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# PREDICTION OF YOUTUBE ADDICTION AMONG UNIVERSITY STUDENTS FROM USES AND GRATIFICATIONS APPROACH

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## Abstract

*Social networking sites (SNS) have become a trend nowadays and it was widely used by university students, however, the rapid expansion of the SNS has caused the time engaging with the technology to become excessive and lead to addiction and other negative consequences among the students. The purpose of this study was to test the motives of watching YouTube as predictors of students' addiction behavior through the Uses and Gratification (U&G) theory. This research adopts a quantitative method, through the online questionnaire. The study applied purposeful sampling, where the respondents who have watched YouTube and have a YouTube account were selected and generated 150 valid responses from the students at a private university in Klang Valley. The findings demonstrate that three motives (Passing Time, Enjoyment, and Information-seeking) are the predictors of YouTube addiction behavior among the students and different motives lead to different degrees of addiction. This study contributes to the U&G Theory as well as the literature on media consumption, for it benefits the parents, universities, and government in understanding the motives that influence media addiction among university students. Thus, strategies can be implemented to avoid excessive addiction which leads to negative social media outcomes.*

*Keywords: Addiction behavior; Communication & media psychology; University students; Uses & Gratification Theory; YouTube*

## INTRODUCTION

With the rapid growth of Internet users worldwide, the Internet has become a common feature for most sectors. Based on Kurniawan's (2020) study, there are about 4.54 billion Internet users and 3.80 billion people are active on social media and online video social applications. This evidence shows that there is a high interaction in virtual scenarios (Khan, 2017).

YouTube is an online video social platform, which is classified as a content community of social networking sites (SNS). Compared with other SNS, YouTube pays more attention to content browsing. Since its launch in 2005, YouTube has become one of the fastest-growing platforms (Paolillo, Ghule, & Harper, 2019). The use of YouTube poses some controversial challenges for colleges and university students in balancing their overall development and lifestyle. According to the survey done by Daud and Othman (2019), college students in Malaysia are Internet addicts spending an average of 5.1 hours online every day, where 51% of the students are active on YouTube. Moreover, studies reported that the young generation mostly shows excessive interest in social media (Al-Sammarraie, Bello, Alzahrani, Smith, & Emele, 2021). There are over 4.33 billion users of social media in the world Geyser (2021) and an estimated 330 million are suffering from social media addiction. Social media addiction became a global phenomenon and its excessive use among the young generation has raised worldwide concerns (Balakrishnan & Griffiths, 2017; Kuss & Griffiths, 2017).

In the Malaysian context, Malaysians spend an average of 159 minutes watching videos on SNS, more than 55% of the world's SNS consumption. Malaysians spend an average of 66 minutes watching videos on YouTube, compared with 59 minutes watching live television (Daud & Othman, 2019). Generation Z thinks YouTube is a necessity in life as they enjoy spending the most time browsing the Internet and using social networking platforms to communicate with colleagues, family, and friends (Issaa & Isaias, 2016).

Addiction has been a concern by most scholars in the media and communication field. Past research has examined television addiction and its relationship to psychosocial variables (Sharma, Rao, Benegai, & Thennarasu, 2018). However, lately, SNS is overtaking the traditional forms of media (Leung, Liang, & Zhang, 2017). Moreover, more research has focused on the aspect of communication psychology, primarily assessing the existence of Internet addiction (Ahamad & Das, 2018). Communication scholars began to pay attention to this area by focusing on social media addiction, such as the use of social media and the predictors of addiction and its consequences (Blackwell, Leaman, Tramposch, Osborne, & Liss, 2017; Ferris, Hollenbaugh, & Sommer, 2021). Social media addiction has proven to cause social problems, where teenagers tend to communicate on virtual platforms like Facebook, Twitter, and YouTube relying on technology to socialize (Grau, Kleiser & Bright, 2019). Social media addiction brings about many adverse effects, such as wasting time and affecting daily behaviors (Siddiqui & Singh, 2016).

In addition, past studies on social media motives have been carried out in different contexts, such as in the U.S. (Ferris et al., 2021), Turkey (Afacan & Ozbek, 2019), Iran (Azizi, Soroush, & Khatony, 2019), and some empirical evidence from Malaysia context have also been found (Abd Rahman & Abdul Razak, 2019). However, there is a need to further reconduct the study as different countries have different social-cultural factors and media policies, which could influence the results. For instance, Kircaburun and Griffiths (2018) argued that each of the social media platforms provides a unique experience, and therefore, the reasons to visit the SNS platform might also vary, which made researchers examine YouTube as one of the social media tools. Based on the above

discussion, therefore, the current study aimed to test the predictors of YouTube addiction behavior through the motivation factors from the lens of Uses and Gratification Theory.

