Factors That Influence Binge Watching Behavior

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Abstract:- This research aims to determine the influence of enjoyment, efficiency, and escape on binge-watching behavior. This study uses a quantitative method with a correlational approach to identify the relationships between variables without the influence of extraneous variables. The subjects of this research are consumers who subscribe to OTT video streaming services and engage in watching activities for more than 2 hours in one sitting. The sample size used in this study is 142 respondents with data analysis techniques using SEM-PLS. The results indicate a positive and significant relationship between enjoyment, efficiency, and escape with binge-watching behavior.

Keywords:- Enjoyment; Efficiency; Escape; Binge Watching;

I. INTRODUCTION

The development of digital technology, referred to as new media, has led society to Over The Top (OTT) services. Initially, OTT providers focused on user-generated content in the form of short videos. However, their services have now expanded to include content such as films, drama series, and news produced by television that do not involve satellite transmission and cable networks. The accessibility of information and the combination of OTT formats that can be accessed through various devices have driven the shift from the conventional era to the digital era, where related audiovisual media services have surpassed traditional television broadcasts (Yoo et al., 2020).

OTT services that distribute videos are commonly known as video streaming services. These services can be enjoyed through digital technology on smartphones, tablets, or smart TVs by people from all walks of life globally, regardless of their gender and age. From the baby boomer generation to Generation X, they continue to use smartphones for chatting, social media, video streaming, and shopping (Wulandari and Muzakir, 2020). The emergence of OTT video streaming services has begun to change the landscape of media worldwide. This change has prompted television media users to switch to OTT video streaming services because they can be enjoyed comfortably by customers anytime and anywhere.

OTT video streaming customers have complete control over a new model for consuming audio-visual content, which is evident in binge-watching behavior. As stated by Meriviki (2019), binge-watching is the practice of watching more than one episode of a TV series consecutively at a time determined by the viewer. Another definition provided in

research by Flayelle et al. (2017) describes binge-watching as the activity of watching several episodes of the same TV series in one sitting. This phenomenon of binge-watching is a clear representation of the shift in current media consumption patterns. Behavior has become popular alongside the development of digital video streaming platforms from OTT services like YouTube, TikTok, Netflix, Disney+ Hotstar, and others.

In 2013, Netflix introduced a new way to enjoy television shows, allowing viewers to choose and determine different, continuous content with multiple episodes as desired (Starosta & Izydorczyk, 2020). However, there were earlier instances where people manifested binge-watching as watching several episodes in a marathon format on TV, VHS, DVD, and others. The popularity of binge-watching also increased between 2011 and 2015, ultimately becoming a normal way to consume TV series among the general public. A survey by databoks.katadata.co.id illustrates that Netflix's customer growth accelerated rapidly, from 5 million subscribers in 2012 to over 167 million subscribers by 2020.

As OTT video streaming services become a serious alternative for viewing, it is essential to study binge-watching activities that leverage the potential of streaming via the internet. This phenomenon is particularly evident in Indonesia, which experienced a significant increase in streaming service usage from 2019 to 2021. According to Nielsen (2020), the time spent by Indonesian residents consuming video streaming platforms increased by 58% from the second quarter of 2019 to 2020. Another survey by App Annie, titled State of Mobile 2022, reported that the total time spent by Indonesians watching video streaming surged by 140% in 2021. This phenomenon positions Indonesia as one of the countries with the highest video streaming watch time in the world.

According to a survey conducted by The Trade Desk in their report titled Future of TV' (2023), users in Indonesia utilize OTT services for 'me time.' This is evident, as 6% of total OTT users live alone, while 54% of others almost always watch alone, and 94% occasionally watch solo. This indicates that many Indonesians spend their time on OTT video streaming as a way to relieve stress. Additionally, a survey by Populix, summarized by databoks.katadata.co.id (2022), provides broader insights into users' motivations for subscribing to OTT video streaming services. The survey revealed that 84% of respondents chose to subscribe because they can watch films anytime. Furthermore, 74% sought entertainment through OTT services, and 63% found OTT

video streaming easy to use, influencing their subscription decisions.

