

Examining the Relationship between the Level of Using Social networking sites as Educational Platforms and Undergraduate Students' Academic Performance: A Comparative Study between Egypt and Saudi Arabia

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Abstract

This research explores Egyptian and Saudi undergraduates' perceptions of the relationship between the level of using social networking sites as educational platforms and academic performance. Students at two Saudi universities, Qassim University and Prince Sattam Bin Abdulaziz University, as well as two Egyptian universities, Al-Azhar University and Minia University, were surveyed about how much they use social networking sites as educational platforms and the relationship between that use and their academic performance. The results of the study showed that there was a higher than average level of using social networks as educational platforms by the research participants, there were no statistically significant differences between the mean scores of the research participants in the overall score and the themes of the scale of using social networks as educational platforms, according to the variable of their country of residence, and according to the gender variable, and finally, the use of social networks as educational platforms contributes significantly to predicting the academic performance of students in the research sample. Overall, the findings of this study can contribute to a better understanding of the relationship between social networking sites use level and undergraduates' academic performance.

Keywords: social networking sites, educational platforms, academic performance, Egypt, Saudi Arabia.

Introduction

According to Selwyn (2012), social media use can lead to any or all of "collaboration, conviviality, and creativity." Social media allows people with similar interests to form and maintain "all-things," "all-deeds," and "all-ways" communication networks. For their everyday communication, entertainment, and informational needs, undergraduates rely greatly on social networking sites (Lemay et al., 2020). Studies examining the habits of using social media by undergraduate students have shown that students spend a great amount of time every day switching between different social networking sites including Facebook, Twitter, Instagram, YouTube, and Snapchat (Dumpit & Fernandez, 2017; Felisoni & Godoi, 2018; Wang et al., 2015). Among other numerous purposes, college students utilize social networking sites for sharing and exchanging opinions, acquiring and gathering information, entertainment and amusement, self-documentation, self-expression, and social engagement and interaction (Lemay et al., 2020). Other studies have also reported using social networking sites for educational purposes, such as

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accessing course information, setting up group work, getting feedback and communicating with instructors (Al-Qaysi et al., 2021; Raza et al., 2020).

Due to the widespread usage of social networking sites among undergraduate students, determining the relationship between social networking sites use and undergraduate students' academic performance has become a main research endeavor (Tafesse, 2020). There have been many studies published on this topic to date, and the body of relevant literature is growing quickly (Masrom et al., 2021). However, the results of these numerous studies have been wildly inconsistent (Astatke et al., 2021). Some studies have found a negative correlation between social networking site use and academic performance (Junco, 2015; Karpinski et al., 2013; Tafesse, 2020), while others have found a positive correlation (Park et al., 2018; Samad et al., 2019; Sarwar et al., 2019).

Given that both positive and negative impacts have been documented in the literature (Astatke et al., 2021; Masrom et al., 2021; Raza et al., 2020), it is possible that, depending on the level of use, social networking sites may have either positive or negative effects on academic performance. Heavy use of social networking sites, on one hand, can have a negative impact on college students' academic performance by forcing them to multi-task or reallocate time away from their academic work (Alt, 2015; Junco, 2015; Kapriniski et al., 2013; Marker et al., 2018). On the other hand, moderate use of social networking sites may have a positive impact on academic performance by promoting collaborative learning and providing educational and entertaining value (Al-Qaysi et al., 2021; Hoi, 2021; Lampe et al., 2015; Lemay et al., 2020; Raza et al., 2020).

In the studies discussed above, social networking site use is reported to have both positive and negative effects. Highlighting the critical role that social networking site use level plays in determining how social networking site use and undergraduates' academic performance are related, this study tries to resolve empirical contradictions seen in the literature by revealing that social networking sites can be linked to both positive and negative academic outcomes depending on their level of use (Astatke et al., 2021). The present study contend that the relationship frequently examined in the aforementioned related studies may not accurately reflect the complex interactions between the use of social networking sites and academic performance, particularly when viewed in the context of a comparison between Egypt and Saudi Arabia.

Literature Review

The literature to be reviewed is restricted to those studies that have investigated the topics in accordance with the main focus of the study, specifically, (1) the definition and characteristics of social networking sites; (2) the level of using social networking sites as educational platforms among university students and (3) the relationship between using social networking sites and academic performance.

Definition and Characteristics of Social Networking Sites.

Social networking sites were defined by Ellison and Boyd (2013) as “a networked communication platform in which participants (1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-level data; (2) can publicly articulate connections that can be viewed and traversed by others; and (3) can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site” (p. 180). Three defining characteristics of social networking sites are highlighted in this definition.