### Literature Review
#### Social Media Addiction
Social media addiction refers to any dependent or compulsive behavior in the online world (Balakrishnan & Griffiths, 2017). In addition, Sun and Zhang (2021), defined social media addiction as the unhealthy dependence on interactive platforms for the needs of social connection and entertainment. Addictive behavior will cause serious psychological harm to the audience, and serious addiction will affect own self as well as friends and family members.

#### Passing Time
Passing time refers to the extent to which an activity fills the user free time (Wibowo, Suryanto, Faroqi, & Hadiwiyanti, 2018). Gan and Li (2018) pointed out that users used social media for entertainment, helping users to pass the time when they were bored or idle. Passing time will affect the mentality of the audience and may lead to addiction.

#### Enjoyment
Enjoyment refers to the activity that enables people to achieve a degree of inner pleasure, which reflects the user's experience (Zong, Yang, & Bao, 2019). Enjoyment has a positive effect on the willingness of using online social media, where the better the degree of experience, the higher the possibility the users will get addicted to it.

#### Information Seeking
Information seeking is a habit and pattern adopted by users to find and obtain the necessary information to meet their needs. Applying different methods to find the information, will help students to solve specific problems (Gordon, Meindl, White, & Szigeti, 2018).

#### The Relationship between Passing Time and YouTube Addiction
Research determined that social media users spend at least two hours a day watching videos on YouTube, mostly for entertainment (Moghavvemi, Sulaiman, Jaafar, & Kasem, 2017). YouTube users said that their attention was attracted by the videos playing and to kill time leading them to spend more time on social media (Moghavvemi et al., 2017). However, in the survey of Balakrishnan and Griffiths (2017), most students do not know about the specific time they should spend on the media, rather than just passing time. Studies by Gladys, Wilson, Wachira, Odek, and Ochieng (2019) show that teenagers rely on YouTube because of its entertainment ability and want to fill their boring time. So, there is a significant relationship between passing time and YouTube addiction. YouTube as an effective medium for entertainment and killing time leads to expectations and uncertainty (Khan, 2017; Wang & Chou, 2019). Based on the discussion, hence, the study hypothesized that:

*H1: Passing time has a positive relationship with YouTube addiction.*

#### The Relationship between Enjoyment and YouTube Addiction
Content browsing social media is a hedonic activity, the enjoyment obtained through social interaction has a high correlation with addiction behavior (Choi, 2016). The popularity of the media comes from the pleasure and joy of people's attitudes towards its content (Sampath, Kalyani, Soohinda, & Dutta, 2017). For instance, the study of Gao,

Liu, and Li (2017) found that enjoyment from using social media reflects users' perceived value in popular entertainment, and on the other hand, it is a way to escape from unpleasant real-world pressure. The enjoyment of social network services based on users increases their willingness to use social media, which in turn may lead to addictive behavior.

It further confirms that YouTube is still a pleasure-oriented content browsing system, which can provide users with interesting videos to help them to pass the time when they are bored or idle (Gladys et al., 2019). This has also supported the notion of Kircaburun, Alhabash, Tosuntaş, and Griffiths (2020), where millennials use social media as entertainment to kill boredom and distract themselves from the workload. Therefore, the current study hypothesized that:

*H2: Enjoyment has a positive relationship with YouTube addiction.*

*The Relationship between Information Seeking and YouTube Addiction*
YouTube is not only served as a video-sharing platform but is also a search platform for information. YouTube can stimulate the interest of teenagers/ students because it provides a lot of information about hobbies and creative activities (Martínez & Olsson, 2018), while most of the YouTube content is primarily for entertainment purposes. In the study by Whiting and Williams (2017), 80% of the respondents used social media to find information as a free choice of learning. Free-choice learning is related to addiction behavior, as users are motivated by their intrinsic motivation to seek or learn information using social media (Rosenthal, 2017).

According to Khan (2017), information seeking is related to predicting preferences, and information seeking have no significant effect on Internet addiction. In addition, the previous study has empirically verified the importance of utilitarian factors on user behavior, such as instant access, information sharing, and self-documentation (Balbay & Kilis, 2017). Individuals use social media for the utilitarian purpose of searching for information, and studies have also shown a positive connection between information searching and YouTube addiction (Moghavvemi, et al., 2017). Based on the discussion, the study hypothesized that:

*H3: Information Seeking has a positive relationship with YouTube addiction.*

*Underpinning Theory*
Uses and Gratification theory (U&G) is widely used in the field of social media and mass communication (Warwimbo, 2015). According to the U&G theory proposed by Katz, Blumler, and Gurevitch (1973), individuals use SNS purposefully and consciously choose media and content to gratify their inner needs or motivations. U&G theory is an audience-centered approach that focuses on what people do with media (Quan-Haase & Young, 2010).

