JOURNAL OF COMMUNICATION, LANGUAGE AND CULTURE

Predictions of Netflix Binge-watching Behaviour among University Students during Movement Control Order

Tak Jie Chan^{1*}, Han Jing², Siti Norlida Roslan², Saodah Wok³

¹Faculty of Applied Communication, Multimedia University, Cyberjaya, Selangor, Malaysia, ²Faculty of Business, Accountancy, Communication and Hospitality Management, SEGi University, Kuala Lumpur, Malaysia,

³ Department of Communication, Kulliyyah of Islamic Review Knowledge and Human Sciences, International Islamic University Malaysia, Kuala Lumpur, Selangor, Malaysia

*Corresponding author: tjchan@mmu.edu.my; ORCID iD: 0000-0001-8655-0924

ABSTRACT

Streaming media like Netflix has become a mainstream trend for people to have fun and relax during the Covid-19 pandemic, and numerous studies found that college students and millennials account for a large group who binge-watch television programmes. Hence, understanding university students' motive for binge-watching is timely, especially during the Covid-19 lockdown period, when there is a lack of studies on this phenomenon. Thus, this study aims to examine the motives that influence Netflix binge-watching behaviour among university students. The study utilised the Uses and Gratifications (U&G) Theory, and three motives, namely 'entertainment', 'social interaction' and 'escape' were deduced from the theory. The study adopted a quantitative research approach using an online survey method. A total of 150 valid responses were collected through the purposive sampling technique, and the results were analysed using correlation and regression analysis. The findings through the Pearson's correlations indicated that 'entertainment' has a positive and strong relationship with Netflix bingewatching behaviour, while 'social interaction' and 'escape' motives have a positive but moderately significant relationship with the binge-watching behaviour. Regression analysis further showed that only 'entertainment' and 'social interaction' were the predictors of binge-watching behaviour; however, 'escape' was not a predictor. This study also contributes to the U&G Theory as well as the literature on the youth's media consumption, particularly during the Covid-19 lockdown period, for it benefits the parents, video streaming service providers and government in understanding the motives that influence binge-watching among youths; thus, strategies can be implemented to avoid excessive binge-watching behaviour during the lockdown which leads to negative social media outcomes.

Keywords: binge-watching behaviour, movement control order, Netflix, university students, Uses and Gratifications Theory

Received: 26 January 2022, Accepted: 7 April 2022, Published: 30 July 2022

Introduction

Digital media has constantly changed the way of media consumption in the contemporary world. Overthe-top (OTT) services include various services, such as electronic communication and distribution which are delivered to users over the Internet and accessed by users at any time through various media contents, and they do not require any facilities of telecommunication operator and subscription to any



traditional cable service (Bilbil, 2018). Among the services of video streaming platforms are Hulu, Netflix, Disney Plus, and more are mushrooming nowadays.

The popularity of streaming media platforms has brought a huge impact on the media entertainment industry (Tiffiller, 2017), and people have gradually changed their viewing habits from traditional cable television to streaming media platforms (Stanimirovic, 2020). In 2020, the Covid-19 pandemic severely affected people's lifestyles and behaviours. The new social norms of keeping the social distance caused by the Coronavirus forced a significant demand for digital consumption and streaming subscription services (Wong et al., 2021), Thus, time spent on social media streaming is higher compared to before (Wiederhold, 2020). In the international market, the Netflix streaming platform had more than 167 million subscribers at the end of 2019. Moreover, due to the global Coronavirus epidemic, the number was going to increase by nearly 200 million subscribers by the end of July 2020 (Moody, 2020). In Malaysia's context, it was reported that Netflix had gained 195% in year-on-year growth in the third week of March, just as the lockdown began in 2020 (Lim, 2020).

Netflix's strategy of releasing an entire season of television (TV) shows at once for the first time and its prominent advantage of streaming media have triggered the binge-watching phenomenon (Castro et al., 2021). The term 'binge-watching' refers to a person watching a particular programme, episode after episode continuously in one sitting without any break in between (Silverman & Ryalls, 2016). Annalect (2014) indicates that about 60 percent of binge-watchers will go on binge-watching at least once a week, and more than half of the audience is gratified about it. Since most of the citizens are forced to stay at home during the lockdown, the time spent on TV programmes will increase, and this leads to addiction and reliance on it (Al-Samarraie et al., 2021).

To contain and control the spread of the Covid-19 virus, governments around the world have introduced the movement control order (MCO). Malaysia is one of the countries that is affected by the Covid-19 pandemic. On 18 March 2020, the government of Malaysia announced the MCO to curb the spread of Covid-19; thus, Malaysians were forced to be at home. This brought Netflix and Tonton the biggest traffic growth rates during the MCO in Malaysia (Lim, 2020). This is supported by Brzeski (2020), who states that Netflix consumption has surged 115% in Southeast Asia during the Covid-19 virus lockdowns.

Since Netflix pioneered a new way of consuming TV shows in 2016, viewers have been able to choose as many episodes of TV shows as they want from the diverse content provided on the streaming platform. According to McCarriston (2017), more than half of Netflix subscribers in America have regular binge-watching behaviour and can binge-watch from anywhere on any device, such as using their mobile phones or tablets, when they commute to work. Binge-watching is now a common way for people to spend time watching TV series and media content, regardless of gender (Moore, 2015).