The first characteristic of social networking sites is that they enable users to design uniquely identifiable profiles that are animated by both system-and user-supplied information such as biographic details, self-descriptions, photos, interests and activities

(Ellison & Boyd, 2013). These pieces of information make the online peer-to-peer networking easier by means of revealing users' identities (Zhang & Leung, 2015). The second characteristic of social networking sites is that they let users articulate connections that others can view and navigate. These connections, which include friends' lists, followers' lists, group memberships, liked pages and more, allow users to determine other users' social connections and facilitate peer-to-peer networking activities on the platforms (Ellison & Boyd, 2013). Zhang and Leung (2015) stated that the ability to navigate and view other users' connections and activities is an original characteristic of social networking sites that is fundamentally unfamiliar in traditional communication forms. The third characteristic of social networking sites is that they allow users to access create and interact with the streams of user-generated content provided by their connections (Kane et al., 2014). According to Dumpit and Fernandez (2017), users use text, images, videos, emoticons, animations, and other elements to create their content on social networking platforms. In addition to sharing their own content, users can consume and interact with other users' content, by liking, sharing and commenting on their posts. This fosters a dynamic and ongoing cycle of online interaction and engagement, which is essential to the vitality of social networking sites (Masrom et al., 2021).

The Level of Using Social Networking Sites as Educational Platforms among University Students

The participation rates of the four most popular social networking sites in Israel, Facebook, Twitter, Whatsapp, and Instagram, were examined by Gazit et al. in 2019. They discovered that among the participants in their study, WhatsApp was utilized for group communication at a medium-high level. Additionally, as noted in some studies (Koomson, 2018; Yeboah & Ewur, 2014), WhatsApp seems to be very popular in many African developing countries due to its simplicity of use (Al-Rahmi & Zeki, 2017) and low Internet data usage (Hogan et al., 2019; Madge et al., 2019). However, given the ongoing challenges that students in developing countries face in accessing and owning hardware and software, using social media, such as WhatsApp, in teaching and learning may be counterproductive (Coetzee et al., 2019). Despite this, social media usage in universities is increasing in developing countries (Koomson, 2019).

In the Saudi educational setting, Alabdulkareem (2015) examined the differences in the use of social media for teaching and learning science by teachers and students in Saudi Arabia's middle public schools and discovered that 72.44% preferred WhatsApp, while 69.43% preferred Instagram, Snapchat 52.41%, Keek 44.73%, Path 29.37%, Twitter 15.96%, Skype 10.24%, Tango 5.72%, Telegram 0.75%, and Facebook 0.31%. The survey also discovered significant differences between students' and teachers' use of social media. While teachers used WhatsApp 100% of the time, students only utilized it 75% of the time. Stainbank and Gurr (2016) also agreed that Facebook seemed to be less widely used for teaching and learning than WhatsApp. In their study of first-year accounting students at a university in South Africa, they discovered that the majority of students thought Facebook and Twitter were more useful for sharing information about careers than for teaching and learning. Last but not least, a recent study by Asiedu and Badu (2018) in selected Ghanaian public universities found that students overwhelmingly prefer WhatsApp over Facebook when using instant messaging applications. This may not come as a surprise given that WhatsApp is so popular for group communication due to its dyadic nature (Knop et al., 2016). One of the aims of this study is to examine the level of using social networking sites as educational platforms among undergraduate students in both Egypt and Saudi Arabia.

The Relationship between Using Social Networking Sites and Academic Performance

Previous research found that social media use had both positive and negative effects on academic performance. For instance, Kirschner and Karpinski (2010) discovered that Facebook users had lower academic achievement than non-users. Contrarily, Hargittai

and Hsieh (2010) and other researchers have discovered that social media use has no significant impact on academic performance. The widespread adoption and use of social networking sites among undergraduate students has sparked a rush of research on how social networking sites use affects academic performance (Masrom et al., 2021). On the one hand, Adalberon and Säljö (2017) observed that most university students' use of social media was informal and unregulated. On the other hand, Dadzie (2019) discovered a positive relationship between students' use of social media and their academic performance in his study of two Ghanaian universities. Despite the fact that the sample consisted of third-year students, the study concluded that there was a need to integrate social media topics in academic courses across the curriculum to improve teaching and learning. Likewise, Karpinski et al. (2013) examined the relationship between college students' use of social networking sites and academic performance in the USA and Europe. Both the US and European data show that using social networking sites has a negative correlation with college students' academic performance, although the US sample shows a higher correlation. Additionally, in Turkey, Cetinkaya and Sütçü (2018) investigated the effects of Facebook and WhatsApp on students' success in learning English vocabulary. Their findings suggested that WhatsApp was more helpful than Facebook in enhancing student achievement. By using class standing as a moderating variable, Junco (2015) examined the relationship between the use of social networking sites and college students' academic performance. The study revealed that increased use of social networking sites has a more significant negative impact on academic performance in freshmen than in seniors. According to a recent study by Tafesse (2020), increased use of social networking sites has a negative impact on academic performance both directly and indirectly through decreased student engagement. On the contrary, Park et al. (2018) examined the relationship between social networking sites use and student engagement among Korean college students and reported a positive relationship. Likewise, Sarwar et al. (2019) discovered that using social networking sites contributes positively to college students' academic performance both directly and indirectly by facilitating collaborative learning. Lastly, Al-Rahmi et al. (2020) discovered that college students' increased perceptions of social presence, interest, perceived enjoyment, and perceived usefulness of social networking sites are positively related to collaborative learning.

