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EXAMINING THE EFFECT OF BINGE-WATCHING ON ACADEMIC MOTIVATION AND ACADEMIC PROCRASTINATION IN UNDERGRADUATE STUDENTS IN THE UAE

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Abstract

Binge-watching has led to a growing concern for the undergraduate students' academic performance. The increased and easy access to internet and streaming devices has provided an opportunity to college students who consider binge-watching as a gratifying pass time. Recent studies explored various effects of binge-watching on adults, teenagers, and students; nevertheless, the current study focuses on determining empirical predictors of academic performance as a result of binge-watching. The data used in the research was manually collected based on a survey administered to college students (N = 150) and analysed using the MANOVA and ANOVA tests. The BWESQ instrument was used for measuring binge-watching levels. On the other hand, procrastination and academic motivation were measured using the procrastination scale and motivation engagement scale (MES), respectively. The outcome of the study shows that binge-watching intensity can predict academic motivation and academic procrastination in college students. Participants with high binge-watching behaviours demonstrated higher procrastination tendencies (F (1,147) = 7.891, p = 0.006). Conversely, high binge-watchers showed low academic motivation, which is a negative effect on the academics of the student (F (2, 146) = 4.326, p = .015). Findings suggest that a mixed-method approach would be appropriate for future studies on binge-watching effects on the academics of college students. Moreover, researchers should re-conceptualize academic performance by including both academic procrastination and academic motivation measures in future research.

Keywords Binge watching, academic motivation, academic procrastination, undergraduate students, technology.

INTRODUCTION

Binge-watching is a crucial problem and can be defined as serial viewing of a program's episode in rapid succession (Gangadhabatla, Ackerman, & Bamford, 2019; Merill & Rubeking, 2019; Rubenking et al., 2018; Walton-Pattison, Dombrowski, & Presseau, 2018). Binge-watching is among the many leisure activities that compete for students' time and distract them from their studies.

The increased internet connectivity and the emergence of new technologies have given multiple opportunities for students to distract and disengage from their academics. Social science theories of mass communication affirm that media could shape and affect many aspects of decision-making (Morgan, 2017). Binge-watching is among the emerging concepts that gained attention of

many researchers because of its substantial effects on individuals, including students. A recent survey revealed that almost 90% of millennials engage in binge-watching, with college students accounting for a sizable share (Gangadharbatla et al., 2019; Merill & Rubenking, 2019). A Harris Interactive Poll (2014) suggested that younger audiences had a higher tendency of bingeing compared to the general population. Walton-Pattison et al. (2018) found that young people binge-watched an average of 1.42 days per week. A study conducted by Chambliss et al. (2017) revealed that binge-watching, especially on Netflix, had a substantial effect on students' academics. Likewise, a survey on Netflix viewers by West (2014) showed that 73% of users had a positive impact on bingeing. The outcome can be associated with the urge to watch many episodes in succession. Studies have revealed several antecedents of binge-watching, including self-regulatory deficits, make it challenging for students to stay on one task (Flayelle, Maurage, & Billieux, 2017; Sung, Kang, & Lee, 2018; Mikos, 2016; Merrill & Ribenking, 2019).

Technological advancements have provided opportunities for people to watch television and other media at any moment using different devices. As such, binge-watching has grown into a phenomenon across the globe (Merill & Rubenking, 2019). The digitally active population engages in binge-watching, especially during its free time. However, many millennials experience fear of missing out (FOMO) in which they believe that watching a program that others are watching at the same time would bring positive rewards (Matrix, 2014).

Being a new concept, binge-watching requires attention pertinent to its influence on students' academics. In the UAE, a recent study (Samoglu & Al Subaihi, 2016) revealed that binge-watching is a growing trend with the introduction of streaming services such as Netflix and other such services. A number of studies have tried to establish the motivations for binge-watching. However, inadequate attention has been given to the possible effects of the habit and the ultimate effect on students' academics was inconclusive. Therefore, to fill the research gap, this study explores the influence of binge-watching on academic motivation and procrastination. Finally, understanding the relationship could help students in regulating their binge-watching behaviors that affect their academics adversely.

