

Facebook and YouTube Addiction: The Usage Pattern of Malaysian Students

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Abstract-- This paper explores the usage of Facebook and YouTube among Malaysian students and the possibility of internet addiction in order to determine the effect of using social media in their social and academic lives. Data was collected from 667 Facebook users and 1056 YouTube users. Examining Young's [1] Internet addiction scale among the students revealed that 18% of Facebook users and 22% of YouTube users are addicted, and they spend more than two hours on Facebook and YouTube per day. They use Facebook for information, maintain relationships, academic learning, product inquiry, and meeting people, while YouTube is used for entertainment, information, academic learning, and product inquiry. These results create awareness for instructors and academic institution using YouTube videos and Facebook as complementary tools for teaching. They should be aware of the potential for compulsive and addicted users to be distracted from prescribed videos to unrelated materials.

Keywords- Facebook, YouTube, Internet Addiction, Young's DQ, Malaysia.

I. INTRODUCTION

The usage of social networking site has become widespread in today's society, especially among university students. Young adults frequently visit multiple sites a day, such as Twitter, Snap Chat, YikYak, YouTube, and Instagram [2] [3]. ~90% of those between 18-29 years old regularly use social media sites [3] [4]. In 2014, 74% of American adults engaged in daily social networking activities [5], and ~87% of companies use at least one social networking site [6]. Social networking sites such as Facebook has over a billion users globally, with 96% of university students saying they access it daily [2, 3, 7]. Malaysia, with a population of 29.72 million, has 17.5 million Internet users and 13.3 million Facebook users [8]. Those aged between 18-24 years old are the highest users, contributing 34.5%, followed by those aged 25-34 years old (29.5%), and 13-17 years old (16.3 %). ~51% of Malaysians have an active YouTube profile, and 80% of Internet user's stream or download videos each month, and spend 10.6 hours watching Broadcast TV. YouTube is the 6th most frequently used smartphone app in the country, and accounts for 67% of all online videos viewed in Malaysia. (Summary prepared by the authors from data in comScore, eMarketer, Internet World Stats, Malaysia Asia, Nielsen, statista, and We Are Social). Malaysians aged between 16-34 years old watches more YouTube videos, with an average watching time of 80 minutes, which is twice that of the world

average [9]. Many research in the field of social media and education have explored the possibilities of social media tools, and its popularity among youth in teaching and learning [10]. However, research shows that Internet and new technologies have an idealistic effect on students, additionally causing disturbing influences as opposed to academically helping them [11]. Ravizza, Hambrick, and Fenn [12] reported that non-academic Internet usage, including social media among university students was negatively associated with classroom performance. The widespread use of social media such as Facebook and YouTube has positive and negative impacts on learning and teaching at university level [13] [14]. Statistics and previous studies on YouTube use demonstrates its positive effect for learning and academic use. However, negative consequences are not entirely absent, similar to other social media [3], in the context of education. Researchers confirmed that Facebook usage and a depressive character can significantly predict Facebook addiction [15]. For example, spending too much time on Facebook has an adverse impact on GPA and learning performance [16], particularly among new students [17]. From a Malaysian perspective, the use of emerging technologies such as Facebook are badly affecting students' reading behaviors [18] and learning performances [19]. With such widespread usage, there is no doubt that social media use has become an issue that many universities need to address [3]. The extensive use of social network site among students and the increasing usage of social media/social network for teaching and learning amongst academic institution create the risk of compulsive use and internet addiction among students. However, in Malaysia, there were no such researches on social media addiction among university students, especially in the context of YouTube. No researches on social media addiction have been conducted using a large sample size like the one reported in this work. To have a better understanding of this, we aim to identify the pattern of use of Facebook and YouTube among students in Malaysia and test it on the Young's Diagnostic Questionnaire (DQ) [1] Internet addiction scale. The fundamental concentration of this examination is to highlight the present circumstance of social media use and addiction amongst Malaysian university students.

