CONCEPTUAL FRAMEWORK FOR THE INFLUENCE OF SOCIAL MEDIA USAGE AND SOCIAL MEDIA MULTITASKING ON THE ACADEMIC PERFORMANCE OF THE UNDERGRADUATE STUDENTS

Mahir Tahrir Salih Mohammed, Faridah Ibrahim and Norzita Yunus
Infrastructure University Kuala Lumpur

ABSTRACT

Social media has become an almost crucial part of our regular life, especially among university students as they are generally using social media excessively in their daily activities like attending classes, doing homework or solving assignments. This study was aimed at investigating the impact of the multitasking of the social media on students' academic performance. A conceptual framework is proposed for the investigation into the influence of social media usage and social media multitasking behavior on the academic performance of undergraduate students. The conceptual framework discussed in this paper examined the contribution of social media to the academic outcomes of Malaysian university students and it will act as a baseline for future empirical research in this area.

Keywords: *Social media, Multitasking, Media Usage, Academic Performance, Undergraduates*

INTRODUCTION

Nowadays, owing to media development, the world transformed dramatically from the physical globe to the internet globe. Websites concentrated more on establishing internet networks for individuals with similar interests. Over the past two centuries, the extreme uses of social media have progressed in a worldwide case. Since words can mean differently in different settings, social media has been noted allowing users to disperse their ideas, opinions, interests, programs, and others Masood, Luqman, Feng, & Ali (2020). Simultaneously, social networking sites are an Internet use where individuals post data and are available to others, particularly for individuals who share comparable interest Greenhow & Lewin (2016). As an illustration, famous social networking sites in use are Tumblr, Facebook, Vine, Twitter, Instagram and LinkedIn. Users of social networking sites enjoy learning from the digital texts as these new media are easily accessible, portable, less costly, motivating and a number of texts can be stored in their laptop or smart phones (Md Mahadhi & Faridah Ibrahim, 2017).

In relation to this, users of more skilled social media were college students who continuously used social media to communicate with peers and retain true relationships. Social media such as You Tube Video work as a tool for motivation, entertaining and engaging way of learning for the tertiary learners (Md Mahadhi *et al.,* 2018). In light of the above, social networking users who usually interact between friends, family and groups intend to meet distinct individuals in their day-to-day life (Bou-Hamad (2020). The dominant users of social media were contemporary generations and can be acknowledged as "digital natives" (Liu, Kirschner, and Karpinski (2017). In addition to this, users of more experienced social media were the university students who continually used social media to interact with colleagues and maintain real relationships (le Roux *et al.,* (2021). However, the true risks emerge along with the advantages of using social media among students. Social media is an exceptional instrument for student's communication and self-articulation. Although internet collaboration is for enjoyment purposes only, it is as dangerous as not having understood it by the student (Henrie, Halverson, & Graham (2015). Accessing social media has become a normal part of student's daily lives and the influence of social media usage and social media multitasking on the

academic performance of students in Malaysian universities found to be overwhelming nowadays (Mohammed, Ibrahim, & Yunus, 2021). In the course of the investigation, the present study endeavors to illuminate this irregularity by building up a single integrated conceptual framework to connect and simultaneously inspect the connections between social media use, multitasking of social media and students' self-efficiency on the academic performance in Malaysian universities (Bhandarkar, Pandey, Nayak, Pujary, & Kumar (2021).

This study was done by utilizing classifications of social media and multitasking practices and performance proposed by past studies. This coordinated social media model would provide the foundation for building a consensual model, which may better clarify these relationships. In this regard, the current writing focuses on understanding the relationships between the antecedents and consequences of social media from both, student and university perspectives.

VARIABLES ANALYSIS

This section presents a review analysis of the variables of previous studies on the basis of four sections, namely, social media, social media multitasking and self-efficacy and academic performance.