The continued growth and use of modern technologies create many opportunities for academic success but also a multiplicity of challenges. New technologies could lead to destructive behaviors, including binge-watching, among students. Building from the previous literature, binge-watching is expected to increase as technologies continue evolving significantly. With this in mind, it is substantial to understand the ways binge-watching affects college students' motivation. Moreover, this approach remains briefly addressed in the literature emphasizing students in the Middle East. Problematizing binge-watching in the context of the UAE could greatly help student affairs practitioners in responding promptly through the implementation of appropriate guidelines. The primary focus of this research is to investigate the effect of binge-watching on academics. In particular, the study aims to analyze the extent to which binge-watching influences students' motivation and procrastination tendencies.

LITERATURE REVIEW

Students engage in two forms of leisure while at college. On the one hand, they could participate in constructive recreation, including sports and volunteer work, which contributes to skill development and demands a long-term commitment. Conversely, they could also join in pleasurable or casual leisure that requires minimal

skills, for instance, socialization and tv watching (Dandamundi & Sathiyaseelan, 2018). A series of recent studies has indicated the impact of technology, there has been very little research on the academic outcomes of binge-watching. There exists a considerable body of literature on psychological outcomes among young adults, little is known regarding the relationship between binge-watching, academic motivation, and academic procrastination. The gap could be explained by the extensive focus on non-student cohorts in most studies.

Gratification is among the psychological aspects that have received attention. In their research, Shim et al. (2018) stressed that video streaming offered instant gratification. Video streaming services from Hulu, Amazon, and Netflix have become readily available to students and serve as a significant source of entertainment (Chao, Hegarty, & Fray, 2016; Morgan, 2017). Although these studies highlight the effects on gratification, however, they fail to highlight the importance of gratification on undergraduate students' academic performance. Eventually, additional studies to understand more completely the key tenets of gratification on college students' academic performance, in particular of the UAE students, are required.

Ahmed (2017) focused on the association between binge-watching, loneliness, and depression. The research was based on a survey of 260 UAE residents, to reveal that high-binge watchers tended to be more depressed and lonelier. Tefertiller and Maxwell (2018) also advocated high levels of depression and loneliness among college students who engaged in binge-watching habits. It is important to mention that Ahmed (2017) relied on the study based on the general UAE resident (general population), nevertheless, the results may not be applicable amongst UAE college students. Moreover, the previous study by Ahmed (2017)

cannot be considered conclusive because the study has not emphasized on how it could affect academics. In conclusion, a more systematic and theoretical analysis is required to reveal the link between depression, loneliness, binge-watching, and academic outcomes.

Binge-watching could also affect students' academics indirectly. Studies have shown some relationship between binge-watching and mental health (Umesh & Bose, 2019). Features such as sleep, fatigue, mood disturbance, and insomnia have been reported widely as prevalent among chronic binge-watchers (Exelmans & Van den Bulk, 2017; Sung, Kang, & Lee, 2015; Umesh & Bose, 2019). Students with poor quality sleep are likely to experience daytime fatigue and mood disturbances, which may affect academic performance. Adequacy and quality of sleep are considered crucial because of the positive effect on memory processing. Okano and colleagues (2019) tracked 100 college students and found that better quality and consistency of sleep led to better grades. Likewise, Maheshwari and Shaukat (2019) found that poor sleep quality affected different dimensions of academic performance adversely. From the context of this study, it could be argued that binge-watchers have poor sleep quality. In turn, the daytime fatigue they experience reduces their academic motivation, which may lead to the procrastination of their schoolwork. As it is noted earlier, more work by introducing a new approach is therefore needed for research among UAE students to establish the effects that binge-watching may produce on their academics.

Binge-watching could likewise be associated with escapism (Rubenking et al., 2018), which could act as psychological response to different stimuli. In their study, Jones, Cronin, and Piacentini (2018) associated binge-watching with escapism and narrative transportation. The preoccupation with a program leads to mental investment in a different

world in which a viewer can project his or her concerns, fantasies, or worries without minding about reality. Panda and Pandey (2017) proposed a relationship between high volume TV indulgence and escape from reality. Fear-Of-Missing-Out (FOMO) has also been considered as a psychological predictor of problematic use of new media (Franchina et al., 2018). On this note, Umesh and Bose (2019) discussed the existence of FOMO among many binge-watchers. The anxiety associated with FOMO may lead to an increased desire to engage in binge-watching. Other scholars have argued that the effect of binge-watching on memory retention. In their study, Horvath, Horton, Lodge, and Hattie (2017) found binge-watching as a new "normal" among many new media consumers. Although marathon watching creates memories, these memories disappear within a short time. In the context of academics, it could be assumed that students will lose any schoolwork concepts acquired from binge-watching within a short period. Although there are many studies that provide crucial insights, the research in academics remains limited. There are key questions and notions that are still not discussed in the literature which opens a gap for further exploration in the context of students.