II. LITERATURE REVIEW

A. Usage of Facebook and YouTube in Education

Social Media tools are noted by many researchers as compelling drivers of change for teaching and learning practices in the context of openness, interactivity, and sociability [20]. Research highlighted the increasing use of Facebook among students to gather information [16], as a supplementary learning tool [21], connecting with peers, and learning the university culture [22]. Moreover, previous reviews explore the utilization of YouTube as guidelines in the scholastic fields, such as medicine [23], health education course [24], in performing arts [25], architecture [26], nursing [27, 28], and in teaching English as a Foreign Language (EFL) [29]. Students perceive that they learn more and that they are more satisfied with a course when social media are integrated into its design [30, 31]. However, some students reported that the social network site (SNS) Facebook 'makes them' lose track of time and that they procrastinate in tasks such as writing term papers or preparing for final exams 'because of Facebook' [32].

Other studies have been performed on the effects of social media on students' cognitive development [33] while some research indicated that the extensive use of social media may also adversely affect students' sense of belonging, psychosocial well-being, and identity development [34]. Meier et al. [35] identified the implications of procrastination as a specific pattern of uncontrolled and dysfunctional media use among the student. Considering the amount of time that users spend online and the positive/negative effect of usage, many researches were conducted to investigate the different type of use and the consequences of Internet use, including habitual use, intensive use, compulsive use, problematic use, abuse, and addiction [36]. Compulsive Internet use is defined as Internet use over which the user is able to exercise no effective control [37]. Meerkerk et al. [38] embraced the term Compulsive Internet Use (CIU) in order to portray the behavioral aspects that substance and non-substance addictions share, such as conflict and loss of control. They defined it as 'the pattern of Internet use characterized by loss of control, preoccupation, conflict, withdrawal symptoms, and use of the Internet as a coping strategy' [38]

B. Internet addiction

The term Internet addiction is largely derived by Young [1], who developed an Internet Addiction Diagnostic Questionnaire (DQ) based on the psychiatric criteria for addiction. Young [1] presented a Diagnostic Questionnaire (YDQ) for 'Internet addiction', with eight dichotomous items, modified from DSM-IV from measures used for pathological gambling. The development in Internet use has been paralleled by rising concerns about problematic Internet use (PIU), also commonly called Internet addiction [1, 39], pathological Internet use [40], and Internet dependence [41]. The most commonly used terms include Internet Addiction Test [1], Young's Diagnostic Questionnaire [1], and the Chen Internet Addiction Scale [42]. In Young's Diagnostic Questionnaire [1], the respondents stated that their Internet usage straightforwardly caused direct to severe problems in their lives due to their failure to control it. One interesting issue that was raised in this study is that, all in all, the

Internet itself is not addictive, but specific applications seemed to assume a significant part in the advancement of pathological Internet use [1]. It was also pointed out that dependents were less liable to control their use of exceedingly intuitive features than other on-line applications [1]

According to a few researches, there may be ~6 - 13% of addicts among Internet clients [36]. Similarly, a couple of researchers studied the different subtypes of Internet addiction, such as Facebook addiction [43], online gaming addiction [44], or Internet sex addiction [45]. The terms found in the writing, "Facebook addiction" [43] or "Facebook intrusion" [46] are described as over-the-top utilization of Facebook that interferes with standard activities, prompts energetic usage of the site, and shows itself in rejecting social life. Based on the study conducted by Vishwanath [47], Facebook habits include individual's frequency of checking, responding, and interacting with this platform, and subsequently encompasses the inability of individuals to regulate such actions. Research conducted by Wang and LaRose [48] shows that there is a negative relationship between habitual use of Facebook with three negative behaviors of a person, which are missing classes, skipping work, and experiencing low levels of academic achievements. Some studies considered urgent use as a part of Internet addiction if the client encounter negative impacts throughout their life due to their utilization of the se platforms [49]. Glass et al. [50] specified that risky SNS alludes to circumstance when the mental state, which incorporates both mental and enthusiastic conditions of an individual, is debilitated due to over utilization of internet platforms. Kamal and Mosallem [51] additionally outlined that problematic internet users (PIUs) cut themselves off from their families, companions, and social exercises, and invest a large portion of their energy alone. Previous reviews underlined the fact that students turned out to be more helpless against habitual internet use due to technological interventions [52, 53]. Based on previous studies, we investigate the current usage of Facebook and YouTube among Malaysian students, and examine the Young's DQ [1] internet addiction scale to explore the prevalence of internet addiction.

III. METHODOLOGY

A. Measurements

As per Chou and Hsiao [54] and others, we adapted Young's [1] eight item Internet addiction DQ for our particular Internet use context. We used Young's items as is, apart from changing 'the Internet' in each item to 'Facebook' and 'YouTube'. The items in the DQ are presented as questions to which the respondent answer 'yes' or 'no'. Young's criterion for classification as addicted is a score of five or more. Therefore, we calculated Facebook and YouTube addiction score as the total number of 'yes' responses, following Young [1] and Chou and Hsiao [54].