In the binge-watching phenomenon, college or university students and millennials account for a large group. A study reveals that binge-watching is theoretically related to personality traits, and impulse is one of the main characteristics of the binge-watching crowd (Starosta & Izydorczyk, 2020). Moreover, binge-watching is a common behaviour in the millennial group, as nearly 90 per cent of millennials between the ages of 20 and 33, most often among college or university students, have engaged in binge-watching behaviour. Most college or university students lack self-regulation and self-management. When a person is exposed to enjoyable television content for hours, binge-watching can be seen as a form of procrastination which interferes with the completion of another task, such as assignment (Jr & Rubenking, 2019). This further supports the notion that binge-watching has increased especially during the pandemic of Covid-19 (Aghababian et al., 2021; Boursier et al., 2021; Sigre-Leirós et al., 2022).

The research gap found in most of the empirical studies for binge-watching among college or university students was only highlighted in the Western countries, and there was a lack of research which focused on Netflix, particularly during the Covid-19 period, causing some limitations in the studies (Castro et al., 2021; Panda & Pandey, 2017). Although there have been some previous studies on Netflix in developing countries like Indonesia, there is a lack of platform perspective of Netflix to explain how

Netflix streaming media affects binge-watching behaviour (Martins & Riyanto, 2020). Based on the discussion, therefore, the current study aims to examine the motives of watching Netflix and binge-watching behaviour among university students from the lens of Uses and Gratifications (U&G) Theory, particularly during the pandemic lockdown period.

Literature Review

Theoretical Foundation

The U&G Theory posits why users actively choose specific media for satisfying their specific needs (Katz et al., 1973). Media users actively choose a medium that can accurately reflect and gratify the needs of consumers through media consumption. Ruggiero (2000) believes that the U&G Theory explains that the new technology has provided a profound influence on media users in terms of personal, social habits and functions. Meanwhile, past studies have mentioned that the U&G Theory not only addresses the motivation for media use, but it also describes and explains the influence of psychological factors on media use and selection in different cultures and contexts (Haridakis & Rubin, 2005). Therefore, the U&G framework can be used to analyse the motives for watching Netflix and the bingewatching behaviour.

Moreover, the development of Internet-based video-on-demand (VOD) streaming platforms enables media users to satisfy motivations from both traditional and new media (Jenner, 2016). Gratification can be divided into 'gratification sought' and 'gratification obtained'; 'gratification sought' refers to the motives for using specific media that could be cognitive, such as needs for relaxation, entertainment, information seeking, and social interaction as well as the need for the innovation of new technologies. The study by Subramanian et al., (2020) which carried out a critical literature review on binge-watching found that these motivation factors are identified as information attainment, entertainment, hobby or companionship, escape or mood management. These motives could be important factors that cause university students to have the behaviour of binge-watching. Besides, Rahman and Arif (2021) also found that the motives for entertainment (e.g. a wide range of shows on Netflix to relieve from boredom), friend or peer influence (social interaction), and escape from the reality are some of the factors that influence the marathon of watching Netflix. This also supports the notion by Sigre-Leirós et al., (2022) that social motives for watching TV series emerged as significant determinants in the Covid-19 lockdown period, and this justifies the study of these three variables in the current study.

Binge-watching Behaviour and University Students

The term binge-watching is defined as the intense and consecutive consumption of a series in a single sitting which has steadily become a prevalent phenomenon in the age of on-demand media entertainment (Pittman & Sheehan, 2015). According to the study by Flayelle et al., (2019), binge-watching behaviour is a common way for people to escape from daily life problems and deal with their loneliness, implying that people engage in binge-watching as a form of emotional regulation. Excessive binge-watching could be a serious problem with mental effects including addiction, which can lead to hesitation or anxiety and sleep problems (Wheeler, 2020), but in terms of psychological conditions, excessive binge-watching behaviour is very similar to addiction among video gamers and the Internet users. Thus, binge-watching is driven by a variety of motivations, including passing time, escaping life's issues, and regulating negative emotions for temporary satisfaction, and it is becoming increasingly popular among young people (Starosta & Izydorczyk, 2020).

Additionally, a study by Hofmann et al., (2017) pointed out that the binge-watching phenomenon can also have a positive impact on users. Binge-watching is a new opportunity for recreational consumption, and VOD services provide users with a permanent access to media content, which provides many positive gratifications for viewers. However, at the same time, the freedom that VOD services give to users also has some negative media impacts, particularly when there are possibilities of continuous viewing which can create the risk of procrastination in completing goals or tasks.

Furthermore, the results prove that laptops and mobile phones are the most common devices used by young adults for binge-watching, meaning that advances in streaming technology have made binge-watching easier compared to traditional cable TV. This is because people can decide where to watch

and how many episodes to watch (Trouleau et al., 2016). According to the study by Starosta and Izydorczyk (2020), young university students in Poland tend to binge-watch their favourite TV series on mobile platforms because they allow students to access them at any time and any place. While this represents an innovative form of entertainment due to the technological advances, it has also created symptoms of addiction which indicate that students may lose self-control over their time spent on binge-watching, neglecting school tasks and their responsibilities.

