ASSOCIATION BETWEEN SOCIAL MEDIA USE AND DEPRESSION AMONG UNIVERSITY STUDENTS

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Abstract

The most widely used social media such as Twitter, Instagram and Facebook have changed the way of communication between people especially amongst youth. It has been identified that individuals who spent more time online experienced more symptoms of depression. Therefore, this study was done to identify the level of depression and to find out the relationship between social media and depression among undergraduate students. This is a quantitative study using a survey method involving 150 students of local university in Malaysia. The questionnaire consists of three sections which are demographic information, Social Media Addiction Scale-Student Form (SMAS-SF) and Beck Depression Inventory 2nd Edition (BDI-II). The finding indicates that majority of the respondents (44%) have minimal depression while only 13.3% has severe depression. Pearson correlation test has been employed to investigate the relationship between social media and depression. The result showed that there is a correlation between social media and depression, r=0.199, p=<0.01. In conclusion, it depicts that social media is significantly related and have positive relationship to depression among students. This study provides valuable information for counsellors and lecturers to identify students who have suffered from depression related to social media use and help in managing the students.

Keywords: social media, depression, students, mental health.

INTRODUCTION

Social media has become a part of human's everyday lives. Malaysia is ranked among the highest users of social media in the Asia Pacific region (Goglobe, 2015). Kaplan and Haenlein (2010) define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of usergenerated content". People can access all types of information in their hands through cell phones, iPads and other devices. Social media, such as Facebook, Twitter, Instagram etc., has taken the technology world to a whole new level. Although these social media can serve as a positive phenomenon by being a good source of communication, it can also serve as a negative effect on individuals' mental health such as depression, losss of self control, social anxiety, stress, sleep deprivation and facilitate offensive behaviour such suicidal ideation (Berryman, Ferguson & Negy, 2018) . This is due to when using the social media too frequently, the effects can make people feel increasingly unhappy and isolated in the long run which might lead to depression (Heffiner, 2016).

Major deperessive disorder (MDD) is a major depressive disorder which is common and recognised as a serious medical illness that negatively affects an individual's feeling, thinking and action or behaviour (American Psychiatric Association, 2013). In the Shared Prosperity Vision (SPV) 2030, the government planned to develop a social modal indicator and its development where it outlines the health index of the citizen as one of the objectives of this strategic core plan. The aspiration was also voiced out by the Chairman of the National Institute of Occupational Safety and Health (NIOSH), Tan Sri Lee Lam Thye, that Malaysia must have its own index of evaluating the psychological well-being of the citizen to produce a balanced individuals from various aspects including physical, emotional and spiritual aspects. Although the Psychology Prosperity Index recorded a modest figure in a range of 7.1 this year (IKPM report, 2020), but the survey conducted by the Ministry of Health found that a 2-fold increment pattern had occurred in issues involving mental health in Malaysia. The National Morbidity Health Survey (NHMS), which was carried out in 2015 and 2017 also found an increase in mental health problems every year. An increment of up to 34.7 percent cases can be seen in 16-19 years old , while individuals aged 16-24 years were reported to have suicidal ideation.

There are a lot of research done by previous scholar mentioning the relation between social media use and depression. Rahilah, Nor Azili, Jaslina, & Yollanda (2018) asserts that social media has a very significant impact on depression of based on the study they conducted among university students in Malaysia. They found that students are considered as heavy social media users that spend an average of 3 to 4 hours daily and have more than 3 social media accounts. Moreno et al. (2015) ascribed such a large amount of depressing content to the fact that many students and people alike

view depression and other psychological disorders as stigmatized and are too afraid to receive help (Youn, Trinh, Shyu, Chang, Fava, Kvedar & Yeung, 2013). Therefore, the researcher wants to increase the knowledge about how social media usage can lead to depression. Despite the burgeoning interest among scholars, the research on social media studies in Malaysia is still scarce compared to the research in Western context. (Nur Atikah, Md. Salleh, Mohd Nizam & Moniza. (2017). The need to understand the phenomenon relevant to Malaysian landscape drives the researcher to carry out this study which may contributes significantly to the body of knowledge and practically to the Malaysian society at large.