1. Do you feel preoccupied with the Internet Facebook/YouTube?
2. Do you feel the need to use the Facebook/ YouTube with increasing amounts of time in order to achieve satisfaction?

3. Have you repeatedly made unsuccessful efforts to control, cut back, or stop Facebook/YouTube use?
4. Do you feel restless, moody, depressed, or irritable when attempting to cut down or stop Facebook/ YouTube use?
5. Do you stay on the Facebook/ YouTube longer than originally intended?
6. Have you jeopardized or risked the loss of a significant relationship, job, educational, or career opportunity because of the Facebook /YouTube?
7. Have you lied to family members, a therapist, or others to conceal the extent of involvement with the Facebook /YouTube?
8. Do you use the Facebook /YouTube as a way of escaping from problems or relieving a dysphoric mood (e.g. feelings of helplessness, guilt, anxiety, depression)?

In addition, we used the measurement for time distortion from Novak, Hoffman, and Yung [55] for Facebook and YouTube. We have two question for Facebook:

- FB1: When I use the Facebook, I tend to lose track of time
 FB2: Time seems to go by very quickly when I am using the Facebook

And four questions for YouTube:

- YT1: Time goes by very quickly when I am using YouTube
 YT2: When I use YouTube, I lose track of time
 YT3: It is very easy to get side-tracked (by the other video which listed there) and lose focus when watching videos in the YouTube.
 YT4: When I am searching for the information related to my subject on the YouTube I get side tracked by the other video which listed there.

These questions were developed based on Novak, Hoffman, and Yung [55], and was validated in a similar study. They were measured using a five-point scale, ranging from 1 (Strongly Disagree) to 5 (Strongly agree).

B. Data collection and participants

In order to gather data from a variety of learners with different types of Facebook use, the questionnaire was distributed to 1000 part-time and full-time students at different levels of study in University of Malaya. A total of 667 of these students (56.7%) returned completed questionnaires. In order to gather data from students who used YouTube, the questionnaire was distributed to 1500 part-time and full-time students at different levels of study in University of Malaya. Of the 1,500 distributed questionnaires, 1056 (70%) were returned.

IV. RESULTS

A. Usage of Facebook and YouTube

Among the 667 respondents, 67.5% were female and 32.5% were male in our Facebook study, and from the 1056 respondents, 65% were female and 35% were male in the YouTube review. ~56% of the respondents of Facebook were less than 25 years old, and only 13.5% were over the age of 35.

The majority of the respondents are of Chinese (42%) and Malay (33.6%) ethnicity. In the case of YouTube respondents, 93% of the respondents were under the age of 25. 41% and 45% of the aggregate respondents were of Chinese and Malay ethnicity. ~60 percent of the respondent in Facebook survey were undergraduates, and 92% of the maximum respondents in the YouTube study were undergraduates as well.

TABLE 1. PARTICIPANT CHARACTERISTICS (FACEBOOK AND YOUTUBE)

Characteristic	Group	Facebook N=667	%	YouTube N=1056	%
Gender	Female	450	67.5	758	65.2
	Male	217	32.5	402	34.6
Age	under 25	371	55.6	1086	93.4
	26 to 30	116	17.4	43	3.7
	30 to 35	90	13.5	22	1.9
	over 35	90	13.5	12	1
Race	Chinese	278	41.7	484	41.6
	Malay	224	33.6	531	45.7
	Indian	93	13.9	85	7.3
	Other	72	10.8	61	5.2
Level of study	Undergraduate	393	59.1	1071	92.0
	Masters	242	36.4	76	6.7
	PhD	30	4.5	74	6.4

The general outline of Facebook and YouTube use can be seen in Table 2. We found that the majority of the understudies asserted that they spend 10-30 minutes on this current SNS's, yet 39% of the respondents clarified that they check Facebook 2- 4 times a day. 75% of the respondents post 0 - 1 post per day on Facebook. 41% of the respondent confirmed that they use Facebook to maintain relationships. Another 36% of the respondents said that they do it for product inquiry. Then again, the majority of the YouTube users (29%) conceded that they use YouTube for 30 - 60 minutes. 45% of the respondents conceded that they sign in 2-4 times in YouTube. 91% of YouTube users utilize it for entertainment, while another 55% for academic learning.