Hypothesis Development

Entertainment is one of the main factors derived from new media technology. In the media industry, entertainment demand has always been identified as an important satisfaction provided by the medium for users (Rubin, 1983). Streaming VOD services like Netflix enable users to access their favourite TV series whenever they want. This allows users to engage in binge-watching while maximising their hedonism, leading to a positive emotional impact. According to Tiffiller (2017), users indicate watching comedies TV shows, or movies with special audio and visual effects on Netflix video streaming platforms as the motive to satisfy their entertainment needs. For instance, viewers who are attracted to episodes of some TV programming with highly coherent and cliffhanger endings will perform bingewatch behaviour. They even rewind and repeat scenes to satisfy the emotional entertainment of the drama (Steiner & Xu, 2020). Digital entertainment also offers users a new mode of media consumption (Granow et al., 2018), and this supports the notion that entertainment will drive people to bingewatching (Arditi, 2021; Gangadharbatla et al., 2019; Sadana & Sharma, 2021). Moreover, Rahman and Arif (2021), expressed that a wide range of shows available on Netflix for entertainment purposes incline viewers to engage in binge-watching behaviour during the Covid-19 pandemic. This also supports the study by Kumar et al., (2021), who found that entertainment was the most dominating motive to influence binge-watching during the Covid-19 pandemic. Based on the above notions, the study hypothesised that:

H1: There is a positive relationship between entertainment and Netflix binge-watching behaviour among university students.

The U&G framework proposes social interaction as a key factor contributing to TV viewing behaviour (Katz et al., 1973). The emergence of the Internet has laid the foundation for the development of new media, which enable users to connect with people directly through media interaction or technology. Medium interaction facilitates human interaction, and it not only provides users with satisfying entertainment needs, but it also satisfies psychological social needs (Sundar & Limperos, 2013). Millennials have made up a large proportion of Netflix viewers, and their motivation for using Netflix is influenced by social interaction. For example, they will be influenced by their social circle which is their friends or classmates who recommend, introduce and give feedback about the popular TV shows or movies on Netflix (Panda & Pandey, 2017). This is further supported by numerous past studies which argued that interpersonal interaction is key for human beings, and therefore, it is strongly related to the motive for using social media (Balakrishnan & Griffiths, 2017; D'Arienzo et al., 2019; Hou et al., 2019).

On the other hand, Netflix's strategy of releasing an entire season of original programming allows viewers to binge-watch an entire season at one sitting with their friends. This is not only one of the main motivations for binge-watching behaviour, but it also enriches the conversation on social media (Rubenking et al., 2018). Thus, university students engage in binge-watching with friends as a form of companionship, a way of interaction to gratify the loneliness during the university period (Pittman & Sheehan, 2015). Therefore, binge-watching behaviour provides university students with media interaction, as well as social interactions with others (like family members), which places students in a position to integrate into the social landscape by communicating about popular culture in TV shows or films on Netflix through binge-watching (Gangadharbatla et al., 2019; Matrix, 2014).

Besides, a study by Sigre-Leirós et al., (2022) found that social motives for watching TV series emerged as a protective factor during the Covid-19 lockdown, when the Covid-19 quarantine and lockdown has greatly restricted the real socialisation. During this period, people will rely on social media and bingewatching streamed series to give themselves a feeling of emotional connection with others through parasocial interaction (Jarzyna, 2021). Hence, based on the discussion, it was hypothesised that:

H2: There is a positive relationship between social interaction and Netflix binge-watching behaviour among university students.

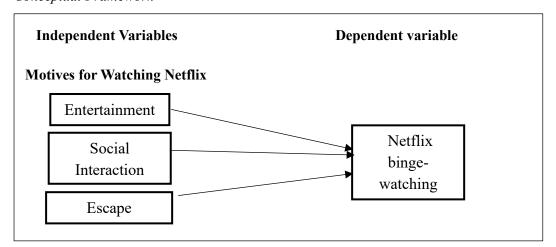
The gratification of 'escape' motive provides synchronicity and demassification to binge-watching. University students' use of binge-watching as a means of escape was previously considered a motivation for traditional TV viewing (Rubin, 1983), but the advantages offered by streaming media have very much dominated the viewing method of the young generation. Hence, university students who are under a lot of stress can escape through binge-watching as a strategy to pass time (Pang, 2014). For instance, students believe that binge-watching can distract them from the real world through the effect of escaping and the reward of relaxing after the deadlines of assignments and exams (Kircaburun et al., 2020; Leppink et al., 2016). Simultaneously, some TV dramas and movies with excellent quality that reflect deeply on the current situation of society and personal life can provide the viewers with a strong sense of immersion and escape from the real world in their minds (Pittman & Sheehan, 2015). This further supports the notion by Brailovskaia et al., (2020) that social media use helped individuals escape from negative emotions in daily life.

Besides, Boursier et al., (2021) highlighted that TV series watching behaviours were equally induced by anxiety symptoms and escapism motivation, thereby suggesting that watching TV series during the Covid-19 lockdown probably served as a recovery strategy to face such a stressful situation. Based on the above discussion, the current study hypothesised that:

H3: There is a positive relationship between escape and Netflix binge-watching behaviour among university students.

Figure 1

Conceptual Framework



Methods

Research Design

This study applied a quantitative research design. Quantitative research is described as a systematic exploration of a phenomenon through the collection of measurable data and the application of statistical, mathematical, or algorithmic methods (Apuke, 2017). According to Babbie (2020), survey design is a suitable method to apply in this study as it allows the researchers to effectively measure the attitudes and opinions of respondents in a large population.

Sampling Procedure

In this study, the researchers used the purposive sampling method as one of the techniques in non-probability sampling, where the researchers will select samples based on their judgment and criteria (Campbell et al., 2020). Therefore, this research chose the respondents who were Netflix users by incorporating the screening questions (such as 'Do you watch Netflix?', 'Do you watch two episodes

continuously from Netflix?') as a strategy to select valid respondents. In addition, Roscoe (1975), Bougie and Sekaran (2019) highlighted that a sample size of more than 30 but fewer than 500 is recommended for most behavioural research. Hence, the current study had 150 valid responses, and it is deemed appropriate for the statistical analysis.

