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Factors Influencing Students' Academic Performance in the Post COVID-19 Era: A Conceptual Model

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Abstract
At the current endemic stage, traditional teaching and learning activities have changed to online approach. The usage of social media in online teaching and learning is increasingly popular. There are various concerns with these changes because these are not the norm in Sarawak education system. With the rapid evolution of web technologies, social media is the best website in bridging the gap of communication in the world. It comprises of applications that connect people around the world like no other technology has before. Applications that were once thought of as platforms to use to reconnect with long lost friends or acquaintances have now become ubiquitous among university students. Some empirical evidence have illustrated that social media use among them are mainly on keeping up with hometown relations and adding new friends to following their favorite social media influencers. However, these activities create major worries among the educators as they would influence their grades. This is because the main characteristic of social media is the use of Internet-based applications which can be addictive and a diversion from educational purposes. Having said that, Internet and social media are very useful as they can provide the end users with lots of information. Its nature has the capabilities of educating, enticing, and entertaining the users and audience. However, if they excessively misuse it, they will experience poor academic performance. Thus, the purpose of this study is to determine the effects of influencing factors such as social media use, online engagement and personality on university students' academic performance. A new variable, personality; is proposed into a model because many researchers have suggested that personality has been shown to be relevant to many types of interactions especially in online platforms.

Keywords: social media; online engagement; personality; academic performance

1.0 INTRODUCTION

According to the official portal of Sarawak government, (2023), Sarawak is a true virtue of multiculturalism with 2,907,500 population and nearly half of the population is under the age of 26 (Institute for Youth Research Malaysia, 2021). When looking at smartphone owners by age, penetration is highest among youth aged 18 to 24 from the report done by Malaysian Communications and Multimedia Commission in 2020. Malaysian university students who constitute youth spend a major portion of their time in using the smartphones for both academic and purchases purposes. The internet also provide convenience to students and teachers to have virtual group discussion (Kolhar et al., 2021).

The constant checking and/or use of smartphone applications 24 hours a day has been linked to sleep disturbances, stress, anxiety, withdrawal and deterioration in well-being, decreased academic performance and decreased physical activity (Donaldson et al., 2021). According to the report done by Statista Research Department in 2022, the top three most popular social media platforms among users in Malaysia were Facebook, Instagram, and Facebook Messenger.

Furthermore, COVID-19 pandemic caused a massive disruption in educational systems. Because of the highly sensitive situation that the virus created, universities had to shift to online learning environments (Basilaia, 2020). In return, this may have negatively affected students'

mental and psychological health. Despite the previous research and amid COVID-19 that highlighted the value of social media usage for online learning purposes, the impact of its usage on students' academic performance after COVID-19 is under-researched (Mahesa et al., 2021).

Bekalu et al., (2019), found that social media is negatively associated with academic performance of students. University students have weak self-control abilities resulting from their immature self-identities (Ting & Essau, 2021) but students' attachment to parents, friends, and teachers is preventing them from committing a delinquent activity (Handa & Ahuja, 2020).

Some research suggests that university students spend a lot of their time on social media both during the day and at night, and it can be contended that such technologies play an important role in their daily lives (Kolhar et. al., 2021) but some viewed it as causing psychiatric disorders (Qiu et al., 2020). The usage of social networking sites is affected by user personality types (Watson et al., 2019). Personality traits affect certain habits that can have an influence on academic success (Kolhar et al., 2021). According to Abbas et al., (2019), several personality traits are related to academic performance. A study done by Hawi et al., (2019) found out that conscientiousness and openness have significant relationship with academic achievement (CGPA).

The studies reviewed above showed excessive social media use is addictive among university students. However, the extent to which these findings could be replicated to university students in Sarawak, Malaysia is unknown (Ting & Essau, 2021). Thus, the main objective of this proposed study is to link the influence of social media use, online engagement and personality on the academic performance of students in public universities in Sarawak.

Other specific objectives of this study are as follows:

1) To determine the influence of social media use on academic performance among students in public universities in Sarawak.

2) To determine the influence of online engagement on academic performance among the students in public universities in Sarawak.

3) To determine the influence of personality on academic performance among the students in public universities in Sarawak.

2.0 LITERATURE REVIEW

2.1 Post COVID-19 and Academic Performance

After the hit of COVID-19, the development of technology in the field of education has rapidly transformed the traditional teacher-based education system into a more flexible venue where students participate and learn ubiquitously (Onyema, 2019). Meanwhile, students are faced with the challenge of transitioning from traditional methods to online learning.