U&G theory suggests that if individuals' psychological or social needs are induced, especially when offline face-to-face interactions are not satisfied, individuals tend to search the SNS to compensate for real interpersonal deficits, and the gratification of their psychological and social needs by SNS leads individuals to become addicted to them (Ryan, Chester, Reece, & Xenos, 2014). Figure 1 show the proposed conceptual framework in this study.
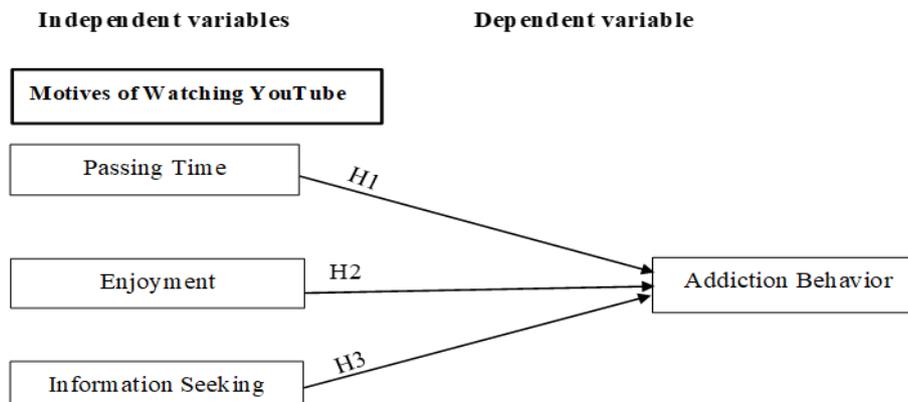
Figure 1: Proposed Conceptual Framework

## METHODOLOGY

### Research Design

A quantitative method was utilized in this study to investigate the relationship between motivations and addictive behavior. Quantitative research is described as a systematic exploration of the phenomenon through the collection of measurable data and the application of statistical, mathematical, or algorithmic methods (Apuke, 2017). The data were collected through a cross-sectional survey design. Survey design is a suitable method to apply in this study as it allows the researchers effectively to measure the attitudes and opinions of the respondents (Babbie, 2020).

### Sampling Procedure

In this study, the researchers used the purposive sampling method as one of the techniques in non-probability sampling, where the researchers select the samples based on their judgment and criteria (Campbell et al., 2020). Therefore, this research selected only the respondents who are YouTube users by incorporating the screening questions (e.g. Do you watch YouTube? Do you have a YouTube account?) as a strategy to filter the valid responses. In addition, Roscoe (1975), Bougie and Sekaran (2019) highlighted that a sample size between 30 and 500 is recommended for most social behavioral research. Hence, the current study has 150 valid responses, and it is still appropriate for statistical analysis.

### Measurement

Section A is the demographic information of the respondents, which includes gender, age, race, and time spent watching YouTube. Section B is about YouTube addiction, where the 6 related items were adapted from Li, Guo, Bai, and Xu (2018). Section C is about the motivation for watching YouTube, namely enjoyment, passing time, and information seeking. For enjoyment, the items were adapted from (Pertegal, Oliva, & Meirinhos, 2019). For the passing time, the items were adapted from (Li et al., 2018), whereas for the information seeking, the items are extracted from Şahin (2018). Sections B and C were anchored based on a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

### Data Collection Procedures

Firstly, the researchers requested and obtained permission from the respondents to complete the survey, as mentioned on the cover page of the online survey. Secondly, the researchers hand out the survey and distributed

the questionnaires to the undergraduate and postgraduate university students of a private university through various virtual platforms such as Facebook, Google, and Whatapps. Finally, the researchers analyzed the data via Statistical Package for Social Sciences (SPSS) version 25 software and researchers promised the respondents to assured the confidentially and anonymity issues of the data collected.

*Reliability Analysis*

Reliability is used to assess the internal consistency of the variable (Mahabier, Hartog, Theysken, Verhofstad, & Lieshout, 2017), and previous researchers believed that Cronbach's alpha value greater than 0.70 proved the data was valid (Shi, Liu, & Li, 2016). Hence, the pilot study results showed that all the variables are more than the threshold value of 0.70, thus, researchers will be able to proceed with the real data collection.