Measurement

The research instrument is divided into three (3) sections. Section A consists of the collection of demographic information of the respondents such as gender, age, nationality and education. Section B taps items for the independent variables, which are 'entertainment', 'social interaction' and 'escape' which were adapted and modified from Panda and Pandey (2017) and Ulusoy and Atar (2020). Section C tries to determine the dependent variable which is binge-watching behaviour, and the items were adapted from Panda and Pandey (2017). The five-point Likert-type scale was applied in Section B and Section C, indicating 1=strongly disagree, 2 = disagree, 3=somewhat agree, 4=agree, and 5=strongly agree. The details of the measurement can be seen in the appendix.

Data Collection Procedures

An online survey method was used for the respondents to answer the questionnaire. The researchers assured the respondents of confidentiality and anonymity of the data collected. The data were collected from March 2021 until April 2021, when Malaysia was under MCO and conditional movement control order (CMCO).

Reliability Test

The pilot study which involved 30 respondents was conducted in this research. According to the requirements of the reliability analysis, the items were consistent and reliable when they exceeded the Cronbach's Alpha value of 0.7 as suggested by Saunders et al., (2019). This indicates that the researcher would be able to proceed with the real data collection as it had met the requirement for the consistency of this instrument.

Table 1 *Reliability analysis*

Variables	No. of Items	Cronbach's Alpha	Cronbach's alpha (n=150)	
		(n=30)		
Binge-watching behaviour	5	0.761	0.736	
Entertainment	5	0.714	0.822	
Social Interaction	5	0.802	0.911	
Escape	5	0.843	0.833	

Data Analysis

The researchers analysed the data via Statistical Package for the Social Sciences (SPSS) version 26 software. Both descriptive and inferential statistics were performed for the study. The descriptive statistics involved were frequency and percentage while the inferential statistics involved Pearson's Product Moment Correlation and Multiple Regression Analysis. Before the data analysis, a normality test was performed to ensure that the criteria for performing the Multiple Regression Analysis were met.

Normality analysis

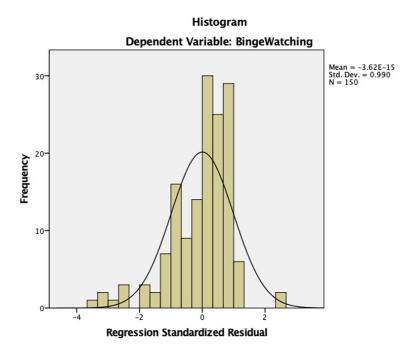
To ensure a normal distribution of the data, skewness and kurtosis analyses were further carried out. Hair et al., (2018) mentioned that data must be normally distributed before multivariate analysis can be conducted. It can be said that the data were normally distributed when the values that represented the skewness and kurtosis of the variables were in a range of -2 to +2, with consideration of 5% sampling errors (Siddiqi, 2014). With that, as referred to in Table 2, the value for the dependent variable (DV), i.e. the binge-watching behaviour, was within the range of -2 and +2, thus, showing that data are still normally distributed and the Pearson's Product Moment Correlation and Multiple Regression Analysis can be conducted.

Table 2Normality Based on Skewness and Kurtosis Values

Variable	Skewness	Kurtosis
Binge-watching behaviour	-0.483	-0.192

Figure 2

Histogram for Binge-watching Behaviour



Results

Based on Table 3 below, more than half of the respondents were females (60.0%), and the remaining were males (40.0%). More than half of the respondents were international students (62.0%), whereas 38.0% of the respondents were Malaysians. In terms of age group, nearly half of the respondents were between 26 to 29 years old (44.0%), followed by respondents aged between 22 to 25 years old (28.0%), indicating that young adult viewers were the reference group of binge-watching. A total of 58.7% of the respondents held a bachelor's degree, whereas 28.0% were in foundation year or had a diploma, and 13.3% of them had a postgraduate (Master's or Ph.D.) degree.

Table 3Profile of the Respondents (n=150)

Variable(s)	Category	Frequency	%
Gender	Male	60	40.0
	Female	90	60.0
Age (years old)	18-21	21	14.0
	22-25	42	28.0
	26-29	66	44.0
	>29	21	14.0
Nationality	Malaysian	57	38.0
	International	93	62.0
Education	Foundation/ Diploma	42	28.0
	Bachelor's degree	88	58.7
	Postgraduate degree	20	13.3

The Pearson's correlations analysis was carried out to determine the direction and strength of the correlation for each variable. Based on the Pearson's Product Moment correlation analysis, it was determined that 'entertainment' motive and binge-watching behaviour have a positive and very strong correlation (r = .849, p < .05). In addition, 'social interaction' and binge-watching behaviour have a positive and moderate correlation (r = .616, p < .05). 'Escape' also has a positive and moderate correlation with binge-watching behaviour (r = .605, p < .05). The interpretation of the strength of the relationship is based on Moore et al., (2013)'s indicators.