TABLE 2. FACEBOOK AND YOUTUBE USAGE

Usage category	Reported usage	Facebook N=667	%	You Tube N=1056	%
	less than 10 minutes	140	21	29	2.5

Time per day	10-30 minutes	182	27.3	164	14
	more than 1/2 but less than 1 hour	112	16.8	339	29
	1 to under 2 hours	95	14.2	248	21
	2 to under 3 hours	56	8.4	217	19
	more than 3 hours	82	12.3	163	14
Logins per day	1 or fewer	143	21.4	442	38
	2 to 4	260	39	520	45
	5 to 10	159	23.8	141	12
	more than 10	105	15.7	55	4.7
Posts per day	0 to 1	502	75.3	-	-
	2 or 3	119	17.8	-	-
	more than 3	46	6.9	-	-
Purpose of Use	Meet People	137	21	-	-
	Entertainment	61	9	1056	91
	Maintain relationship	269	41	-	-
	Social events	176	27	-	-
	Product inquiry	235	36	176	15
	Discussion	121	18	-	-
	Academic learning	182	28	646	55
	General Information	339	51	590	51

B. Internet addicts

We followed Young's criteria, which suggest that respondents answering yes to five or more of his/her eight questions are addicts. The result shows that 121(18%) of the respondents that are using the Facebook are addicts, and they spend more than two hours on Facebook per day, 115 of them have more than 50 Facebook friends, and they post at least once a day. ~53% of them use Facebook for information, 59% for maintaining relationships, 38% for academic learning and product inquiry, and 30% to meet people.

The results of the YouTube data show that 236 (20%) of the respondents are addicted to YouTube, and they spend more than two hours on YouTube per day. ~89% of the respondents use YouTube for entertainment, 46% for information, 45% for academic learning, and 16% for product inquiry. We calculated the means and standard deviation for the time distortion factor, and the results shows that students do not keep track of the time (FB1: Mean=4.04), and they lose track of time (FB2: mean=3.76). Similar results were reported for YouTube users (YT1: 3.94 and YT: mean=3.70), and the video listed in the side attracted their attention, and they lose focus, as they are influenced to watch other related videos.

TABLE 3. MEAN AND STANDARD DEVIATION

Time Distortion	Mean	Standard Deviation
FB1	4.04	0.80
FB2	3.76	0.99
YT1	3.94	0.87
YT2	3.70	0.93
YT3	3.64	0.96
YT4	3.83	0.86

V. DISCUSSION AND CONCLUSION

This study investigated YouTube and Facebook usage among Malaysian students and the possibility of Facebook and YouTube addiction. As per literature, recently many universities and instructors are using social media as a complementary tool for teaching and learning, and many studies highlighted the effectiveness of this approach. Following Young [1] measurement, the results of this study shows that ~18% of the students are Facebook addicts, and 20% of the students are YouTube addicts. Almost half of the Facebook and YouTube addicts spend more than two hours in Facebook and YouTube for different purposes. Facebook addicts use Facebook for information, maintaining relationship, academic learning, product inquiry, and meeting people, while YouTube addicts use YouTube for entertainment, information, academic learning, and product inquiry. However, compulsive use of social media amongst students influenced their corresponding social and academic lives. Previous research showed that excessive use of SNS affect students' academic performance [12] and family relationships [56], which might also culminate in internet addiction [45]. Another crucial fact that we focused upon is the boundless utilization of the Internet among young people makes them feel alone, causes dangerous practices, and results in poor family and companions' connections [53]. Recent statistics showed the rapid growth in social media usage among students in Malaysia [8]. It is also evident that the usage of this media in the long run can hamper a student's cognitive development [33], psychosocial well-being, and identity development [34]. In another study involving Taiwanese college student, it was found that 17% of college students had Internet Addiction, which may lead to depression [57]. Through this research, we offer insight into the pattern of Internet use amongst students which can be used by academic institutions to minimize the possibility of social media addiction while using it for teaching and learning. As the Malaysian government completely supports the utilization of social networking for scholastic purposes [60], in lieu with Chou and Hsiao [56], this represents the perfect time for educational organization to be aware of and control students' use of online social networking and reorient it for educational improvement.

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