Several studies on binge-watching have identified various factors that influence this behavior, including enjoyment, efficiency, escape, perceived control, social influence, social interaction, and attitude. Much of this research builds on earlier studies, such as those by Shim & Kim (2018). However, the current study focuses specifically on enjoyment, efficiency, and escape as the main variables influencing binge-watching behavior. Additionally, this research incorporates the concept of 'need for cognition' as recommended in previous studies to demonstrate its moderating effect on the relationship between these influencing factors and binge-watching behavior. By narrowing the focus to these key variables and introducing a moderating factor, this study aims to provide more nuanced insights into the motivations behind binge-watching.

All variables will be tested and analyzed from the perspective of the Uses and Gratifications Theory (UGT), which emphasizes the active role of media users in selecting media to satisfy their needs (Katz et al., 1970). Recent findings related to UGT highlight motives such as self-realization, individual satisfaction, competition, social

interaction, addiction, and escape (Bulduklu, 2019). The urgency of this study lies in understanding consumer intentions regarding OTT video streaming usage within binge-watching behavior. This insight can inform future marketing strategies.

II. METHODS

A. Research model

The research employs a quantitative method with a correlational approach, aiming to determine the relationships among variables and utilize these relationships for prediction (Gay, Milis, & Airasian, 2011). To achieve a concrete assessment, the researchers utilized a survey method with a questionnaire as the data collection tool. The sampling method applied in this study is purposive sampling, where respondents are selected based on specific criteria relevant to the research needs. This includes respondents who engage in viewing activities for more than 2 hours and are subscribed to OTT video streaming services. The sample size is determined using G*Power, following recommendations from previous studies, as this application is a preferred choice among researchers in business and social sciences (Hair et al., 2014; Hair et al., 2017). The sample size used was 142 respondents with a 10% confidence level.

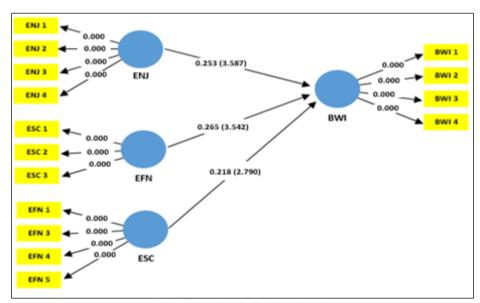


Fig 1 Hypothesis Testing Result

Source: Results of data processing using SmartPLS 4.0, 2023

Data analysis in this study is conducted using SmartPLS with the Structural Equation Modeling-Partial Least Squares (SEM-PLS) method. Two main tests are performed: the measurement model and the structural model. The measurement model test includes assessments of validity, reliability, and collinearity using the Variance Inflation Factor (VIF). Meanwhile, in the structural model test, there are R-square, f-square, and Q-square tests, and hypothesis testing of path coefficients and P-value.

B. Hypothesis

In the uses and gratifications theory (UGT), it is stated that active media users will consciously determine their media according to their personal needs and satisfaction. There are several needs for active media users, namely the need for information (cognitive), the need for enjoyment (affective), integrative personal needs, the need to strengthen relationships with the social environment, and the need to be free from perceived pressure (Blumler & Katz, 1974; Blumler, 1979). When there are needs that must be fulfilled, intrinsic drives or motivations will arise within, ultimately leading users to a particular behavior.

Enjoyment serves as a motivation that refers to the pleasure and comfort users experience while spending time engaging in activities through technology. From the perspective of self-determination theory, which emphasizes the importance of intrinsic motivation over extrinsic motivation, enjoyment can provide a sense of entertainment and excitement that enables users to fulfill their intrinsic motivational needs (Shim & Kim, 2018). Therefore, overall, enjoyment has a significant and positive influence on bingewatching behavior. Based on this explanation, this leads to the following hypothesis.

H1: Enjoyment has a significant and positive effect on binge-watching behavior.

From the perspective of utilitarian benefits (i.e., convenience, wisdom, and unlimited access to content), efficiency influences binge-watching because it allows users to realize that their favorite programs can be accessed at will, leading to binge-watching behavior (Shim & Kim, 2018). Efficiency in consumption theory can also be defined as the user's ability to maximize the utility or satisfaction they will

achieve. In this regard, binge-watching becomes a form of satisfaction that users seek to achieve or fulfill. Thus, overall, efficiency has a significant and positive influence on binge-watching behavior. Therefore, this explanation leads to the following hypothesis.