Social Media

According to Hepworth, Rooney, Rooney, & Strom-Gottfried (2016), social media are creating a digital communication network that allows the user to share information in which the public can subscribe or produce information content as a transmitter and receiver of data. While Buettner (2016) presents social media as basic web tools that allow the public and companies to create, share data, considerations, photographs, exchanges and virtual systems. Therefore, social media are websites and / or applications that allow users to create and offer items or participate in social media.

Academic Self-Efficacy

Self-efficacy is known as "the intensity of the individual's certainty that they are able to create a particular behavior. Self-efficacy alludes to a person's confidence in his or her ability to execute behaviors important to create particular execution achievements (Bandura 1977, 1986, 2001). In the context of academic, Arbona (2016) describe academic self-efficacy as a student's level of self-certainty to effectively achieve a college errand related (e.g. examine ponder, assignments, midterms, course work and end of the year tests, and so on). Therefore, the definition of self-efficacy utilized as a part of this exploration is the manner by which a student reflects trust in the capacity to apply control over one's own inspiration, behavior, and social condition.

Multitasking

Multitasking, in a human context, is defined as the synchronous execution of two or much all the more preparing exercises at one time. Multitasking is a coherent augmentation of multi-programming framework that backings different projects to run simultaneously (Brasel & Gips (2011). The phrase ‘media multitasking’ refers to the synchronous utilization of no less than one kind of media, while taking part in any number of other media or non-media exercises (Jeong & Hwang (2016). Therefore, in the context of this writing, multitasking refers to the at the same time execution of different undertakings and procedures by a student through hardware, software or any computing appliance which consider the consistent reconciliation of social connection while studying.

Academic Performance

According to Fredricks, Filsecker, and Lawson (2016), academic performance speaks to the level of performance that a man ready to achieve specific targets of exercises in educational conditions, for particular in school, college, and university. On the other hand, York, Gibson, & Rankin (2015) defined academic performance as an intellectual objective in educational frameworks which can be characterized either through the size of learning picked up which can be called attention to by assessment, examination point, test scores, and GPA, or basic reasoning, self-adequacy, subjective improvement, and non-psychological advancement space. Therefore, in the context of this writing, academic performance relates to the students' performance results that demonstrate the degree to which he/she has achieved particular objectives that were the focal point of exercises in educational situations, particularly in university.

THEORIES

Theoretical perspectives are defined as theoretical frameworks concerning a few aspects of a social or educational phenomenon that can be used as a conceptual model for explaining the research area. Figure 1shows in diagrammatic form of the two underpinning theories that may use in a proposed future study. Furthermore, the following sub-sections will explain the two theories that could be applied in the future research.

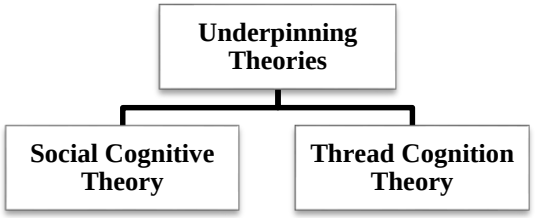

Figure 1: Underpinning Theories

Social Cognitive Theory

The social cognitive theory provides a system in which the psycho-social components, through which emblematic communication affects the idea, the influence, and human activity, are analyzed and determined. The frameworks of communication work in two respects: the instant way and the social way. They encourage change immediately by teaching, empowering, persuading and managing members (Bandura (2006). In the socially interfered route, the media have an impact on connecting employees with social systems and network settings which provide distinctive driving forces and continue the required change in a person. Because wide communications have a compelling position in the public interest, it is of important significance to understand the psychosocial elements by which representative communication influences idea, impact and human activity. A theoretical structural agent for inspecting determinants and structures of such effects is the social cognitive theory. Human behavior, in which conduct is created and regulated by environmental effects or inner dispositions, was frequently categorized according to the unidirectional causality. Social cognitive theory clarifies psychosocial activity regarding the supplementary triadic causality (Bandura 1986). In this view, Fonagy (2018) based on the value of oneself and society, individual variables like mental, social and natural occasions, norms of private behavior and environmental events are determining variables mutually influencing one another.