Binge-watching and Academic Outcomes

The competition between leisure activities and academic work may lead to adverse outcomes. Cheong, Shuter, and Suwinyattichaiporn (2016) identified the emerging digital media as a cause of substantial distractions. Likewise, Chambliss et al. (2017) identified binge-watching as a leading problematic distraction that affected students' success using the data of liberal arts college students in the mid-Atlantic region. Based on a comparison of 12 potentially disruptive activities, the authors found that more than 60% of the disruptions were associated with Netflix binge-watching. Additionally, the study revealed that

males' academic performance was more compromised compared to females. A different study in the Institute of Applied Psychology at Jagiellonian University, Poland, also claimed a substantial relationship between binge-watching and loss of motivation among many individuals entering early adulthood (Starosta, Izydorczyk, & Lizynczyk, 2019). Likewise, Dandamundi and Sathiyaseelan (2018) found a negative relationship between GPA and excessive watching. As studies can be considered a first step towards a more profound understanding of binge-watching on academic confidence, performance, and honesty within college students.

Moreover, binge-watching may also lead to procrastination of academic work. The previous studies (Dandamundi & Sathiyaseelan, 2018) reveal that binge-watching is usually the most problematic to the time students would spend on academics. Consequently, many of them tend to postpone the completion of their assignments. For example, recent research (Vaterlaus & colleagues, 2019) suggested that students used binge-watching for avoidant purposes ended with the procrastination of schoolwork. In this view, the procrastination could motivate them to engage in academic dishonesty, including cheating or plagiarizing others' homework. Umesh and Bose (2019) advanced the same argument regarding the experience of FOMO among students. The anxiety from missing out leads to frequent checking of Internet-based devices to view episodes others have watched. The habit could be associated with multi-tasking (Pittman & Steiner, 2019). In addition to this, the susceptibility to multitask impairs cognitive processing for other tasks, which may be detrimental to one's academics. Indeed, engaged binge-watchers view their favorite programs regularly and integrate the activity in their daily routines. According to Schweidel and Moe (2016), the immersion to this alternate reality inhibits them from attaining other motives other

than the feelings of gratification from watching, which could result in procrastination.

Interestingly, some studies have also tried to relate to binge-watching and career choice. Primarily, the study of the relationship emphasizes the effects of social learning through observing others' behaviors. Based on the Social Learning Theory, Morgan (2018) argued that binge-watching intensified individual's wishful identification with the personality traits of their favorite characters. However, the findings suggested that binge-watching habits do not predict individuals' academic motivation pertinent to the selection of one's career. Two hypotheses emerge from the review of the existing literature.

H1: An increase in binge-watching would significantly increase academic procrastination among college students

H2: An increase in binge-watching would significantly decrease academic motivation among college students.

METHODOLOGY

Research Design

The study used a quantitative and non-experimental model. In the course of this study, a quantitative design played an important role as it is considered appropriate in studies that seek to establish a predictive relationship between variables. A number of recent studies (for example, Morgan, 2017; Pittman & Steiner, 2019; Shim et al., 2018) on binge-watching have been carried out with the quantitative methods to identify correlations between different variables. The extensive use of the design in other studies also justifies its applicability in the context of the current study. The study relied on a specific set of variables. Binge-watching is the independent variable, on the other hand, procrastination and academic motivation are the dependent variables. As such, the design enabled the identification of the relation between binge-watching, motivation, and procrastination.

Study Participants

There were one hundred and fifty (150) undergraduate students from Middlesex University, Dubai included in this sample. These students were recruited using convenience sampling. Among them, 102 were female and 48 male students. The quality of the data was enhanced by recruiting students from different courses to ensure that the sample is heterogeneousness. The sample was considered appropriate for the quantitative design because it would provide the generalizability of the findings. The average age of the students was 19.75 years.