Table 4Correlation Test on the Relationship between Motives of Watching Netflix and Binge-Watching Behaviour (n=150)

	Binge-watching behaviour		
Motives for Watching Netflix	r	p	
Entertainment	.849**	.000	
Social interaction	.616**	.000	
Escape	.605**	.000	

^{**}Correlation is significant at the 0.01 level (1-tailed)

The value for the Durbin-Watson in this research was 1.277 which is between the values of 1 to 3, indicating that there were no auto-correlations that arose from the statistical regression analysis that was generated. The value of R was .881, suggesting that the independent variables for this research which were 'entertainment', 'social interaction' and 'escape' had a high effect on the binge-watching behaviour. The value of R Square was .776 which indicates that the independent variables of this research affected binge-watching behaviour by 77.6%. However, the analysis indicated that only 'entertainment' and 'social interaction' under the U&G motives were the predicting factors that contributed to the binge-watching behaviour, while 'escape' was excluded. Thus, the remaining 22.4%

were based on other variables that were not investigated in this research. Hence, H1 and H2 were supported; however, H3 was rejected.

 Table 5

 Multiple Regression Analysis of Binge-Watching Behaviour with Predictor Variables

Predictor Variables	Unstandardized	Coefficient	Standardized Coefficients	
	В	Std. Error	Beta	p
(Constant)	2.246	.159		.000
Entertainment	0.682	.037	.865	.000
Social Interaction	0.203	.153	.262	.019
Escape	0.021	.164	.026	.898
F = 168.54	$df_1 = 3, df_2 = 146$	p = .000		
R = .881	$R^2 = .776$	Adjust $R^2 = .7$	71	

Discussion

The findings are supported by numerous past studies. This indicates that hypothesis 1, where there is a positive relationship between 'entertainment' motive and binge-watching behaviour, is accepted. The outcome of this research is aligned with the research done by Panda and Pandey (2017) which indicates that students perform binge-watching due to the entertainment value generated through the channels of streaming services. In addition, Sadana and Sharma (2021) discovered that young consumers binge-watched their favourite channels for entertainment purposes to relieve themselves from stress, particularly during the Covid-19 lockdown time (Rahman & Arif, 2021). Arditi (2021) also found that the entertainment value creates the cognitive response by allowing the consumers to binge-watch. This further supports the study by Kumar et al., (2021), who found that 'entertainment' was the most dominating motive to influence binge watching during the Covid-19 pandemic.

The second objective of this research is to determine the relationship between 'social interaction' motive and binge-watching behaviour among students, and the outcome shows that there is a significant positive relationship between 'social interaction' motive and binge-watching behaviour, and this is in line with the study by Elmashhara and Soares (2019) stating that the social interactions among the peers of the individuals create room for binge-watching as they create the topic for discussion. The research by Piehler et al., (2019) also suggests that social interactions developed are related to the binge-watching attitude. This supports the notion of Jarzyna (2021) that during the Covid-19 quarantine and lockdown period, people will rely on social media and binge-watching streamed series to give themselves a feeling of emotional connection with others through the parasocial interaction.

The last objective of this research is to determine the relationship between 'escape' motive and binge-watching behaviour among university students, and the regression results show that 'escape' motive does not significantly influence the binge-watching behaviour. This is contradicted by the findings by Kottasz et al., (2019) which demonstrate that individuals usually binge-watch to escape from their realities. Cova et al., (2018) also discovered that an individual's escape is related to the action of avoiding stressors or unwarranted situations, where a common method of release is binge-watching. The current results also differ from the study by Camilleri and Falzon (2020) which demonstrates that individuals escape to distract themselves from any issues leading to their personal lives, and binge-watching is resorted to. The possible explanation for the different results is that this study was conducted during the MCO, where university students were studying online, and most of their time was spent at home; hence, there was ample time they could spend watching programmes on Netflix. Thus, escapingfrom the routines such as going to class and being trapped in the traffic were not significant;

this possibly explains why the 'escape' motive was not related to the behaviour of binge-watching in this study.

Conclusion

The study intends to find the predictors of Netflix binge-watching behaviour through the U&G Theory. The results show that 'entertainment' motive has a positive and strong correlation with binge-watching behaviour, while 'social interaction' and 'escape' motives have a positive and moderate relationship with binge-watching behaviour. Regression analysis further shows that 'entertainment' and 'social interaction' motives are the predictors of binge-watching behaviour among university students; however, 'escape' motive is not the predictor.

The Implications of the Study

For the academic implication, this research has contributed to the U&G Theory and new media research as the outcomes illustrate that the variables of 'entertainment' and 'social interaction' have a significant impact on binge-watching while the variable of 'escape' does not. The outcomes of this research have therefore proved the applicability of U&G Theory in the literature on media psychology and consumption, particularly during the Covid-19 MCO and CMCO periods.

For the practical implications, the outcomes of this research have allowed the university to determine the attitude and behaviour of their students relating to binge-watching Netflix as one of the most popular streaming services providers. This study also benefits the parents, video streaming service providers and government in understanding the motives that influence binge-watching among university students; thus, strategies can be implemented to avoid excessive binge-watching behaviour which can lead to negative social media outcomes.

Limitations and Suggestions for Future Study

The first limitation is that the respondents of this study only consisted of the students of one private university, and there are many other private universities as well as public universities in Malaysia that consist of many students who can contribute to the outcomes of this research. Thus, the future study can increase the number of respondents by sampling students from various public and private universities and colleges to make the study more representative.

Furthermore, the study only managed to secure valid responses from 150 respondents, who were Netflix users as well as those who had experience watching Netflix through the purposive sampling. Although the sample size number allows researchers to conduct statistical analysis, it is not able to generalise. Thus, the future study can study more respondents and utilise the probability sampling technique to complement the current deficiency.