With regard to the above, social behavioral theory tends to differentiate the respective causality between individual components (e.g. cognitive, affective or biological), private and natural behavioral norms (Bandura (1999) in the determinants of human considerations, feelings, and behavior. Through communication and effect processes among the three determining variables, people tend to keep, alter or reinforce their thoughts, impacts and activities, which are the intrinsic concept of people, also known as "plasticity" (Bandura 2002, 2006); Hutto (2017). In that manner, people display a distinctive boundary created by four human skills: symbolization, self-direction, self-reflection, and vicarious capacity when separated from other living beings. In view of symbolizing, it refers to the ability of a person to symbolize, through the cognitive processes identified with the external condition, images related to their experiences.

Thread Cognition Theory

The sub-process cognition by Salvucci and Taatgen (2008) is a theory of multiple resources that means to clarify the psychological procedures and the results of multitasking practices. It depends on ACT-R (Adaptive Control of Thought-Rational), a computational model of mind design that attempts to recognize and talk about crucial structures and procedures (Martin & Sujatha (2016). Underlined cognition holds that there are sets of distinctive assets for various intellectual procedures, which include a set of focal points for procedural memory (i.e., how assignments are made) and marginal backgrounds for observation, motor capabilities and memory revealing While multiple tasks are performed, each task is composed around the particular objectives of the individual as a subjective self-sufficient "thread" (or numerous threads for complex tasks).

At the moment in which an objective is established, it triggers a progression of principles from the set of focal procedure assets, which guide the psychological sub-processes and the use of assets from different groups to achieve the objective (Nijboer, Taatgen, Brands, Borst, & van Rijn (2013). Think of a direct circumstance: a man is walking through a hallway and chatting with a partner. There are two particular goals (walking and talking) with establishing psychological principles for each one. The principles are activated in the memory of procedures; and the fundamental forms of perception, motor or decisive memory that participate in the execution of each task are fused in intellectual threads (for example, observing the earth, moving the legs, creating expressions).

The most important thing is that a single thread can effectively attract a set of assets at a time. This is not at all like the restricted general limit or the different estimation of assets represented previously, in which the restrictive element is the measure of the assets accessible in a group (Nijboer, Borst, van Rijn, & Taatgen (2016). Conversely, if a group of assets is drawn with a one-thread procedure, at that point a procedure is deferred from another thread. In the case of walking and talking, there may not be an extraordinary level of asset coverage between the different sub-processes. This considers that the two objectives will be executed simultaneously. In more complicated assignments, there could be more notable coverage among assets, delivering bottlenecks or impedance between companies.

CONCEPTUAL FRAMEWORK

Given the past theoretical models accessible and investigations of conflicting discoveries, this writing proposed a conceptual framework from the literature approach by scholars that well-articulated with the result to social media usage, multitasking of social media, students' academic self-efficacy, and students' academic performance. In assuring this, Social Cognitive Theory suggested that social media can play an important role in the formation of self-efficacy and perceived social norms and, secondly, self-efficacy and perceived social norms can affect the performance of students in the

university. Whereas in view of the Threaded Cognition Theory, change of tasks in social media by university students ranging from simultaneous multitasking and determine the frequency with which students change from studying to another task, why they change and how this affects their ability to perform.

Furthermore, the variables described in previous sub-topics have been used to form a diagrammatic view of the conceptual framework as shown in figure 2. Based on the review of the literature, it was posited that social media usage and multitasking of social media have both direct and indirect influence on students' academic performance. The indirect influence is postulated to act through students' academic self-efficacy. In other words, it was proposed that social media practices influence students' academic performance directly as well as, indirectly through the mediating effects of students' academic self-efficacy and these have been explained by Junco (2012); Lau (2017); Lee, Lin, & Robertson (2012); Wu (2017). In this conceptual framework, the writing attempts to examine the influence of social media usage and social media multitasking on the academic performance of the future selected population sample, namely undergraduate students.

