8-10 minutes to complete the questionnaire. They were allowed to ask any queries about any of the test items through e-mails. Documentation of data and, accordingly, data entry was done for further statistical analysis. Under data entry, mainly Excel worksheets were generated. Raw scores, percentiles, and, accordingly, the category of each sample were noted for all three variables. Appropriate statistical techniques were applied for the interpretation of collected data.

**Data Analysis**

Software program Statistical Package for Social Science Version 16 (SPSS 16) is utilized for statistical analysis. Data were collected, coded, and descriptive analysis was completed. The relationship between the variables was tested using correlation,

**Results**

**Table 1:** Description Of respondents with respect to age, gender and qualification

Category	Sub category	Frequency
<b>Age</b>	18-30 years	93%
	30-60 years	7%
	Total	100
<b>Gender</b>	Male	55%
	Female	45%
	Total	100
<b>Qualification</b>	Under graduates	13%
	Graduates	60%
	Post graduates	27%
	Total	100

Table 1 demonstrates the frequency distribution and percentage of participants depending on demographic factors such as age, gender, qualification. Out of 100 -----Majority 93%of participants between the age group of 18-30years, followed by 7%between the age of 30-60 years.55% \_\_\_\_\_ were male and 45% were female. The percentage of -----in qualification area was undergraduates 13%, graduates 60%and post graduates are 27%.

**Table 2:** Mean difference in binge watching, sleep deprivation and general health

<b>Descriptive Statistics</b>			
Variables	Mean	SD	N
BINGE W	31.5600	17.41317	100
SD	9.4400	5.25572	100
GH	27.0300	7.09453	100

Table 1 shows the results of 100 participants which reveals that Binge Watching shows higher mean value (M = 31.5600) compared to Sleep Deprivation and General Health(M=27.0300). Sleep deprivation shows the least mean value (M=9.4400). The standard deviation of Binge (SD= 17.41317) watching is higher comparing to Mental health (SD=5.25572) and Sleep deprivation ( SD=7.09453).

**Table 2:** Correlations coefficients among study variables (N=100)

Variables	Binge Watching	Sleep Deprivation	Mental Health
Binge Watching	1	.464**	.330**
Sleep Deprivation		1	.454**
Mental Health			1

Note - \*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 2 demonstrates Pearson Correlation between binge watching, sleep deprivation, and general health. All the three variables are positively correlated. The correlation value of binge watching and sleep deprivation is (r=.464, p>.01). The correlation value of Binge Watching and general health is(r= .330, p>.01). The correlation value of sleep deprivation and general health is(r=.454 p>.01)

**DISCUSSION**

There are limited studies or assessment tools for identifying the effects of binge watching on sleep deprivation and general health. There are studies that explores the relationship between the binge watching and sleep, with a focus on the role of pre-sleep arousal where the author suggest that excessive binge viewing may disrupt pre-sleep arousal and negatively impact sleep quality (Exelmans, L.2017). And also there are is a systematic review and meta-anaysis that examines the relationship between binge-watching and mental health problems (Alimoradi, Z. Et.al.2021). The current study set out to look at the impact of binge viewing on overall health and sleep deprivation. According to the study's findings, binge viewing had a higher mean value than both poor sleep and overall health. When compared to lack of sleep and general health, binge watching had a higher standard deviation. Additionally, all three variables showed positive correlations, suggesting that binge watching was linked to both sleep deprivation and a decline in general health. The study's results are in line with earlier studies showing that binge viewing can be harmful to one's



sleep and general health. Binge viewing can cause sleep cycles to become interrupted, which can lead to exhaustion and sleep deprivation.

The results of the present study have a number of consequences for patients and healthcare workers. According to the research, binge watching should be limited for individuals to avoid damaging consequences on their sleep and general health. Binge watching may be lessened by employing techniques like time restrictions, pauses, and participating in physical exercise while waiting between episodes.

The study emphasises the necessity for healthcare practitioners to address the detrimental impacts of binge viewing on sleep and general health. Healthcare practitioners may inform patients about the value of rest and exercise, as well as providing tools to help patients lessen the harmful consequences of Binge Watching.

## CONCLUSION

The current study shows that binge viewing has a detrimental impact on overall health and sleep deprivation. The research highlights the need for people to limit their binge-watching behaviour and for healthcare professionals to address the harmful impacts of binge-watching. The processes underlying the link between binge viewing, sleep deprivation, and overall health require further study.

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