Table 1: Study Participants descriptives

	N	Minimum	Maximum	Mean	Std. Deviation
Gender	150	1	2	1.32	.468
Age	150	17	28	19.75	1.672
Attendance	150	1	3	1.50	.632
Ethnicity	150	1	5	1.75	1.316
ST_YR	150	1	4	2.99	1.007
Valid N (listwise)	150				

Regarding gender, the female respondents comprised 68% while the male comprised 32% of the whole dataset. For the age variables, descriptive statistics showed that the age of the

respondents ranged from 17 years to 28 years. With regard to attendance to lectures/seminars/workshops, the variable was grouped into three categories, the high attendance, the average attendance, and the below-average attendance. The high attendance consisted of 57.3%, average attendance at 35.3%, and below-average attendance with 7.3%. For ethnicity variables, Asians had consisted of 72.7%; Middle/eastern/North African 14.7% and Caucasian 3.3%. For the year of study, the highest proportion of the respondents was from 3rd years, representing 43.3% of the sample, followed by 1st years with 30.7% and least was IFP making a total of 6.7%.

Material/Measures

A categorical demographic survey (Appendix A) was used in the collection of demographic information, including age, gender, ethnicity, year of study, and the frequency of attending lectures. Besides, standardized and validated questionnaires were used in the collection of data. Based on the hypothesis, three tools were applied: modified Binge-Watching Engagement and Symptoms Questionnaire (BWESQ) (Appendix B), the Procrastination Scale (Appendix C), and the Motivation and Engagement Scale (MES) (Appendix D).

Modified BWESQ

The questionnaire consists of 51 items divided into 6-item subscales (Flayelle et al., 2019) with a 4-point Likert-type scale, "I don't sleep as much as I should because of how much time I spend watching tv series". The tool has excellent psychometric properties with internal consistency (Cronbach's α) ranging from 0.63 to 0.83 for the subscales. The scores were calculated by summing up the responses which ranged from 4 to 24.

Procrastination Scale

The questionnaire was adapted to a 16-item tool developed by Tuckman (1991), with a 4-point Likert-type scale. Some of the questions include, "I needlessly delay finishing jobs, even when they're essential," "When I have a deadline, I wait until the last minute," and "I manage to find an excuse for not doing something." The scores were acquired by summing up the responses to each item and range from 16 to 64. As well as three questions were reversed scored, questions,7,12,14,16. The higher scores are associated with lower levels of procrastination. Ozer, Sackers, and Tuckman (2013) tested the validity and reliability of the original tool and found the properties as excellent (Cronbach's alpha = .86).

Motivation and Engagement Scale (MES)

The tool is a 44-item questionnaire with a 7-point Likert-type scale ranging from 1 for "strongly disagree" to 7 for "strongly agree" (Martin, 2010). Some of the sample questions include: "If I can't understand my university/college work at first, I keep going over it until I do;" "I feel very pleased with myself when I really understand what I'm taught at university/college;" and "When I study, I usually study in places where I can concentrate." The responses were norm-referenced and scored on a benchmark score of 100. A high score would depict high levels of motivation in a student.

Research Procedure

The study had to observe ethical considerations during the data collection process. In this case, the students were informed about the consent formed which had essential information regarding the confidentiality of data and the risk of harm to the participants (Acevedo Perez et al., 2017). It assured the participants that all information during data collection would be kept confidential and unidentified to ensure anonymity. Moreover, it communicated to the participants about their freedom to participate and withdraw from the study without penalties. The data compilation was performed at Middlesex University, Dubai, in

Knowledge Village Park. In the collection of data, the students were requested to fill the questionnaire during their free time. Others were approached while sitting in groups outside the campus. In some cases, the investigator (the person who was collecting data) requested some lecturers to grant permission to assemble data by having a ten minute break during lecture. The investigator handed over the consent form to the willing students and requested them to fill. As soon the students brought back the signed consent form, a questionnaire form was forked over to the individual student. After the completion of the questionnaire, the participants were debriefed and handed a copy of the session.