Table 1: Pilot testing of the variables

| Variables | No. of Items | Cronbach's Alpha (n=30) |
|---|---|---|
| YouTube Addiction behavior | 6 | 0.858 |
| Passing Time | 5 | 0.827 |
| Enjoyment | 5 | 0.858 |
| Information seeking | 5 | 0.889 |

*Normality Test*

To ensure the normal distribution of the data, skewness and kurtosis analysis were further carried out. Hair, Black, Babin, and Anderson (2018) mentioned that data must be normally distributed before multivariate analysis can be conducted. It can be said that the data was 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 Table 2, the value for the dependent variable (DV), YouTube addiction behavior was within the range of -2 and +2, thus, showing that data are still normally distributed and the Multiple Regression Analysis can be conducted.

Table 2: Normality based on skewness and kurtosis values

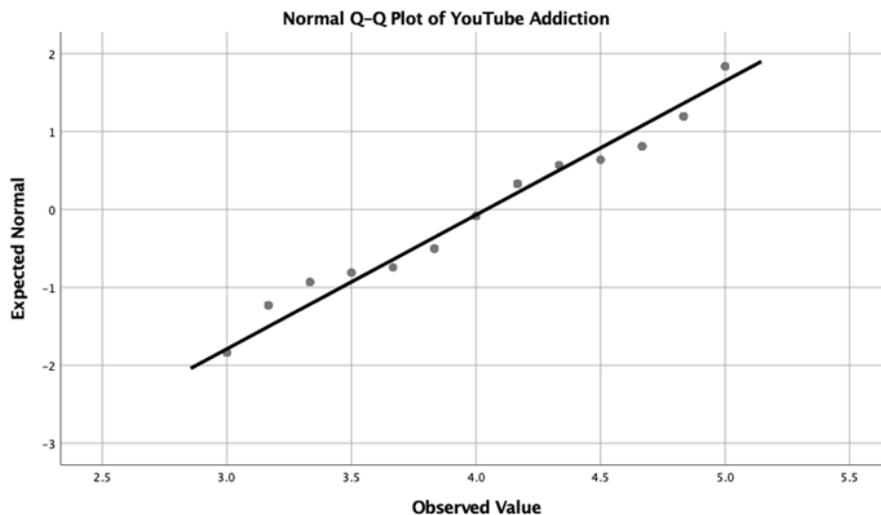| Variable | Skewness | Kurtosis |
|---|---|---|
| YouTube addiction behavior | -0.112 | -0.822 |

Figure 2: Q-Q plot for the YouTube addiction behavior

## RESULTS AND DISCUSSION

Based on Table 3 more than half of the respondents were male (58.7%), and the remaining were female (41.3%). In terms of age group, more than half of the respondents are aged 18-23 years old (58.7%), followed by respondents aged between 24-29 years old (36.7%), which indicated that young adults (undergraduate & postgraduate students) were the reference group of YouTube. A total of 58.7% of the respondents spend 4-6 hours on YouTube (58.7%), followed by 26.0% spending more than 6 hours on YouTube daily, which indicated that young adults are active YouTube users.

Table 3: Profile of the respondents (n=150)

| Variable(s) | Category | Frequency | % |
| --- | --- | --- | --- |
| **Gender** | Male | 88 | 58.7 |
| | Female | 62 | 41.3 |
| **Age groups** | 18-23 | 88 | 58.7 |
| | 24-29 | 55 | 36.7 |
| | >29 | 7 | 4.6 |
| **Race** | Malay | 55 | 36.7 |
| | Chinese | 62 | 41.3 |
| | Indian | 23 | 15.3 |
| | Others | 10 | 6.7 |
| **Time spent on YouTube (daily)** | < 1 hour | 1 | 0.6 |
| | 1-3 hours | 22 | 14.7 |
| | 4-6 hours | 88 | 58.7 |
| | > 6 hours | 39 | 26.0 |

The multicollinearity issue occurs when there are two or more variables that are highly correlated. To evaluate multicollinearity, an assessment of the variance inflation factors (VIF) was carried out (Hou & Shiau, 2019). In this respect, Mayr and Zins (2012) mentioned that if the VIF value is greater than 10 and the tolerance value is less than 0.10, there is an issue with multicollinearity. Based on Table 4, the range of tolerance values is between 0.150 and 0.176 which indicates that it is greater than 0.10. Besides, the VIF values range between 5.678

and 6.652 which indicates that the values did not exceed 10. Hence, it can be concluded that there were no multicollinearity problems in this study.