Some students struggle with slow speed of internet connections, high quality and expensive learning software, as well as the cost and availability of technology especially those students who reside in the rural areas of Sarawak. Hence, some psychological problems such as frustration and confusion occur while learning online (Atlam et al., 2022). These psychological problems can demotivate students and lead to poor academic performance.

Regardless of the challenges that may distress and affect online learning experience during the current COVID-19 pandemic, Atlam et al. (2022) have found that online learning to be constructive and practical and improve the students' interaction. These could happen if educators supplement their talks with video visits, virtual gatherings, and so on to get prompt feedback and establish personal connections with the students.

2.2 Social Media Use and Internet

Utilization of social media platforms in daily life has significantly expanded in the recent years and it has become a part of everyone's life, including students (Anser et al., 2020). According to Azizi et al. (2019), university students are among the most using social networking. Obar & Wildman (2015) defined social media as web 2.0 internet-based applications and user generated content where individuals and groups create user-specific profiles for a site or application designed and maintained by a social media service and facilitate the

development of social networks online by connecting a profile with those of other individuals and/or groups.

Nearly 91.7% of Malaysians were frequent users of social media as of January 2022. Compared to 2016, when social media users made up over 62 percent of Malaysia's entire population, this represented an increase of close to 30 percent (Statista, 2022).

According to internet users survey reported by Malaysian Communication and Multimedia Commission (MCMC) 2020, smartphone was the most common device used to access the internet which represents 98.7 percent. The most common activities for internet users are texting (98.1 percent) and visiting social networking sites (93.3 percent) (MCMC,2020).

2.3 Social Media Use on Academic Performance

Social media has a significant impact on young people's daily life today, particularly university students (Stathopoulou et al., 2019). A study by Sobaih et al. (2022) found that the use of social network applications as e-learning platforms has a good, considerable impact on students' academic achievement. For instance, YouTube is increasingly being used as a learning platform. Yaacob & Saad (2020), in their study found that perceived usefulness, perceived ease of use, and social influence are three important factors in encouraging students to use YouTube as a learning platform. Apart from that, the usage of online social media for collaborative learning had a big impact on how interactive students were with their peers and teachers, as well as how they shared knowledge online (Ansari & Khan, 2020). The right use of social media could usher in a new era of social learning, social presence, and an alternate platform to support online learning (Sobaih et al., 2020).

However, according to Bhandarkar et al. (2021), social media has a negative impact on the academic performance of 21st-century undergraduate medical students. Furthermore, a study among the medical students in University of Sharjah found that the use of social media also had a greater impact on female academic achievement than on male academic performance, despite the fact that males were more attached to social media networks (Alnajat et al., 2019).

Apart from that, the intensity of use of social media is the most reliable indicator of social media tiredness and this exhaustion adds to the decline in academic performance (Malik et al., 2021). Their heavy use of social media for non-academic purposes kept them from focusing on their studies and other tasks, and they stayed up later than they should have, which decreased the amount of sleep they got. These repetitive behaviours can prevent students from concentrating on their schoolwork, negatively impact their grades, social interactions, and sleep patterns, and promote a sedentary lifestyle and physical inactivity, which increases their risk of developing non-communicable diseases and mental health issues (Kolhar et al., 2021). Although students found social media to be a useful tool for passing the time and aiding in their academics, it is still important to keep an eye on how it is being used to prevent any unfavourable effects on the students' social and physical well-being (Sheng et. al 2022).

2.4 Online Engagement and Academic Performance

Academic achievement has a strong correlation with student engagement in the educational and learning process (Mahdiuon et al., 2020).The transition to online learning has required faculties to make adjustments to examination and grading methods as well as create strategies to increase student engagement (Jackson et al., 2020). Paulsen and McCormick (2020) suggested that online learning can occur in a variety of forms, but the three most common categories are: (i) fully asynchronous instruction (requiring no face-to-face interaction), (ii) blended instruction (involving of both online, and face-to-face instruction, and (iii) synchronous online learning (just face-to face instruction, which is the online version of traditional lectures). Furthermore, educator's presence in online settings, interactions between students, teachers, and content, as well as designed connections between online and offline activities apart from campus-related and practice-related activities are essential for better engagement, improved satisfaction, and achievement of learning outcomes of online students (Nortvig et al., 2018). Alenezi & Brinthaup (2022) in their study found that most of the students perceived that social media facilitated interaction with peers, interaction with faculty, engagement, and collaborative learning.

