Social Media use and its Relationship with Collaborative Learning and Students' Motivation in Abu Dhabi Schools United Arab Emirates

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Abstract

In the current years, social media and its various platforms are providing range of facilities to different community members including the students. However, the significance of social media usage towards the learning of the students can not be ignored. The purpose of present study is to examine the trends in collaborative learning of the students through social media usage. For addressing this objective, literature support has been provided in a reasonable manner. Furthermore, questionnaire was developed through various items from existing literature for both social media usage and collaborative learning as measured through Five points likert scale. Meanwhile, data has been collected with the help of different techniques. A valid sample response of 403 respondents from different grades ranging from 9th to 12th has been collected from different schools as situated in Abu Dhabi, UAE. After data collection, demographic analyses through cross-tabulation have been presented in an appropriate manner. More specifically, both measurement model and structural model were also accessed to confirm the reliability and validity and relationship between the variables. It is found that measurement model for the relationship between social media usage and collaborative learning is quite fine. Finally, the results through structural model confirm that there is a significant and positive impact of social media usage on collaborative learning of the targeted students. The study findings have provided some meaningful discussion for various policymakers

specifically in the education sector. Finally, there are some limitations through which future directions are also determined.

Keywords: social media usage, collaborative learning, motivation, measurement model, structural model

Introduction

In the modern world, children have access to social media applications and the internet across different devices that include laptops, smartphones, desktops, and tablets (Badri, Al Nuaimi, Guang, & Al Rashedi, 2017). Social networking is now an integral component of children's social life. Social media is now a learning platform that can be used to enhance student performance and engagement. Social media provides students with opportunities to communicate, access information, chat, research and keep in touch. To put it simply, social media does not only pave the way for better knowledge transfer, but it also encourages collaborative learning between students which eventually creates a shared understanding between students, conversations with other classmates, teachers, increases students' awareness in various subjects and develops students research skills (Redecker, Ala-Mutka, & Punie, 2010). Social media also plays an important role in education and learning by facilitating collaboration, developing positive relationships between students, merging the learning curriculum with advanced technology that makes the learning process more relatable, fun and interactive to the students whether in class or after classes (Fewkes & McCabe, 2012).

Social media has the potential to facilitate higher-level learning outcomes through collaborative learning (W. Al-Rahmi, Othman, & Yusuf, 2015). Social media also helps in enhancing student motivation, which is an essential factor for student success (Cheung, Chiu, & Lee, 2011). Unlike standard websites, social media has certain applications that provide students and society with multiple ways of collaborating. Social Media sites are made of different tools, which include collaborative projects such as Wikipedia, blogs, social network sites such as Facebook, and content communities such as YouTube. Social networking sites (SNSs) are deemed to possess a strong academic culture that is built around their online community. Social media enhances knowledge transfer and promotes collaborative learning through discussions with peers, creating understanding among students, and discussions with lecturers (Al-rahmi et al., 2015). Social media increases knowledge sharing and enhances students' research skills. Social media enhances collaboration and assists in

ISSN 2411-958X (Print)
ISSN 2411-4138 (Online)

European Journal of
Interdisciplinary Studies

January - June 2023
Volume 9, Issue 1

the development of relationships among students as well as provide instantaneous opportunities for curricula enhancement and dissemination that is external to the actual classroom (Fewkes & McCabe, 2012).