PROBLEM STATEMENT

Due to the increased popularity of social media in Malaysia, it is identified that one-third of the country's Internet traffic will be access to social sites. According to Muniandy and Muniandy (2013) citing Burson-Marsteller (2012), Malaysian netizens view social network sites 14 billion times every month. Meanwhile, according to Kemp (2012), almost 90% of Malaysian Internet users have registered social media accounts. Malaysians are considered as sociable online as they have among the highest average number of friends on social networks in the world. For instance, Facebook users in Malaysia have, on average, 233 friends which is about 80% higher than the global average. The study also revealed that Malaysians prefer to spend more time online rather than watching television or listening to the radio. Video streaming is one the favorite online activities with 51% of online users having an active YouTube account while 80% of Internet users stream online video content each month.

In relation to the above issue, many researches concluded that high usage of Facebook causes depression and decreases prosperity in individuals (Feinstein et al., 2013). In recent years, a lot of scholars have carried out various empirical studies investigating the causations and consequences of depression in context of the use of new media. These investigations have focused on social media use (Banjanin, Banjanin, Dimitrijevic, & Pantic, 2015; Błachnio et al., 2015; Mok, Sing, Jiang, & See, 2014); intensity of social media use (Cotten, Ford, Ford, & Hale, 2012, Cotten, Anderson, & McCullough, 2013; online communication (Wagner, Horn, & Maercker, 2014); and online threats (Varghese & Pistole, 2017).

In addition, Tandoc, Ferrucci & Duffy (2015) saw how social media would lead to depression as users would compare themselves to others they were viewing online. If a person saw himself or herself as less successful than another person, that "envy" would lead to highly depressed feelings. Facebook and other social media sites are seen as a place to portray oneself in a positive light, so if users are constantly checking up on these sites and see others as more successful and happier than themselves, these users are more likely to feel inadequate and depressed (Lin, Jaime, Sidani, Brian &

Primack, 2016; Tandoc et al., 2015). According to Rashid et al., (2020), mental health climate can affect the way a person thinks, behaves and feels, where the level of mental well-being will determine the way a person makes decisions and choices in life, solves problems as well as interacts with others.

Nowadays, mental illness has becoming the second biggest health problem affecting Malaysians after heart disease. National Health and Morbidity Survey (NHMS) 2017 previously proved at least one in 10 young people or 10 percent of 5.5 million youth in the country had ever thought of suicide.The same study also showed that one in five young people suffer from depression, while one in 10 teenagers suffer from emotional stress. It is reported that more than 300 million people are affected worldwide (World Health Organization, 2017). This is worrying and alarming situation in view of youth generation are mostly students. According to Wenjuan et al. (2020) and Bruffaerts et al. (2018), mental health issues tend to increase among university students as they are having a major impact in their life at this stage. University students experience a variety of difficulties such as educational, social, environmental, and psychological adjustment in a new campus environment which can affect their psychosocial well - being and learning outcomes (Yikealo et al. ,2018). Therefore, this study was done to identify the level of depression as well as to investigate the relationship between social media use and depression among university students.

LITERATURE REVIEW
Depression, known as a major depressive disorder or clinical depression, is a common and serious mood disorder. Those who suffer from depression experience persistent feelings of sadness and hopelessness and lose interest in activities they once enjoyed. Aside from the emotional problems caused by depression, individuals can also present with a physical symptom such as chronic pain or digestive issues. To be diagnosed with depression, the symptoms must be present for at least two weeks (Truschel, 2019). Scholars have linked a state of depression with different psychological symptoms, including distress, depressive moods and anguish (Błachnio, Przepiorka, & Pantic, 2015) and suggested that depression has an influential effect on both mental and physical processes (Sydenham, Beardwood, & Rimes, 2017). Kross (2012) indicated that frequent use of social media may be associated with declines in subjective well-being, life satisfaction, and real-life community.