However, online class environment presents the challenge of maintaining student engagement as

compared to a traditional face-to-face setting. One of the disadvantages of online environment as pointed out in the literature is the reduced interaction between and among the students and course facilitators (Chen et al., 2008; Paulsen & McCormick, 2020). This low engagement could further lead to their low satisfaction and poor performance which has not been explored in previous studies. The interaction between students and teachers, peers, and online knowledge sharing has had a big impact on students' engagement, which in turn has a significant impact on students' academic success (Ansari & Khan, 2020).

2.5 Personality and Academic Performance

Apart from social media use, it has been suggested that behavioral tendencies reflected in personality traits affect certain habits that can have an influence on academic success. According to the most recent definition, a person's personality is a stable collection of characteristics and behavioural patterns, including dispositions (also known as natural tendencies or inclinations) and distinctive social behaviours (Bergner, 2020).

The importance of non-cognitive factors in explaining individual disparities in academic performance is another area of intense and expanding research (MacCann et al., 2019). Personality is one of the non-cognitive elements that has been systematically linked to academic success (Richardson et al., 2012).

There are many acknowledged models of personality traits, and the five-factor model (FFM) is one of them (Costa & McCrae, 1992). According to Feher et al. (2021), the FFM has become the standard model for personality traits since it is so widely used in studies and is thus used without hesitation. Extraversion, agreeableness, conscientiousness, neuroticism, and intellect/imagination experience/openness to a new experience are the five categories that FFM used to categorize personality traits.

Students' personalities as well as their capacities for emotional intelligence have an impact on their education and productivity (Dong et. al., 2022). Additionally, it has been noted that personality qualities play a significant effect in how well students achieve academically (Mammadov, 2022).

Another study done by Begum et. al., (2021) found that agreeableness and conscientiousness have positive significant correlation with academic performance and negative correlation with neuroticism. However, a study done by Bongato & Rulona (2018) found that the personality traits of the students did not affect their academic performance.

Although many previous researchers provide evidence of the associations of personality types with academic performance, inconsistent results by different studies has created more room for research to clarify the links. Thus, to reduce this gap, a personality factor is proposed and this will be conducted among university students in Sarawak.

3.0 CONCEPTUAL MODEL

Figure 1 is the proposed conceptual model that visualizes the relationship between social media use, online engagement and personality as independent variables and academic performance as a dependent variable. This model is adapted from a previous work by Al-Rahmi & Othman (2013) who reported that interactivity and engagement predict students use of social media that resulted in good academic performance. In our proposed model, students' use of social media is regarded as a factor that increases the interaction with their peers and teachers. Students' engagement is specifically focusing on online engagement because today students are social media dependents. Personality factor which will be used includes two most significant traits with academic performance namely openness and conscientiousness.

Figure 1: The Proposed Conceptual Model
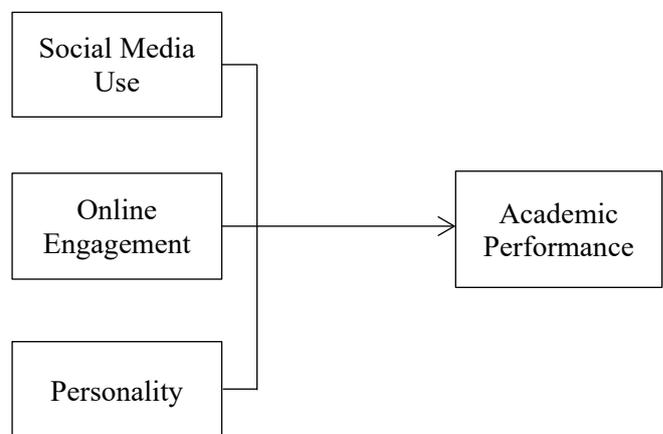
4.0 CONCLUSION

This paper discusses the influences of social media use, online engagement and personality on students' academic performance. Social media use is highly adopted in online learning realm, and this causes active interaction between educator and students. Active participation can help students to excel academically. Students' online engagement is a multidimensional concept, and many studies found that it has a positive impact on academic performance. Personality construct is newly proposed because many findings demonstrate that it influences students' academic success. Additionally, it is found that students with self-motivation appear to perform better in the online learning environment. Teachers should carefully design their online learning to foster students' collaboration through scaffolding the learning steps. This study contributes to the literature in a novel way by studying these factors from different dimensions and settings, among students from universities in Sarawak.

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