In addition, another limitation is related to the variables that were studied and which were limited to 'entertainment', 'social interactions' and 'escape' as the motives, whereas this study showed that there were remaining 22.4% of other variables that were not included in this research. Hence, the future study can expand the model by including other variables such as self-efficacy, post media consumption and addiction, to name a few, to test the moderating and mediating effects and make the model more robust.

Last but not least, the current study is limited to one type of research approach which is the quantitative (positivism) approach. Hence, for future research, it can incorporate qualitative or mixed-method (pragmatics) approach to examine the issue to provide a more holistic understanding of the binge-watching phenomenon and contribute to the new media scholarship.

Acknowledgement

The authors would like to extend their heartfelt gratitude to the reviewers for their feedback.

Conflict of Interest

The author(s) have declared that no competing interests exist.

Author Contribution Statement

All authors contributed to the conception, design, writing, and revision of the manuscript.

Funding

This research received no external funding.

Ethics Statements (Times New Roman, Bold, Font 11)

Our publication ethics follow The Committee of Publication Ethics (COPE) guideline.

References

- Aghababian, A. H., Sadler, J. R., Jansen, E., Thapaliya, G., Smith, K. R., & Carnell, S. (2021). Bingewatching during COVID-19: Associations with stress and body weight. *Nutrients*, *13*, 3418. https://doi.org/10.3390/nu13103418
- Al-Samarraie, H., Bello, K. A., Alzahrani, A. I., Smith, A. P., & Emele, C. (2021). Young users' social media addiction: Causes, consequences and preventions. *Information Technology & People, ahead-of-print* (ahead-of-print). https://doi.org/10.1108/itp-11-2020-0753
- Annalect. (2014, July). *The impact of binge-viewing*. Retrieved from https://www.slideshare.net/asmolick/annalect-primary-research-the-impact-of-binge-viewing-final-7-102014
- Apuke, O. D. (2017). Quantitative research methods: A synopsis approach. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, 6(10), 40-47. doi:10.12816/0040336
- Arditi, D. (2021). Streaming TV: The golden age of TV and flow interrupted. *Streaming Culture (Society Now)*, Emerald Publishing Limited, Bingley, 81-101. https://doi.org/10.1108/978-1-83982-768-620210008
- Babbie, E. R. (2020). *The practice of social research* (15th ed.). Cengage Learning.
- Balakrishnan, J., & Griffiths, M. D. (2017). Social media addiction: What is the role of content in YouTube?. *Journal of Behavioral Addictions*, 6(3), 364-377.
- Bilbil, E. T. (2018). Methodology for the regulation of Over-the-Top (OTT) services: The need of a multi-dimensional perspective. *International Journal of Economics and Financial Issues*, 8(1), 101-107.
- Bougie, R., & Sekaran, U. (2019). *Research methods for business: A skill building approach* (8th ed.). New Jersey: John Willey and Sons, Inc.

- Boursier, V., Musetti, A., Gioia, F., Flayelle, M., Billieux, J., & Schimmenti, A. (2021). Is watching TV series an adaptive coping strategy during the COVID-19 pandemic? Insights from an Italian community sample. *Frontiers in Psychiatry*, *12*, 599859. doi: 10.3389/fpsyt.2021.599859
- Brailovskaia, J., Schillack, H., & Margraf, J. (2020). Tell me why are you using social media (SM)! Relationship between reasons for use of SM, SM flow, daily stress, depression, anxiety, and addictive SM use–An exploratory investigation of young adults in Germany. *Computers in Human Behavior*, 113, 106511.
- Brzeski, P. (2020, April 20). Netflix Consumption Surges 115 Percent in Southeast Asia Amid Virus Lockdowns. Retrieved from https://www.hollywoodreporter.com/business/business-news/netflix-consumption-surges-115-percent-southeast-asia-virus-lockdowns-1291075/
- Camilleri, M., & Falzon, L. (2020). Understanding motivations to use online streaming services: Integrating the technology acceptance model (TAM) and the uses and gratifications theory (UGT). Spanish Journal of Marketing (ESIC), 25(2), 217-238. https://doi.org/10.1108/SJME-04-2020-0074
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652-661.
- Castro, D., Rigby, J. M., Cabral, D., & Nisi, V. (2021). The binge-watcher's journey: Investigating motivations, contexts and affective states surrounding Netflix viewing. *The International Journal of Research into New Media Technologies*, 27(1), 3-20.
- Cova, B., Caru, A., & Cayla, J. (2018). Re-conceptualizing escape in consumer research. *Qualitative Market Research: An International Journal*, 21(4), 445-464.
- D'Arienzo, M. C., Boursier, V., & Griffiths, M. D. (2019). Addiction to social media and attachment styles: A systematic literature review. *International Journal of Mental Health and Addiction*, 17(4), 1094-1118.
- Elmashhara, M., & Soares, A. (2019). The impact of entertainment and social interaction with salespeople on mall shopper satisfaction. *International Journal of Retail & Distribution*, 47(2), 94-110.
- Flayelle, M., Maurage, P., Karila, L., Claus, V., & Billieux, J. (2019). Overcoming the unitary exploration of binge-watching: A cluster analytical approach. *Journal of Behavioral Addiction*, 8(3), 586-602. doi:10.1556/2006.8.2019.53
- Gangadharbatla, H., Ackerman, C., & Bamford, A. (2019). Antecedents and consequences of binge-watching for college students. *First Monday*, 24(12) http://dx.doi.org/10.5210/fm.v24i12.9667
- Granow, V. C., Reinecke, L., & Ziegele, M. (2018). Binge-watching and psychological well-being: Media use between lack of control and perceived autonomy. *Communication Research Reports*, 35(5), 392-401. https://doi.org/10.1080/08824096.2018.1525347
- Hair, J., Black, W., Babin, B., & Anderson, R. (2018). *Multivariate data analysis* (8th ed.). Cengage Learning EMEA.
- Haridakis, P. M., & Rubin, A. M. (2005). Third-Person Effects in the Aftermath of Terrorism. *Mass Communication and Society*, 8(1), 39–59. https://doi.org/10.1207/s15327825mcs0801_4
- Hofmann, W., Reinecke, L., & Meier, A. (2017). The Routledge handbook of media use and wellbeing: International perspectives on theory and research on positive media effect, 211-222.
- Hou, Y., Xiong, D., Jiang, T., Song, L., & Wang, Q. (2019). Social media addiction: Its impact, mediation, and intervention. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 13(1), http://dx.doi.org/10.5817/CP2019-1-4