Collaborative learning has been found to have a positive impact on student motivation. Student motivation plays a key role in influencing student performance in schools. If students do not feel motivated while at school or in learning, their performance usually declines as they do not feel engaged in schools (Gbollie & Keamu, 2017). Collaborative learning influences student motivation by ensuring that any student who is involved feel engaged in the learning process. Social media is enhancing collaboration learning in schools and among students (Badri et al., 2016). The nature of motivation and learning strategy is essential to improving student-learning outcomes. Collaborative learning is an education method that is used in learning and teaching environments that involve two or more people (Ojo & Ntshoe, 2017). Collaborative learning creates a positive working and learning environment for students who enjoy working in groups. Ojo and Ntshoe (2017) state that students are able to learn successfully by participating in activities where they can learn from their peers and by explaining their ideas to others. Social media has made it possible for collaborative learning and the positive environment it creates among students that can help develop student motivation in learning. Collaborative learning is an educational strategy for learning and teaching that involves groups of students who work together to solve a problem, create a product, or complete a task. Collaborative learning is based on the concept that learning is a naturally social act whereby those involved discuss among themselves. Technology has increased collaboration among people trying to solve a task as it has made communication easier. Social media applications have enhanced collaboration among individuals. Students are using technological devices to make collaborative learning successful; schools and parents are encouraging students to make use of social media as a useful tool for learning in order to increase student motivation.

Literature Review

As stated by Gray, Vitak, Easton, and Ellison (2013), the use of social media applications such as Facebook, WhatsApp and YouTube as a factor for collaborative learning empowers students to perform different exercises in a smooth manner and face less worry in their academics. It additionally empowers them to reinforce interpersonal relationships and associations with their friends in an environment of learning. Utilizing Facebook additionally delivered a collaboration that is viewed as helpful as far as social association and interpersonal relationship is concern (Gray et

al. 2013). In the modern times, the basic view of taking a gander perspective at education is seen as long-term learning aptitudes as opposed to knowledge engagement (Fallows and Steven 2000). Many authors consider collaborative learning vital for students to acquire for future employments engagements. Hence collaborative learning is characterized as coordinated effort or procedure or wherein at least two individuals endeavor to facilitate and adapt new knowledge.

Men and Muralidharan (2017) stated that social media support collaborative learning. Collaborative learning involves the interaction of students where they form groups to solve various problems or carry out assignments. As such, social media provide a broader scope for interaction among students as they can discuss through social media without physically meeting. According to López-Bonilla and López-Bonilla (2013b) it is the most appropriate time for educators to look for ways of incorporating social media into classes. According to Mutekwe (2015) social media can be used in boosting creativity and help learners to explore further the course content. Various options are provided by social media that can enhance learning, such as lectures uploading YouTube videos while explaining certain concepts learned in class. Through satisfaction of the learners need with corporative learning, students can balance their distinctiveness and peer connection leading to students' motivation (Men & Muralidharan, 2017). While the studies discussed in this section will provide an insight into collaborative learning through social media, they will also be used to identify gaps in research work done by scholars. The discussion will delve deep into each variable, namely social media, collaborative learning, and students' motivation in school. However, the main focus of this review section is collaborative learning among students. The goal is to establish a link between the three variables discussed by researchers and scholars, where collaborative learning and students' motivation in schools are dependent variables.

Collaborative learning methodologies first arose in several ancient civilizations. Different educational ideas have evolved in their stead in Western and colonial Eastern Hemispheres. Collaborative learning was revitalized in the latter half of the twentieth century after researchers demonstrated that students learned more quickly and retained more information when they were actively involved in the teaching and learning process rather than simply receiving knowledge from their educators. A study contacted By Al-Rahmi & Zeki (2017) stated that the use of social media has a positive influence on the active collaborative learning environment. Most school tutors are less familiar with the use of social media when it comes to teaching and interacting with students. Also, most of the lectures lack skills on how to use social

ISSN 2411-958X (Print)
ISSN 2411-4138 (Online)