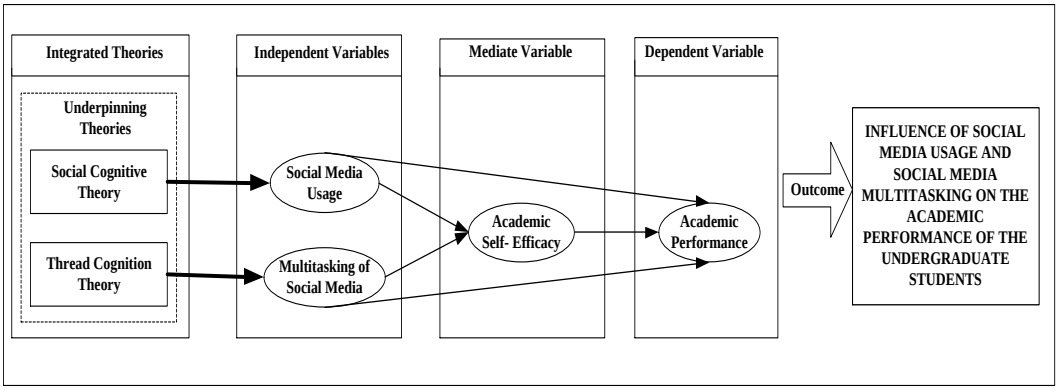

Figure 2: Conceptual Framework

CONTRIBUTION TO KNOWLEDGE

This framework has also made some contributions to the academic performance in the context of social media influences.

- The main contribution that conceptual framework adds to current theories in social media studies is the studying and analyzing the connection between the social media usage and multi-tasking activities of university students in Malaysia. Furthermore, the integration of the interceding variable - the self-efficacy of the academic student offers a further contribution to the research.
- Next, the combination of two theories (Social Cognitive Theory and Threaded Cognition Theory) that formed the theoretical proposal will contribute to the academic performance in the context of social media literature.
- Thus, this study provides a conceptual framework for further studies, especially for future research in online learning environment.

CONCLUSION

The evolution in the use of social media has changed various behaviors in student's communities which has also influenced a new way of studying and achieving their homework. This writing reviewed related literature to propose the framework of social media impact on the academic performance for Malaysian university students. In addition, risk related with social media usage by individuals during their daily life with multitasking on self-efficacy and academic performance is in need to be more investigated to understand the real connection between them and the range of the impact. Furthermore, this writing tried to come out with a clear understanding of the actual relationship and whether it's positive or negative association with student academic achievement which could be verified through empirical investigation. Hence, our proposed framework on students' multitasking can lead to future study to confirm the model in quantitative research.

REFERENCES

Arbona, C. (2016). Ethnic Minority Status Stress, Self-Efficacy, and Persistence Intentions among Hispanic College Women: A Moderation Analysis. Journal of Psychology and Behavioral Science, 4(1), 11-22.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. Psychological review, 84(2), 191-215.

Bandura, A. (1986). Social foundations of thought and action. New Jersey, Englewood Cliffs, 1986.

Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. Personality and social psychology review, 3(3), 193-209.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. Annual review of psychology, 52(1), 1-26.

Bandura, A. (2002). Social cognitive theory in cultural context. Applied psychology, 51(2), 269-290.

Bandura, A. (2006). Guide for constructing self-efficacy scales. Self-efficacy beliefs of adolescents, 5(1), 307-337.

Bhandarkar, A. M., Pandey, A. K., Nayak, R., Pujary, K., & Kumar, A. (2021). Impact of social media on the academic performance of undergraduate medical students. Medical Journal Armed Forces India, 77, S37-S41.

Bou-Hamad, I. (2020). The impact of social media usage and lifestyle habits on academic achievement: Insights from a developing country context. Children and Youth Services Review, 118, 105425.

Brasel, S. A., & Gips, J. (2011). Media multitasking behavior: Concurrent television and computer usage. Cyberpsychology, Behavior, and Social Networking, 14(9), 527-534. doi:10.1089/cyber.2010.0350

Buettner, R. (2016). Personality as a predictor of Business Social Media Usage: an Empirical Investigation of Xing Usage Patterns. Paper presented at the PACIS.