H2: Efficiency has a significant and positive effect on binge-watching behavior.

In the uses and gratifications theory (UGT), it is stated that one of the needs of media users is to be free from perceived pressures in their daily lives. Several studies on escape have also established that users with binge-watching behavior gain satisfaction from the escape they experience, as binge-watching can help them break free from stressful situations (Song et al., 2021). The escape that users engage in to alleviate stress involves watching videos through their chosen media for extended periods. Therefore, overall, escape has a significant impact on binge-watching behavior. Given this explanation, this leads to the following hypothesis.

H3: Escape has a significant and positive effect on bingewatching behavior.

III. RESULT AND DISCUSSION

The convergent validity test indicate that there are outer loadings that did not pass the test, namely BWI 1, EFN 2, and EFN 5 due to values <0.7. However, if the outer loading value of the reflective indicators is >0.4 and <0.7, then it is necessary to analyze the impact of removing the indicator on the AVE and CR values.

Table 1. Average Variance Extracted (AVE) Value

	Previous AVE	New AVE
ENJ	0.689	0.689
EFN	0.497	0.544
ESC	0.622	0.622
BWI	0.590	0.590

Source: Results of data processing using SmartPLS 4.0, 2023

Note: ENJ – Enjoyment, EFN – Efficiency, ESC – Escape, BWI – Binge Watching Intention

The initial calculation results of AVE show that the EFN value is 0.497, so one of the EFN indicators with the smallest value must be removed. From the previous outer loading calculations, the EFN 2 indicator has the smallest number, so it must be removed. After the removal, the new AVE value changed to 0.544 and is considered to pass the test because the AVE value must be >0.5.

Table 2. Composite Relibiality (CR) Value

	Previous CR	New CR
ENJ	0.898	0.898
EFN	0,831	0,826
ESC	0,831	0,831
BWI	0,848	0,848

Source: Results of data processing using SmartPLS 4.0, 2023

Note: ENJ – Enjoyment, EFN – Efficiency, ESC – Escape, BWI – Binge Watching Intention

The composite reliability (CR) test show that the initial CR value before removing EFN is 0.831, and the new CR value after removing EFN is 0.826 both can be declared valid since the CR has a value >0.7, indicating that the variables are reliable.

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Table 3. Heterotrait-Monotrait Ratio (HTMT) Value

	BWI	EFN	ENJ	ESC
BWI				
EFN	0,657			
ENJ	0,666	0,576		
ESC	0,663	0,525	0,612	

Source: Results of data processing using SmartPLS 4.0, 2023

Note: ENJ – Enjoyment, EFN – Efficiency, ESC – Escape, BWI – Binge Watching Intention

Another criterion for discriminant validity uses the heterotrait-monotrait ratio (HTMT). The HTMT value measured reflectively must be below 0.85 to establish discriminant validity. Based on the results obtained through the PLS Bootstrapping procedure, the HTMT value is below 0.85, meaning it meets the criteria for the threshold of discriminant validity. In addition to checking the HTMT value to establish discriminant validity, it can also be assessed using the Fornell-Larcker Criterion.

Table 4. Fornell-Lacker Criterion

	BWI	EFN	ENJ	ESC
BWI	0,768			
EFN	0,493	0,737		
ENJ	0,555	0,462	0,830	
ESC	0,505	0,390	0,466	0,789

Source: Results of data processing using SmartPLS 4.0, 2023

Note: ENJ - Enjoyment, EFN - Efficiency, ESC - Escape, BWI - Binge Watching Intention

According to the Fornell-Larcker Criterion, the square root of each construct's AVE must be greater than its correlation with other constructs. The results from the Fornell-Larcker Criterion show that the square root of each construct's AVE is greater than the values in the same row and column. Thus, it can be stated that the model constructs have discriminant validity.