Some of the research on social media and depression has found significant relationship between the two variables. For example, Zhang, Shi, Liu, and Miao (2014) found that students who engaged in large amounts of social media activities like Facebook and playing online games were more dissatisfied with their lives and depressed than those who played sports or were involved in other interactive activities. In addition, Lin et al. (2016) found that social media use was significantly associated with depression

among 1787 adults in the US. The study suggests that depressive participants were inclined to closely interact with social media. Meanwhile, Hoare, Milton, Foster, and Allender (2017) illustrated that a higher level of depressive conditions was prevalent among 2967 Australian adolescents with intense Internet usage.

Pantic et al. (2012) reported that daily time spent on social media was causing adjuvant effect on depression levels of the high school students. Steers, Wickham, & Acitelli (2014) have reported a similar result to the findings of Pantic et al. (2012). According to this study, staying longer on Facebook was making students more depressed rather than staying in the classes. Despite of that, findings by Scherr and Brunet (2017) illustrated that depressive users are likely to spend more time on Facebook so as to relieve themselves from stressful symptoms. Similarly, in a study of 413 young adults, Ophir (2017) found that people with stressful feelings related to social pressure, high expectations and problems are more likely to use social media for mitigating these negative emotions.

Furthermore, there is a controversial issue as to whether social media use may exacerbate or alleviate conditions such as depression. Engagement via platforms such as Facebook, Twitter, Instagram, Snapchat, Youtube, Whatsapp and etc. may provide opportunities for keeping in touch with family and friends as well as other social interactions that may increase social capital and alleviate depression and anxiety. Nabi et al. (2013) showed that having a higher number of friends on Facebook significantly predicted higher perceived social support, reduced stress, and increased overall well-being, although the interpretation of their results is limited by the cross-sectional nature of the study. While Feinstein et al. (2013) and Vogel et al (2015) concluded that it may be the quality of social media use that is associated with mental health outcomes rather than the quantity of time spent on social media sites, such that when social media is being used to leverage social resources, its overall impact may be positive.

METHODOLOGY
This study used the quantitative research design using survey method. The target population for this study were the undergraduate students from Universiti Kebangsaan Malaysia (UKM). The undergraduate students include Malay, Chinese and Indian students. One hundred and fifty students were involved in this study. They were chosen according to convenience sampling method where the researcher selects participants because they are willing and available to be studied. The data was collected using questionnaires which were distributed to the student face to face after getting the consent from them. The researcher used Social Media Addiction Scale-Student Form to determine social media addiction among students. This scale was developed by Cengiz Sahin (2018). This instrument consists of 29 items which

includes 4 sub-dimensions which is virtual tolerance, virtual communication, virtual problem and virtual information.. The highest point that can be scored from the scale is 145, and the lowest one is 29. The higher scores indicate that the respondents perceive himself as a "social media addict". Findings show the Sperman Brown reliability coefficient was calculated as .91; Guttmann Split-Half value was calculated as .90, and Cronbach Alpha reliability coefficient was calculated as 0.93.

Beck Depression Inventory 2nd Edition (BDI-II) also was used to assess the severity of depression. This inventory consists of 21 items that are self-rated on a 4-point scale ranging from 0 to 3. The total raw scores can range from 0 to 63.

The data that had been collected from the survey was coded and entered into the computer to analyse using Statistical Package for Social Sciences (SPSS) version 22 for windows. An internal consistency and reliability test ran for each of the Social Media Addiction Scale-Student Form (SMAS-SF) and Beck Depression Inventory 2nd Edition (BDI-II) items using Cronbach's Alpha. Descriptive statistics were used to analyse quantitative data for frequency and level of depression. While, to investigate the relationship between two variables of social media and depression, the researcher used Pearson correlation to analyse the data.