Statistical Data Analysis

All the statistical analyses were performed using multivariate analysis of variance (MANOVA) on SPSS. According to Nimon, Zientek, and Kraha (2018), MANOVA is considered appropriate when predicting the dimensions of differences between and within groups. The technique was considered suitable for selection because it would enable the identification of relative contributions of group membership on the outcome variables

Before conducting the statistical analysis, it was vital to evaluate the internal consistency of the data. The internal consistency or the reliability of the user data was tested using Cronbach's alpha. This test is used when the questionnaire used in research has Likert questions. In this study, the focus is to find out whether the scale used is reliable. In addition to this, there were three categories of questionnaires, the BWESQ scale, procrastination scale, and motivation and engagement scale, whose reliability was tested independently. In the analysis, the results presented below will be guided by the following criteria: above 0.9 is excellent; 0.8-0.9 is good; 0.7 - 0.8 is acceptable; 0.6 – 0.7 is Questionable; 0.5 – 0.6 is Poor and less than 0.5 is unacceptable. The three

questionnaire scale tests are presented below:

BWESQ Questionnaire Scale: In this section, the reliability tests for the Binge-watching Engagement and Symptoms Questionnaire (BWESQ). The Cronbach's Alpha is 0.812, which, based on the above criteria, is good. The 'Item-Total Statistics' table (Appendix E) presents the "Cronbach's Alpha if Item deleted." This column presents the value that Cronbach's alpha would be if that particular item were deleted from the scale. From the table, deleting any of the questions would result in a lower Cronbach's alpha. Hence, it was concluded that this scale was reliable.

Motivation and Engagement Scale (MES): In this section, reliability tests for the Motivation and Engagement Scale (MES) were done. For analysis, only the positive motivation data was applied. Cronbach's alpha was found to be 0.841, which, based on the above criteria, is good. The 'Item-Total Statistics' table (Appendix F) presents the "Cronbach's Alpha if Item deleted." This column indicates the value that Cronbach's alpha would be if that particular item were removed from the scale. From the table, deleting any of the questions, apart from question MES_35 and MES_42, would result in a lower Cronbach's alpha. However, deleting these questions would only result in very little increase in already good reliability. Finally, it was decided to retain the question and that the scale was reliable.

Procrastination scale Tuckman (PST): In the reliability test of the Procrastination scale Tuckman (PST), Cronbach's alpha was found to be 0.878, using the above criteria is significant. The 'Item-Total Statistics' table (Appendix G) presents the "Cronbach's Alpha if Item deleted." This column shows the value that Cronbach's alpha would be if that particular item were eliminated from the scale. From the table, removing any of the questions would result in a lower Cronbach's alpha. Therefore, it was concluded that this scale was reliable.

Study Results

MANOVA Analysis

The results demonstrate two things. First, whether binge-watching would significantly increase academic procrastination among college students. Secondly, whether an increase in binge-watching would significantly decrease academic motivation among college students.

Table 2: Manova Descriptive Statistics

	Low Binge Watching			High Binge Watching		
	n	*M*	*SD*	*n*	*M*	*SD*
Academic procrastination	124	41.2177	7.65258			
Positive Motivation						

Descriptive Statistics				
	BWESQ_Group	Mean	Std. Deviation	N
Positive Motivation	Low	67.7907	11.21671	86
	High	67.6032	10.40090	63
	Total	67.7114	10.84367	149
Procrastination Total with R	Low	41.8721	7.75628	86
	High	38.5397	6.65225	63
	Total	40.4631	7.47114	149

From the above table, key findings emerge: the descriptive statistics table shows the student with Low Binge-Watching has a higher mean value (41.872) of procrastination as compared to the mean value (38.539) of with Higher Binge Watching. However, the respondents with Low Binge-Watching have almost equal average value of positive motivation (67.79), to that of the respondents with High Binge-Watching (67.603). This is an important finding in the understanding of procrastination.

The other test that was important in this MANOVA is the Box's Test of Equality of Covariance Matrices, which evaluated the assumption of homogeneity of covariance across holds. The results obtained were Box's = 2.467, F = 0.810, Sig = 0.488 respectively (Appendix I). It applied the criterion of $p<0.001$. From these results, the Box' M was not significant because of the p-value (Sig. = 0.488 > 0.001). Together, the present findings confirm that there is no significant difference between the covariance matrices. Therefore, the MANOVA assumption is not violated, and it is appropriate to use the Wilk's Lambda test.