Table 5. Collinearity statistics (VIF) Value

	TITE
Indicator	VIF
BWI 1	1,226
BWI 2	1,912
BWI 3	1,788
BWI 4	1,959
ENJ 1	2,344
ENJ 2	2,441
ENJ 3	1,962
ENJ 4	1,557
EFN 1	1,212
EFN 3	1,668
EFN 4	1,718
EFN 5	1,339
ESC 1	1,463
ESC 2	1,634
ESC 3	1,237

Source: Results of data processing using SmartPLS 4.0, 2023

Note: ENJ – Enjoyment, EFN – Efficiency, ESC – Escape, BWI – Binge Watching Intention

Collinearity VIF is conducted to test for correlations among independent variables in a regression model. The VIF value should be below 5, and the results of the multicollinearity assessment indicate that there will be no issues in the research model analysis, allowing progression to the next step.

Table 6. R-Square (R²) Value

	R-Square (R ²)	R-Square (R ²) adjusted
BWI	0,510	0,484

Source: Results of data processing using SmartPLS 4.0, 2023

Note: BWI – Binge Watching Intention

The R2 value approaching 1 means that the independent variables provide almost all the information needed to predict the dependent variable. However, if the R2 value decreases, it means the ability of the independent variables to explain the dependent variable is quite limited. The R-square test performed on the structural model indicated an R^2 value of 0.510, which falls into the moderate category. An R^2 of 0.50 can be considered significant in the field of consumer behavior studies.

Table 7. Effect Size (f²) Value

Relationship Between Variables	f-square (f²)	Effect Size
ENJ -> BWI	0,080	Small - Moderate
EFN -> BWI	0,057	Small - Moderate
ESC -> BWI	0,095	Small - Moderate

Source: Results of data processing using SmartPLS 4.0, 2023

Note: ENJ – Enjoyment, EFN – Efficiency, ESC – Escape, BWI – Binge Watching Intention

Then in the f-square test the result for the enjoyment variable (X1) about the binge-watching intention variable (Y) is 0.080, signifying that variable X1 has a significant impact on variable Y. Furthermore, the f^2 value from the efficiency variable (X3) to the binge-watching intention variable (Y) is 0.057, meaning that variable X3 also has a substantial influence on variable Y. Next, the f^2 value from the escape variable (X2) to the binge-watching intention variable (Y) is 0.095, indicating that variable X2 has a substantial influence on variable Y. Meanwhile, the average relationship among the variables falls within a small to moderate range.

Table 8. Q-square (Q2) Predict Value

	Q ² predict	RMSE	MAE
BWI	0.413	0.775	0.600

Source: Results of data processing using SmartPLS 4.0, 2023

Note: BWI – Binge Watching Intention

In the Q² test if the value is equal to or greater than 0.05 indicates that a construct model is relevant. Conversely, a Q² value less than 0 means the constructed model has limited predictive relevance. Based on the Q² calculation, the value is greater than 0.05, suggesting that the constructed model is relevant. Therefore, the analysis can proceed to the hypothesis testing stage.

Table 9. Path Coefficients and P-value

Hypothesis	Relationship Between Variables	Path Coefficients	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Decision
Hl	ENJ -> BWI	0.253	0.070	3.587	0.000	Accepted
H2	EFN -> BWI	0.218	0.078	2.790	0.003	Accepted
H3	ESC -> BWI	0.265	0.075	3.542	0.000	Accepted

Source: Results of data processing using SmartPLS 4.0, 2023

Note: ENJ – Enjoyment, EFN – Efficiency, ESC – Escape, BWI – Binge Watching Intention

The results of the hypothesis analysis show that enjoyment and escape are the variables that most influence the binge-watching behavior of OTT video streaming customers, thus H1 and H3 are accepted with the calculation results of enjoyment ($\beta = 0.253$, p ≤ 0.000) and escape ($\beta =$ 0.265, p \leq 0.000), which indicate that both factors have a significant and positive correlation with binge-watching behavior. From the perspective of self-determination theory, which emphasizes the importance of intrinsic motivation over extrinsic motivation, enjoyment can provide a sense of entertainment and excitement that allows users to fulfill their intrinsic motivational needs (Shim & Kim, 2018). In this case, enjoyment can provide hedonic satisfaction from the efforts to meet the needs of OTT video streaming customers by generating pleasure and entertainment during bingewatching.