European Journal of
Interdisciplinary Studies

January - June 2023
Volume 9, Issue 1

media (Al-Rahmi & Zeki, 2017). Sawar et al. (2019) stated that most students dislike the existing platform put in place by most institutions since they do not facilitate interactions. López-Bonilla and López-Bonilla (2013a) asserted that most students prefer to use social media in collaborative learning; however, lectures argues that students do not depend on the use social media for learning but instead for communication and entertainment purposes. Social media is used as a tool for communication among learners and instructors and be divided into two types: synchronous and asynchronous. The tools play a crucial role in supporting different idea sharing. During collaborative learning, various ideas from students are shared and in this case, social media enhances easy interactions among learners. Figure 1 provides the layout for the framework of the study.
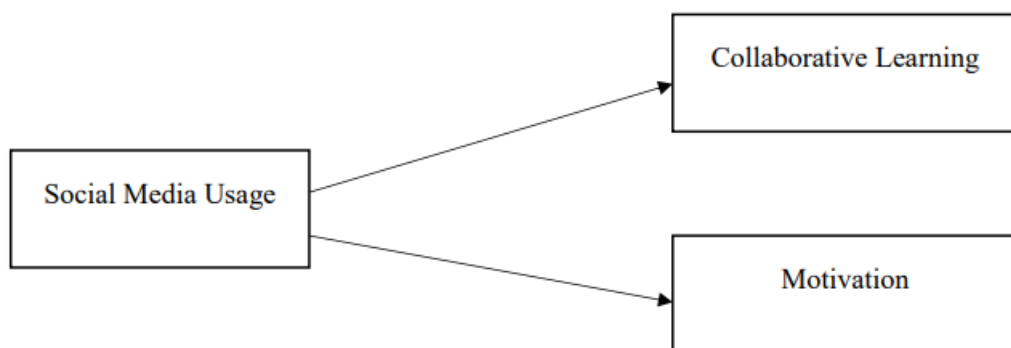

Figure 1: Research Framework

Based on the research discussion, H1and H2 is determined.

H1: there is a significant impact of social media usage on collaborative learning.

H1: there is a significant impact of social media usage on student's motivation.

Research Methodology

Research design can be defined as the framework that entails the methodology and techniques that guide a researcher in undertaking the research process from strategy selection, collection, processing and analysis of data. There are three types of research designs: Exploratory, Confirmatory and Descriptive. A researcher selects the research designs that serve to answer the research questions and achieve the research objectives Mitchell, Frank, Harris, Dodds, and Danforth (2013). Exploratory research design is one which is undertaken when there are few or no similar studies done that the research may rely on. Hence exploratory design's goals are to create a

ISSN 2411-958X (Print)
ISSN 2411-4138 (Online)

European Journal of
Interdisciplinary Studies

January - June 2023
Volume 9, Issue 1

familiarity with the research problem and develop new hypotheses (Mills et al., 2010). Confirmatory research design, on the other hand, is research done to provide more compelling pieces of evidence of similar research done before. The research is usually restricted from developing new theories and hypotheses by prior studies (Kennedy and Watt, 2018). However, current study is going to apply quantitative research design. Data collection for this study has been conducted through a structured questionnaire distributed to students in secondary level/Cycle 3 from or grades 9 to 12 in the public school particularly in the Island of Abu Dhabi UAE as this is the crucial level that qualifies student for admission into colleges and universities in the UAE. The researcher will distribute questionnaire by official student email using Survey Monkey to collect the data also the researcher will use stratified random sample method.

As stated in chapter three, the current study has considered the data collection through a self-administrative questionnaire where the items of independent and dependent variables have been extracted from existing literature. For data collection, it is stated that the unit of analysis is individual where a total sample of 354 respondents from different schools was observed. However, to achieve maximum responses, the stated sample of 354 was inflated 100 percent through which a new sample of 708 questionnaires was finalized. With the help of 6 team members, a researcher had conducted the process of data collection. This process took 7 weeks of time duration while distributing the stated number of questionnaires among the targeted respondents. Meanwhile, the proposed time duration to complete the survey was also shared with the targeted respondents where an overall questionnaire was translated into easy English language for the convenience of respondents. Total 708 questionnaires were distributed among the targeted respondents; however, it is found that the returned questionnaires were 463, showing a response rate of 65.39% which is found to be reasonable enough. A detailed investigation of the received questionnaires has made it evident that several questionnaires were missing with the valid responses, therefore, dropped from the final sample. More specifically, a total number of 58 copies were finally excluded from the total sample. Finally, it is found that there were 404 copies of valid questionnaires with no missing responses which indicate a valid response rate of 57.06%. In this regard, various researchers have provided their justification regarding the valid response rate. For example, Mugenda and Mugenda (2003) have stated the fact that a response rate of 50% is observed as an adequate sample, whereas 60% is entitled as good, whereas 70% is found to be very good. This means that the overall valid response rate under the present study is adequate for applying descriptive and inferential analysis. Furthermore, various