Fonagy, P. (2018). Attachment theory and psychoanalysis: Routledge.

Fredricks, J. A., Filsecker, M., & Lawson, M. A. (2016). Student engagement, context, and adjustment: Addressing definitional, measurement, and methodological issues (Vol. 43, pp. 1-4): Elsevier.

Greenhow, C., & Lewin, C. (2016). Social media and education: Reconceptualizing the boundaries of formal and informal learning. Learning, Media and Technology, 41(1), 6-30. doi:10.1080/17439884.2015.1064954

Henrie, C. R., Halverson, L. R., & Graham, C. R. (2015). Measuring student engagement in technology-mediated learning: A review. Computers & Education, 90, 36-53.

Hepworth, D. H., Rooney, R. H., Rooney, G. D., & Strom-Gottfried, K. (2016). Empowerment series: Direct social work practice: Theory and skills: Nelson Education.

Hutto, D. D. (2017). Basic social cognition without mindreading: minding minds without attributing contents. Synthese, 194(3), 827-846.

Jeong, S. H., & Hwang, Y. (2016). Media multitasking effects on cognitive vs. attitudinal outcomes: A Meta‐Analysis. Human Communication Research, 42(4), 599-618.

Junco, R. (2012). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. Computers in human behavior, 28(1), 187-198.

Lau, W. W. (2017). Effects of social media usage and social media multitasking on the academic performance of university students. Computers in human behavior, 68, 286-291.

le Roux, D. B., Parry, D. A., Totolo, A., Iyawa, G., Holloway, J., Prenter, A., & Botha, L. (2021). Media multitasking, online vigilance and academic performance among students in three Southern African countries. Computers & Education, 160, 104056.

Lee, J., Lin, L., & Robertson, T. (2012). The impact of media multitasking on learning. Learning, Media and Technology, 37(1), 94-104. doi:10.1080/17439884.2010.537664

Liu, D., Kirschner, P. A., & Karpinski, A. C. (2017). A meta-analysis of the relationship of academic performance and Social Network Site use among adolescents and young adults. Computers in human behavior, 77, 148-157. doi:10.1016/j.chb.2017.08.039

Martin, R. J., & Sujatha, S. (2016). Bottom-up Approach of Modeling Human Decision Making for Building Intelligent Agents. Indian Journal of science and technology, 9(4), 1-5. doi:10.17485/ijst/2016/v9i4/81628

Masood, A., Luqman, A., Feng, Y., & Ali, A. (2020). Adverse consequences of excessive social networking site use on academic performance: Explaining underlying mechanism from stress perspective. Computers in human behavior, 113, 106476.

Mohammed, M. T. S., Ibrahim, F., & Yunus, N. (2021). Exploring The Relationship of Social Media Usage and Multitasking of Social Media on Self-Efficacy and Academic Performance. Jurnal Komunikasi: Malaysian Journal of Communication, 37(1).

Nijboer, M., Borst, J., van Rijn, H., & Taatgen, N. (2016). Contrasting single and multi-component working-memory systems in dual tasking. Cogn Psychol, 86, 1-26. doi:10.1016/j.cogpsych.2016.01.003

Nijboer, M., Taatgen, N. A., Brands, A., Borst, J. P., & van Rijn, H. (2013). Decision making in concurrent multitasking: do people adapt to task interference? PloS one, 8(11), e79583. doi:10.1371/journal.pone.0079583

Salvucci, D. D., & Taatgen, N. A. (2008). Threaded cognition: An integrated theory of concurrent multitasking. Psychological review, 115(1), 101.

Wu, J.-Y. (2017). The indirect relationship of media multitasking self-efficacy on learning performance within the personal learning environment: Implications from the mechanism of perceived attention problems and self-regulation strategies. Computers & Education, 106, 56-72.

York, T. T., Gibson, C., & Rankin, S. (2015). Defining and Measuring Academic Success. Practical Assessment, Research & Evaluation, 20, 1-20.