- Jarzyna, C. L. (2021). Parasocial interaction, the COVID-19 quarantine, and digital age media. *Human Arenas*, 4, 413–429. https://doi.org/10.1007/s42087-020-00156-0
- Jenner, M. (2016). Is this on TV? On Netflix, TVIII, and binge-watching. *New Media and Society, 18*(2), 257-273. https://doi.org/10.1177/1461444814541523
- Jr, K. M., & Rubenking, B. (2019). Go long or go often: Influences on binge-watching frequency and duration among college students. *Social Sciences*, 8(1), 10. https://doi.org/10.3390/socsci8010010
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The Public Opinion Quarterly*, 37(4), 509-523.
- Kircaburun, K., Alhabash, S., Tosuntaş, Ş. B., & Griffiths, M. D. (2020). Uses and gratifications of problematic social media use among university students: A simultaneous examination of the big five of personality traits, social media platforms, and social media use motives. *International Journal of Mental Health and Addiction*, 18(3), 525–547. https://doi.org/10.1007/s11469-018-9940-6
- Kottasz, R., Bennett, R., & Randell, T. (2019). Post-series depression: Scale development and validation. *Arts and the Market*, 9(2), 132-151.
- Kumar, S., Goyal, S., Kaur, E., & Bansal, T. (2021). Study of relationship between binge-watching and motivation for binge-watching during Covid-19. *Journal of Research in Humanities and Social Science*, 9(5), 5-13.
- Leppink, E., Odlaug, B., Lust, K., Christenson, G., & Grant, J. (2016). The young and the stressed: Stress, impulse control, and health in college students. *The Journal of Nervous and Mental Disease*, 204(12), 931-938. doi: 10.1097/NMD.000000000000586.
- Lim, I. (2020, April 01). MCO: Malaysians stuck at home give Netflix, Tonton biggest traffic growth rates against competitors. Retrieved from https://www.malaymail.com/news/malaysia/2020/04/01/mco-malaysians-stuck-at-home-give-netflix-tonton-biggest-traffic-growth-rat/1852432
- Martins, M. A., & Riyanto, S. (2020). The effect of user experience on customer satisfaction on Netflix streaming services in Indonesia. *International Journal of Innovative Science and Research Technology*, 5(7), 573-577.
- Matrix, S. (2014). The Netflix effect: Teens, binge-watching, and on-demand digital media trends. *Jeunesse: Young People, Texts, Cultures, 6*(1), 119-38.
- McCarriston, G. (2017, March 11). 58% of Americans Binge-Watch TV Shows. Retrieved from yougov: https://today.yougov.com/ topic / lifestyle / articles-reports / 2017/09/13 / 58-americans-binge-watch-tv-shows
- Moody, R. (2020, July). *Netflix subscribers and revenue by country*. Retrieved from Comparitech: https://www.comparitech.com/tv-streaming/netflix-subscribers/
- Moore, A. E. (2015, July 23). Binge-watching: Exploring the relationship of binge-watched television genres and colleges at Clemson University. *Graduate Research and Discovery Symposium (GRADS)*.

 138. https://tigerprints.clemson.edu/grads_symposium/138 *Graduate Research and Discovery Symposium*, 138.
- Moore, D. S., Notz, W. I., & Flinger, M. A. (2013). *The basic practice of statistics* (6th ed.). New York, NY: W. H. Freeman and Company.
- Panda, S., & Pandey, S. C. (2017). Binge-watching and college students: Motivations and outcomes. *Young Consumers*, 18(4), 425–438. https://doi.org/10.1108/YC-07-2017-00707