Table 3: Multivariate Test Table

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.982	3963.809[b]	2.000	146.000	.000	.982
	Wilks' Lambda	.018	3963.809[b]	2.000	146.000	.000	.982
	Hotelling's Trace	54.299	3963.809[b]	2.000	146.000	.000	.982
	Roy's Largest Root	54.299	3963.809[b]	2.000	146.000	.000	.982
BWESQ_Group	Pillai's Trace	.051	3.950[b]	2.000	146.000	.021	.051
	Wilks' Lambda	.949	3.950[b]	2.000	146.000	.021	.051
	Hotelling's Trace	.054	3.950[b]	2.000	146.000	.021	.051
	Roy's Largest Root	.054	3.950[b]	2.000	146.000	.021	.051
a. Design: Intercept + BWESQ_Group							
b. Exact statistic							

The results for MANOVA were administered to examine the effect of binge-watching on academic motivation and procrastination. The results of Wilks' Lambda were found to be significant F (2, 146) = 3.950, p = .021, $\eta2$ = .051. Since the findings from MANOVA were found to be significant, a follow-up ANOVA was conducted to evaluate if binge-watching significantly predicted procrastination or motivation.

The follow-up one-way ANOVA (Appendix I) demonstrated that Binge-Watching has a highly statistically significant effect on procrastination (F (1, 147) = 7.555; p = .007; partial $\eta2$ = .049, but not on positive motivation (F (1, 147) = 0.11; p = .917; partial $\eta2$ = .000. The data illustrates that students who had high binge-watching had significantly lower procrastination scores (M =38.54) than students with low binge-watching (M = 41.87).

Discussions, Conclusions & Recommendations

The primary goal of this research was to determine if there is an association between binge-watching and academics in college students. The research questions directed the emphasis of the investigation's efforts, and the outcomes demonstrate the insightful literature concerning how binge-watching influences the student's academic performance, especially in procrastination levels and academic motivation.

The first hypothesis was to investigate if there was a statistical significance between binge-watching and academic procrastination among college students. The findings of the study revealed sufficient evidence of binge-watching among college students in the UAE. Binge-watching was

found to positively and significantly influence academic procrastination levels according to the outcomes of this study. The results are aligned to previous research on the effects of binge-watching on academics (Chambliss et al., 2017; Dandamudi, 2018; Vaterlans, 2019; Umesh & Bose, 2019). While the survey data indicates that high binge-watchers had higher academic procrastination levels, it does not account for the academic-related motivations for binge-watching. Nevertheless, prior studies find FOMO experience (Umesh & Bose, 2019) and avoidance of tasks (Vaterlaus et al., 2019) as some of the motivations for academic procrastination. Besides, the research outcomes fail to illustrate how academic procrastination levels affect the student's academic performance. Findings from previous research suggest the postponement of assignments and reading time (Dandamudi & Sathiyaseelan, 2018), and academic dishonesty (Dandamudi & Sathiyaseelan, 2018; Vaterlaus et al., 2019) as some of the effects of academic procrastination that contribute to adverse performance. Overall, binge-watching among college students largely influences academic procrastination, which potentially translates to adverse educational outcomes.

The second hypothesis was to examine if binge-watching statistically influenced academic motivation in college students. In the case of determining if there is a statistically significant relationship between binge-watching and academic motivation, the outcomes of the investigation suggest there is a negative relationship. The findings are analogous to previous research on binge-watching and loss of motivation in people entering adulthood (Starosta et al., 2019). Umesh and Bose (2019) showed that gratification of watching takes preference over completing academic tasks at the corresponding moment, which can be considered a reduction in academic motivation. The daytime fatigue and mood disturbances resulting from poor quality

sleep patterns that binge-watching students exhibit (Shaukat, 2019), may further explain the evidence of low academic motivation among the tested sample of college students. Nevertheless, the investigation fails to account for how low academic motivation impacts the educational outcomes of the participants. Pittman and Steiner (2019) showed that undergraduate students with low academic motivation pay relatively less concentration on academic activities and tasks, which may lead to lower academic scores. The findings of this study are further supported by Merill and Rubenking (2019), who demonstrated that enjoying binge-watching led to higher frequencies of watching. In contrast, academic activities got less commitment and duration. Generally, an increase in binge-watching leads to reduced academic motivation, which may adversely affect academic performance.

Limitations and recommendations for future research

The current investigation has several limitations that need to be addressed. Initially, the population is not representative of binge-watching among college students. The study included a larger population of third year students while there is no indication that third year students were the most significant binge-watchers in the corresponding university. The research can be improved by first finding out which year of students demonstrate what percentage of binge-watching and recruiting participants as such. Moreover, analysing the differences between gender and year of study groups would have increased the effectiveness of the study outcomes. Including these elements in future studies can improve the generalizability of the study outcomes on study populations.