RESULTS

The collected data was analysed using Statistical Package for Social Studies (SPSS) version 20. Categorical variables were presented as frequency (n) and percentage (%). Table 1 described the distribution of the respondents in terms of their demographic information. The table indicated that the number of respondents in term of gender and races were the same. It also shows that 26% came from the first year, 30.7% from the second year, 26.7% in third year level of study and only 16.7% come from others. Most of the respondents currently used WhatsApp 40.7% and the most frequent users of social media per day was 34% which was estimated between 5 until 8 hours. Therefore, based on analysis on the information gained from the background questionnaire, it can be concluded that majority of the students used WhatsApp as their social media and the usage of the social media was 5-8 hours per day. Majority of the students used social media 5-8 hours per day, but there were still 2.7% students who engaged with social media for about 21 until 24 hours per day. It is also quite surprising to know that 46.8% of the respondents spend most of their time on screen time between 9 hours to 24 hours.

Table 1: The Distribution of Samples Across Demographic Characteristics

Demographic variable		Frequency	Percent
Gender	Male	75	50.0
	Female	75	50.0
	Total	150	100%
Level of study	First year	39	26.0
	Second year	46	30.7
	Third year	40	26.7
	Others	25	16.7
	Total	150	100%
Races	Malay	50	33.3
	Chinese	50	33.3
	Indian	50	33.3
	Total	150	100%
Types of social media that currently used	Facebook	22	14.7
	Instagram	39	26.0
	Twitter	28	18.7
	WhatsApp	61	40.7
	Total	150	100%
Frequency usage of social media per day	1-4 hours	29	19.3
	5-8 hours	51	34.0
	9-12 hours	37	24.7
	13-16 hours	19	12.7
	17-20 hours	10	6.7
	21-24 hours	4	2.7
	Total	150	100%

n=150

Table 2 shows the level of depression among undergraduates' students. Majority of the respondents, 66 students have minimal depression (44%), while only 13.3% of them have severe depression.

Table 2: Level of Depression Among Undergraduate Students

Depression	Frequency	Percent
Minimal Depression	66	44.0
Mild Depression	33	22.0
Moderate Depression	31	20.7
Severe Depression	20	13.3
Total	150	100%

n=150

Pearson correlation was used to analyse the relationship between two variables of social media and depression. The result revealed that social media and depression significantly correlated, where *r=0.199, n=150, p=<0.01.*

Table 3.: Relationship Between Social Media and Depression

		Depression
Social Media	Pearson Correlation	.199*
	Sig. (2-tailed)	.014

n=150

DISCUSSION

Table 2 shows that majority of the respondents which is 44% of the undergraduate students have minimal depression while only 13.3% has severe depression. Among the factors that contribute to minimal depression are social support, downward social comparison, good self-control in the use of social media, and others. The impact of social media on mental health may differ because adolescent might use the social media to strengthen bonds with family, existing friends and new friends which lessen the feeling of loneliness and social isolation, and indirectly improve mental health (Keles, McCrae & Grealish, 2020).

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Furthermore, the impact of social media on mental health tends to occur on adolescents who used to compare themselves with those who are believe to be superior socially. This upward comparison according to social comparison theory (Festinger, 1954) induce more negative feelings such as envy, which in turn can leads to depression. The more frequent adolescents actively use their social media, they are not likely to develop envy toward others. This is supported by the findings by Appel, Gerlach, and Crusius (2016) who reported that passive Facebook use predicts social comparison and envy, which in turn lead to depression. In this current study, most adolescents are active users of social media.

Individual's internal self-control is another factors that might Decision of using a specific website, turning to another one or logging out is a personal one related to the individual's internal and self-control. Respondents might experience less enjoyment and feel more guilty about their media use when they have to delay other tasks such as delaying the assignments (Panek, 2014; Reinecke et al., 2014). As undergraduate students, most of their time are occupied with classes and assignments. Therefore, they might not have much time on screen. That is why they reported to have minimal depression.