The enjoyment experienced is then related to escape or the need to escape from the stress of daily activities. OTT video streaming customers consume shows that can entertain them for escapism. Some studies on escape also establish that users with binge-watching behavior gain satisfaction from the escape they achieve, as binge-watching can help users break free from high-pressure situations (Song et al., 2021). The escape that users seek to eliminate stress involves watching videos through their chosen media for extended periods. The comfort and enjoyment felt while watching on OTT video streaming ultimately facilitate the need for escape, as users become immersed in the storyline they are watching.

However, efficiency also influences binge-watching behavior, with the efficiency calculation result (β = 0.218, p \leq 0.003) leading to the acceptance of H2. This analysis indicates that the relationship between efficiency and binge-watching behavior has a significant and positive correlation. From a utilitarian interest perspective, efficiency is understood as a form of comfort, wisdom, and unlimited

access to content (Shim & Kim, 2018). The efficiency perceived by customers is linked to utilitarian motivation, where active media users have a vested interest in subscribing to OTT video streaming efficiently and timely to achieve their goals with minimal risk. The features and services offered by OTT video streaming play a crucial role in the decision-making process for active media users to continue their subscriptions. Therefore, careful consideration is needed when making subscription decisions.

The analysis of the three factors influencing bingewatching align with the research conducted by Shim and Kim (2018) and Librani et al. (2020). The analysis results also support the UGT model, which suggests that active media users can satisfy their desires through enjoyable viewing experiences that evoke curiosity to fill their time (Sung et al., 2018). According to the UGT model, active media users will be satisfied with the media they choose if they can continue using it. The three factors influencing binge-watching behavior are some of the reasons that motivate active media users to continue subscribing to their preferred OTT video streaming services (Shim & Kim, 2018; Librani et al., 2020). OTT video streaming customers in this study spend more than 2 hours a day watching content on OTT video streaming platforms. The trend among these OTT video streaming customers in the study shows that they subscribe to Netflix and Disney Hotstar.

IV. CONCLUSION

Enjoyment is one of the most influential variables affecting the binge-watching behavior of OTT video streaming customers. This is demonstrated by the results of the hypothesis testing, which showed that enjoyment has a positive and significant impact on the binge-watching behavior of OTT video streaming customers. Enjoyment provides hedonic satisfaction from the efforts to fulfill the needs of OTT video streaming customers for pleasure and entertainment. From the perspective of self-determination theory, which emphasizes the importance of intrinsic motivation (within oneself), enjoyment can provide a sense of entertainment and excitement for OTT video streaming customers to meet their personal needs.

Efficiency also becomes one of the factors that influence binge-watching behavior, and this can be seen from the results of the hypothesis testing that has been conducted. The results show that efficiency has a positive and significant impact on the binge-watching behavior of OTT video streaming customers. From a utilitarian benefit perspective (i.e., convenience, discretion, and unlimited access to content), efficiency influences binge-watching because OTT video streaming customers realize that their favorite shows can be accessed anytime and anywhere. Efficiency in consumption theory can also be defined as the user's ability to maximize the utility or satisfaction that will be fulfilled.

Escape is also one of the most influential variables affecting the binge-watching behavior of OTT video streaming customers. The results of hypothesis testing indicate that escape has a positive and significant impact on

the binge-watching behavior of these customers. Escape is facilitated by enjoyable feelings and curiosity that immerse OTT video streaming customers in the storyline, motivating them to continue watching persistently. In this study, escape serves as a factor for OTT video streaming customers to engage in binge-watching, as it helps them forget the stress of their daily lives.

Enjoyment and escape significantly influence bingewatching behavior. Therefore, future research should explore other variables beyond this study, such as purchase intention, perceived control, social influence, word of mouth, customer satisfaction, or other psychological factors. It is also recommended that OTT service providers implement effective marketing strategies aimed at retaining users who prefer binge-watching on their platforms. Additionally, this study indicates that users typically subscribe to applications such as Netflix, Disney Hotstar, and VIU. As a result, other OTT service providers are encouraged to develop appropriate marketing strategies to remain competitive. The findings highlight a cognitive need among users for efficiency in their binge-watching experience. According to the Use and Gratification Theory, users proactively choose media that can fulfill their satisfaction, thus emphasizing the importance of understanding user needs when developing OTT content and services.

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