The value for the Durbin-Watson in this research is 2.040 which is between the value of 1 to 3 indicating that there are no autocorrelations that arise from the statistical regression analysis that had been generated. The value of R is 0.995 indicating that there is a high effect between the independent variables for this research which are passing time, enjoyment, and information seeking.

The value of R Square is 0.913 which indicates that the independent variables of this research are affecting YouTube addiction behavior by 91.3%. The analysis indicated that passing time, enjoyment, and information-seeking under the U&G motives were the predicting factors that contributed to the YouTube addiction behavior. Thus, the remaining 8.7% are based on other variables that have currently not been investigated in this research. Hence, H1, H2, and H3 were supported.

Table 4: Multiple regression analysis of YouTube addiction behavior with predictor variables.

| Predictor Variables | Unstandardized | Coefficient | Standardized Coefficients | | | |
|---|---|---|---|---|---|---|
| | B | Std. Error | Beta | p | Tolerance | VIF |
| (Constant) | 1.181 | 0.109 | | 0.100 | | |
| Passing Time | 0.543 | 0.062 | 0.528 | 0.000 | 0.163 | 6.146 |
| Enjoyment | 0.269 | 0.061 | 0.279 | 0.000 | 0.150 | 6.652 |
| Information seeking | 0.140 | 0.045 | 0.181 | 0.002 | 0.176 | 5.678 |

F = 509.371    $df_1 = 3$, $df_2 = 146$    P = 0.000
R = 0.995    $R^2 = 0.913$    Adjust $R^2 = 0.911$

The results of the study were consistent with numerous past studies which indicated that passing time significantly influences addiction behavior (Gladys et al., 2019; Wang & Chou, 2019), where young adults like university students rely on YouTube because of its entertainment ability and want to pass time. In addition, the results also supported the study of Gao et al., (2017), which found that enjoyment from using social media to escape from unpleasant real-world pressure led to addiction behavior. This has also supported the notion that millennials use social media as entertainment to kill boredom, and distract themselves from workload (Kircaburun et al., 2020).

Balbay and Kilis (2017) have empirically verified the important influence of utilitarian factors on user behavior, such as instant access, information sharing, and self-documentation. Individuals who use social media for the utilitarian purpose of searching for information have shown a positive correlation between information searching and YouTube addiction which aligned with the study (Moghavvemi, et al., 2017).

## CONCLUSION

In conclusion, the three motives (Passing Time, Enjoyment, and Information-seeking) are the predictors of YouTube addiction behavior among university students and different motives lead to different degrees of addiction.

The theoretical implication of this study is that researchers demonstrated an impact between motivation and addictive behavior by utilizing the U&G theory. The researchers were able to determine what motivates students to watch YouTube, and how they become addicted. Through this research, other scholars will have a more profound and better comprehension of U&G theory and its application to support previous theoretical findings and bring more worthy to the mass media scholarship.

The practical implications of this study suggest an important relationship between information-seeking motives and YouTube addiction. The results of this study show many applications in learning are of great value for future research. In terms of education, scholars can use YouTube as a platform to convey knowledge to students. Although most people thought that students spent time watching YouTube just for fun and it is a waste of time. Nevertheless, this study testifies that one of the main motivations for students to become addicted to YouTube is to seek information, not just to pass time and have enjoyment. In addition, students will be benefited because using YouTube in their learning procedure is more viable and proficient than conventional educating techniques. Most understudies said they would prefer to watch or use YouTube for any reason. Whenever utilized shrewdly, YouTube can be a helpful device for instructors and learners.

This study has several limitations, Firstly, due to the use of non-probability sampling (purposeful) and although the sample size of 150 is sufficient for the statistical analysis, however, the current study is not able to generalize. In addition, this study only focuses on the undergraduate and postgraduate students of a private university in Klang Valley as a sample. Hence, more samples can be collected in the future to have better representativeness. Besides, researchers with similar research interests can consider other geographical areas in the future, such as students from other states in Malaysia, and make a comparisons study among those states.

The current study only applied quantitative and positivism approaches to examine the phenomenon. It is suggested that future researchers can also adopt qualitative (interpretive) or a mixed method (pragmatics approach) to gain a further in-depth understanding of the issue. Another limitation is that this study only studies three motivations for people to watch YouTube, namely enjoyment, passing time, and information seeking, and testing the direct relationship with YouTube addiction. Nevertheless, there are other antecedents of YouTube addition that future researchers can include, such as socialization, self-presentation, online incivility (Sun et al., 2021; Kosmidis & Theocharis, 2020), to name a few to test the mediating effects and also the demographic variables as the moderators to make the framework more robust and contribute to the scholarship of media effects and media psychology.

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