In this current study, the results show 46.8% of the respondents spend most of their time on screen time between 9 hours to 24 hours. This finding should be worrisome and warrants attention. Adolescents who reported spending more time on screen activities consistently shows greater depressive symptoms. This result had been supported by Jacobs, Reinecke, Gollan, & Kane, (2008) stated that major depressive illnesses are usually commencing in adolescence because of their chronic and repetitive character there is a high probability of iteration in adulthood. Kim-Cohen et al. (2003) reported that 75% of the adults that are going through major depressive disorder have experienced their first depressive episode in childhood or adolescence. In addition, Amarasuriya, Jorm and Nicola (2015) stated that over 20% of the undergraduates in Sri Lanka had depression as per PHQ-9, with over 9% obtaining a diagnosis of Major depression. Similar findings by Kuruppuarachchi et al. (2002) and Torabi and Perera (2006) indicates high levels of psychological distress and depression symptomatology in undergraduates in Sri Lanka. Differences in likelihood of depression were seen within a number of demographic groupings, including faculty and year of study, age category, residence and ethnicity. Those exposed to a higher number of life events had a higher likelihood of depression. Family deaths, romantic break-ups, problems with a close associate, educational difficulties, unemployment, harassment by another student and domestic violence were all associated with a higher likelihood of depression.

Table 3 shows that there was a positive significant correlation between social media and depression among undergraduate students which is r=0.199, n=150, p=<0.01. This result is tallied with previous studies conducted by Banjanin et al. (2015) and Tan et al. (2016) stated that there was a significant positive correlation between internet use and depression. According to them, as the time spent online increased, the depression level of the individual was rising. A lot of other large-scale empiric work in this area also suggests associations between time spent on social media and increased symptoms of depression and anxiety and decline in subjective well-being (Kross et al., 2013; Lin et al., 2016; .Andreassen et al., 2016).

Other study done by Shakya and Nicolas (2017) also showed the linked between depression and social media use. In the study, they assessed the associations of both online and offline social networks with several subjective measures of well-being. They investigated the associations of Facebook activity and real-world social network activity with self-reported physical health, self-reported mental health, self-reported life satisfaction, and body mass index. Results showed that overall, the use of Facebook was negatively associated with well-being. In addition, Twenge et al (2017) revealed that there was a rise in depressive symptoms which correlates with smartphone adoption in 8th to 12th graders between 2010 and 2015.

According to Gebrie (2018), depression has significant consequences in daily life and constitutes a major threat to chronic diseases. This is due to Kurtaran (2008), individuals who are having difficulties in expressing themselves, feeling alone and left-out, it may be thought that since virtual platforms such as internet and social media allow individuals to be anonymous by disguising their identity, they can act as a person they are not and express themselves more comfortably.

In contrast, there were some researchers that did not find a significant relationship between social media and depression. For instance, according to Sanders, Field, Miguel, & Kaplan (2000), the increase in internet use was causing weakening effect on social relations, however, that wasn't affecting the depression levels of the students significantly. In another study, Jelenchick, Eickhoff and Moreno (2013) also stated that there was no significant relationship between daily time spent on social networking platforms and depression among university students.

The strength of this study is that it had managed to get a high participation rate from the undergraduate students studied. However, the generalisation of the results needs to be interpreted with caution because the number of sample is too small. Future studies would need to cover wider population, which covers the public and private higher educational institutions for better representativeness of the universities in this country. The awareness on the association between the usage of social media and

depression highlighted the importance of educating the younger generation in terms of controlling the usage of social media.

CONCLUSION
Not only among university students, social media is a popular informative and communicative platform among users across the globe. Despite the various positive outcomes which are beneficial to users in various aspects of life, negative consequences due to excessive social media use are also inevitable. From this study, we can concluded that there is significant relation between social media and depression among undergraduate students. Given the increasing prevalence of social media and the substantial morbidity and mortality associated with depression worldwide, the positive association we found between social media use and depression has important implications for future research and intervention.

Besides that, from this study, we can see that there is a high prevalence of depression among undergraduate students. Based on these findings, we would like to recommend that undergraduate students are screened periodically for the presence of depressive symptoms and adequate levels of support are provided to them by the university, parents and significant others. Future studies could focus on finding its impact on academic achievement performance, and the types of appropriate intervention.

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