- Pang, A. (2014, February 13). *In defense of binge-watching*. Retrieved from slate: http://www.slate.com/articles/technology/future tense/2014/02/is binge-watching _the _new_ season_of_house_cards_bad_for_you.html.
- Piehler, R., Schade, M., Kalmer, B., & Burmann, C. (2019). Consumers' online brand-related activities (COBRAs) on SNS brand pages. *European Journal of Marketing*, 53(9), 1833-1853.
- Pittman, M., & Sheehan, K. (2015). Sprinting a media marathon: Uses and gratifications of bingewatching television through Netflix. First Monday, 20(10) http://dx.doi.org/10.5210/fm.v20i10.6138
- Rahman, K. T., & Arif, M. Z. U. (2021). Impacts of Binge-Watching on Netflix during the COVID-19 pandemic. *South Asian Journal of Marketing*, *2*(1), 97-112.
- Roscoe, J. T. (1975). Fundamental research statistics for the behavioural sciences. New York: Holt, Rinehart and Winston, Inc.
- Rubenking, B., Sandoval, J. A., & Rister, J. S. (2018). Defining new viewing behaviours: What makes and motivates TV Bing-watching? *International Journal of Digital Television*, *9*(1), 69-85.
- Rubin, A. M. (1983). Television uses and gratifications: The interactions of viewing patterns and motivations. *Journal of Broadcasting*, 27(1), 37-51. https://doi.org/10.1080/08838158309386471
- Ruggiero, R. (2000). Uses and gratifications theory in the 21st century. *Mass Communication & Society,* 3(1), 3-37. https://doi.org/10.1207/S15327825MCS0301_02
- Sadana, M., & Sharma, D. (2021). How over-the-top (OTT) platforms engage young consumers over traditional pay television services? An analysis of changing consumer preferences and gratification. *Young Consumers*, 22(3), 348-367. https://doi.org/10.1108/YC-10-2020-1231
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education Limited.
- Siddiqi, A. (2014). An observatory note on tests for normality assumptions. *Journal of Modelling Management*, 9(3), 290-305. doi: 10.1108/JM2-04-2014-0032
- Sigre-Leirós, V., Billieux, J., Mohr, C., Maurage, P., King, D. L., Schimmenti, A., & Flayelle, M. (2022). Binge-watching in times of COVID-19: A longitudinal examination of changes in affect and TV series consumption patterns during lockdown. *Psychology of Popular Media*. Advance online publication. https://doi.org/10.1037/ppm0000390
- Silverman, R. E., & Ryalls, E. D. (2016). Everything is different the second time around: The stigma of temporality on orange is the new black. *Television & New Media*, 17(6), 520–533. http://dx.doi.org/10.1177/1527476416647496
- Stanimirovic, U. (2020, July 15). *How Live Streaming Is Changing the World as We Know It*. Retrieved from brid.tv: https://www.brid.tv/how-live-streaming-is-changing-the-world-as-we-know-it/
- Starosta, J. A., & Izydorczyk, B. (2020). Understanding the phenomenon of binge-watching: A systematic review. *International Journal of Environmental Research and Public Health*, 17(12), 4469. doi: 10.3390/ijerph17124469
- Steiner, E., & Xu, K. (2020). Binge-watching motivates change: Uses and gratifications of streaming video viewers challenge traditional TV research. *Convergence: The International Journal of Research into New Media Technologies*, 26(1), 82–101
- Subramanian, A., Seetharaman, A., & Maddulety, K. (2020). Critical review of binge-watching behaviour through the prism of Vroom's Expectancy Theory. *Academy of Marketing Studies Journal*, 24(3), 1-11.

- Sundar, S., & Limperos, A. (2013). Uses and grats 2.0: New gratifications for new media. *Journal of Broadcasting & Electronic Media*, 57(4), 504-525.
- Tiffiller, A. (2017). Moviegoing in the Netflix age: Gratifications, planned behaviour, and theatrical attendance. *Communication & Society*, 30(4), 27-44.
- Trouleau, W., Ashkan, A., Ding, W., & Eriksson, B. (2016, August). Just one more: Modeling binge watching behavior. In *Proceedings of the 22nd ACM SIGKDD international conference on knowledge discovery and data mining* (pp. 1215-1224).
- Ulusoy, Ş. G., & Atar, Ö. G. (2020). Reflection of social media addiction on family communication processes. *ADAM AKADEMİ Sosyal Bilimler Dergisi*, 10(2), 425-445 doi: 10.31679/adamakademi.701858
- Wheeler, K. (2020). The Relationships between Television Viewing Behaviours, Attachment, Loneliness, Depression and Psychological Well-Being. (Unpublished Master Dissertation). Georgia Southern University.
- Wiederhold, B. K. (2020). Using social media to our advantage: Alleviating anxiety during a pandemic. *Cyberpsychology, Behavior and Social Networking*, 23(4), 197–198. https://doi.org/10.1089/cyber.2020.29180.bkw
- Wong, A., Ho, S., Olusanya, O., Antonini, M. V., & Lyness, D. (2021). The use of social media and online communications in times of pandemic COVID-19. *Journal of the Intensive Care Society*, 22(3), 255–260. https://doi.org/10.1177/1751143720966280

Appendix A

Entertainment

I like to watch Netflix because it makes me happy.

I watch Netflix to keep myself entertained.

I feel relaxed when I watch Netflix.

Watching Netflix is an enjoyable experience for me.

I am interested in watching Netflix.

Social Interaction

I watch Netflix because I want to feel engaged with my friends.

I watch Netflix with my friends and family.

I watch Netflix because it makes me less lonely.

I watch TV shows or movies on Netflix because of the discussion on social media.

I watch Netflix because I want to post the TV/ movie content on my social media account to gain the attention of my friends.

Escape

I watch Netflix because it transports me to another world.

I can forget about schoolwork when I watch Netflix.

I watch Netflix because it can temporarily get away from the problems.

I watch Netflix because it can help me solve some daily worries.

I watch Netflix after I have experienced a bad day.

Binge-Watching Behaviour

I often watch on Netflix for a longer time than I intended.

I continue to watch Netflix even though sometimes I think I should stop watching it.

I felt guilty as I had wasted a lot of time watching Netflix. (Reverse item)

I spend more time watching Netflix.

I spend a long-time watching Netflix.