An additional limitation to this research is the use of a sample from one university and the cross-sectional nature of the study. The sample from one university may not be representative of the

outcomes in another study. Using students from different institutions is vital to obtaining generalizable results for students in the UAE region. Longitudinal research is also highly recommended to monitor the binge-watching behaviour of the students, thereby capturing positive and negative academic motivations for binge-watching patterns and the students' behaviour after binge-watching. To address this limitation and obtain a better understanding of the binge-watching behaviour, further study is needed to use a multiple-methodology approach.

Another limitation of this study is the lack of variables to indicate academic-related motivations for binge-watching, and the effects of academic procrastination, as well as low academic motivation on the actual performance of the students. While prior research shows the likely consequences of academic procrastination on academic achievement, failure to address the impact on this study paints an incomplete picture of the relationship. Further qualitative research on how low academic motivation impacts the academic performance of college students would assist in painting a complete picture. Including the academic motivations leading to binge-watching would also increase the emphasis on academics.

Some of the measures used in this research act as a limitation. Developing more strategic academic outcome measures would significantly help to improve future studies. Prior researchers have utilized various measures to operationalize academic motivation and educational outcomes to promote consistency among investigators. Besides, it would be valuable to study in the light of the causal relationship between academic motivations for binge-watching and academic outcomes. Future research needs to develop and incorporate more suitable and separate measures of these variables to investigate this relationship better.

Finally, more research is required to link academic procrastination levels and academic motivation positively. Future studies should test for moderating or mediating effects of either of the dependent variables on the relationship between binge-watching and the other variable, as well as the relationship between binge-watching and academic success. Qualitative studies can be really fruitful to improve understanding and the impact of these variables with regards to college students.

Implications and Contribution

Generally, the outcomes presented in this research have both theoretical and practical applications. Researchers should re-conceptualize academic outcomes to include measures on academic motivation and academic procrastination. The non-overlapping predictors of these elements of academic performance suggest that other variables explain educational outcome elements.

This investigation also builds upon the theoretical concepts of gratification. Individual gratification plays a vital function in how college students engage in binge-watching. With higher levels of gratification, college students may binge-watch as a type of academic procrastination, which would then engender poor performance in academics. With lower levels of gratification, individuals may reduce engagement in binge-watching as a form of academic procrastination, thereby have moderate effects on their academic outcomes. Besides, higher gratification from binge-watching may cause less concentration on academic tasks due to low motivation, and prompt poor academic results. Less gratification, on the other hand, may lead to increased motivation in completing academic performance. Therefore, these findings can be used by the faculty to develop more gratifying academic tasks compared to binge-watching to encourage the timely completion of the tasks, as well as to avoid binge-watching as a form of academic procrastination.

Moreover, the findings of this study provide the

basis for further research. Qualitative studies would help with providing more insights into the empirical analysis by explaining how the relationship between binge-watching and academic procrastination, and binge-watching and academic motivation affect the overall academic performance of the study. The outcomes of the subsequent studies can then be used by higher learning institutions to develop countermeasures that can help minimize binge-watching among college students.

CONCLUSION

This investigation managed to achieve exciting and significant steps on the latest widespread, yet under-researched phenomenon of binge-watching on college students' academic outcomes. The investigations' primary findings were that levels of binge-watching could predict academic procrastination levels and academic motivation among college students. It is illustrated that the gratification levels of binge-watching drive the intensity of academic procrastination and academic motivation. Therefore, this insight can explain why college students who binge-watch more frequently procrastinate more often than students who binge-watch less regularly. Higher academic procrastination levels are the products of higher levels of gratification from binge-watching shows, as the individuals find less gratification from engaging in academic tasks. When binge-watching is done alongside academic assignments, satisfaction from binge-watching took preference over the motivation to complete academic tasks. Thus, the more college students engage in binge-watching, the less their academic motivation.

The findings of the study indicate that future research should continue to conceptualize the academic performance as both a measure of academic procrastination and academic motivation as the variables in the study were inadequate predictors of both. Additionally, future studies should adopt the mixed-methodology approach to gain a better understanding of the binge-watching phenomena. The research outcomes also demonstrate that a more diversified sample in terms of higher-level institutions would be vital for future research on the behaviour and its effects on college students.

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