ISSN 2411-958X (Print)
ISSN 2411-4138 (Online)

European Journal of
Interdisciplinary Studies

January - June 2023
Volume 9, Issue 1

authors have justified the data collection through questionnaire technique with the better success rate in terms of response rate (Farouk, Abu Elanain, Obeidat, & Al-Nahyan, 2016). Besides, explaining that the sample size in any study should be greater than 30 and smaller than 500 would be accepted as reason enough for the data analysis. Based on the above discussion, this study infers that a sample size of 405 respondents as achieved through valid responses is quite reasonable through which data analyses have been conducted. Upcoming sections are providing the output and discussion related to data analyses and related techniques. Besides, Table 1 covers the details for the number of questionnaires as distributed, questionnaires returned by the respondents, and valid response rate and usable questionnaire, respectively.

Instruments

This research accounts for a brief discussion on the social media use and its relationship with collaborative learning and student's motivation in Abu Dhabi schools. The variables proposed in this study to be use: social media, collaborative learning and student motivation.

The questionnaire aims to determine social media use and its relationship with collaborative learning and student's motivation in Abu Dhabi schools. This questionnaire consists of questions on a five-point Likert scale, 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 strongly Agree. In the questions of this questionnaire will be close ended.

Data Analyses

In this study, the researcher used correlation method to explore the relationship between quantitative variables and to measure the linking or strength the relationship between SMU independent variable with CL and SM depend variables. To understand the relationship between variable to variable such as increase or decrease.

ISSN 2411-958X (Print)
ISSN 2411-4138 (Online)

European Journal of
Interdisciplinary Studies

January - June 2023
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Research Objectives	Research Questions	Research Hypothesis	Data Analyses
O1. To determine the relationship of social media use on collaborative learning	Q1: What does the relationship between social media use and collaborative learning?	H1: There is a significant relationship between social media use and collaborative learning	Correlation
O2. To determine the relationship of social media use on students motivation	Q2: What does the relationship between social media use and student's motivation?	H2: There is a significant relationship between social media use and student motivation	Correlation
O3. To determine the impact of social media use on collaborative learning	Q3: How does the impact between social media use and collaborative learning?	H3: There is a significant impact between social media use and collaborative learning	Regression
O4. To determine the impact of social media use on students motivation	Q4: How does the impact between social media use and student's motivation?	H4: There is a significant impact between social media use and student motivation	Regression
O5. To investigate the impact of social media use on students psychological development	Q5: How does social media use impact on student's psychological development?	H3: Social media use has significant impact on student's psychological development	Regression
O6. To determine the impact of social media use on students safety needs	Q6: How does social media use impact on student's safety needs?	H4: Social media use has significant impact on students safety needs	Regression
O7. To determine the impact of social media use on students belongingness and love needs	Q7: How does social media use impact on student's belongingness and love needs?	H5: Social media use has significant impact on students belongingness and love needs	Regression
O8. To determine the impact of social media use on students esteem needs	Q8: How does social media use impact on student's esteem needs?	H6: Social media use has significant impact on students esteem needs	Regression
O9. To determine the impact of social media use on students self-actualization	Q9: How does social media use impact on student's self-actualization?	H7: Social media use has significant impact on students self-actualization	Regression

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Interdisciplinary Studies

January - June 2023
Volume 9, Issue 1

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