In his investigation of two universities in Ghana, Dadzie (2019) also discovered a positive relationship between students' use of social media and their academic performance. According to the findings of the study, social media topics should be included in all academic courses to improve teaching and learning. These findings were also supported by Koomson (2018).

Despite the numerous benefits of social media participation for university students, other studies show that students face social media competence challenges when participating in digital networking activities (Xu et al., 2019). Additionally, Adalberon and Säljö (2017) came to the conclusion that most university students used social media in an unstructured and informal manner. In spite of their contributions to a better understanding of how social networking sites use affect university students' academic performance, the studies reviewed have not investigated the relationship between social networking sites use and academic performance from a comparative perspective between two countries, Egypt and Saudi Arabia. To address this issue, the current study is unique in the sense that it is the first of its kind that has examined, from a comparative perspective between Egypt and Saudi Arabia, the relationship between students' use of social networking sites and their academic performance.

Theoretical Framework

Two key theoretical perspectives explain the relationship between using social networking sites and undergraduate students' academic performance: the time-displacement/multitasking argument; and the collaborative learning argument. According to the first viewpoint, social networking sites divert students' attention away from academic study (Alt, 2015; Astatke et al., 2021; Karpinski et al., 2013). Time displacement and multitasking are two prominent theoretical mechanisms hypothesized to explain this negative relationship. Time spent on social networking sites, according to the time displacement argument, is time shifted from essential academic activities such as studying, attending classes, or completing assignments (Tafesse, 2020). Social networking site use is argued to have a negative impact on students' academic performance by forcing them to reallocate time from academically productive to academically nonproductive tasks (Alt, 2015; Cao et al., 2018; Tafesse, 2020). According to the multitasking argument, attempting to complete academic tasks while remaining on social networking sites reduces students' attention span and cognitive ability to effectively engage in academic work, thereby negatively affecting their academic performance (Junco, 2012; Karpinski et al., 2013; Lau, 2017; Lepp et al., 2015).

According to the second perspective, social networking sites can be used to facilitate collaborative learning and motivate students to engage in more constructive learning activities (Hoi, 2021; Lampe et al., 2015; Raza et al., 2020). According to the researchers who hold this perspective, the interactive and social characteristics of social networking sites can be used to share information, organize group work, receive feedback, and facilitate communication with instructors (Al-Rahmi et al., 2020; Lampe et al., 2015). As opposed to individual learning, social networking sites emphasize collaboration and group engagement, allowing students to become active participants and socially engaged in the process of exchanging information, discovering knowledge, and solving problems, which should improve their overall learning and academic performance (Astatke et al., 2021; Lampe et al., 2015; Sarwar et al., 2019).

This study is theoretically based on the two contrasting perspectives discussed above to propose a relationship between social networking sites use level and college students' academic performance. The study anticipates a positive relationship between social networking sites use and academic performance when the level of social networking sites use is low and a negative relationship when the level of social networking sites use is high.

The study assumes the following:

- There is a low level of use of social networks as educational platforms among university students.
- There is no statistically significant correlation between the scores of university students participating in the study in terms of the use of social networks as educational platforms and academic performance.
- There are no statistically significant differences between the average scores of university students participating in the study in terms of the use of social networks as educational platforms that differ according to the country (Egypt - Saudi Arabia).
- There are no statistically significant differences between the average scores of university students participating in the study in terms of the use of social networks as educational platforms that differ according to gender (males - females).

Methodology

Research Design

In an effort to collect data, the study used a descriptive survey method of research along with an online questionnaire. This approach is essential for verifying the validity of the hypotheses, identifying and understanding the relationship between the study variables, specifically, the relationship between the level of use of social networking sites as educational platforms and the academic performance of undergraduate students in Egypt and Saudi Arabia. The survey instrument served as the primary data collection tool for this study.

Sample and Data Collection

Students from selected public universities in Egypt and Saudi Arabia studying a variety of subjects participated in this study. To verify the psychometric characteristics of the study scale (the scale of using social networking sites as educational platforms for university students), the pilot study included 180 male and female students, with an average age of 19 - 23 years and a standard deviation of (1.44). In order to test the study hypotheses, other than those participated in the pilot study, there were 419 Egyptian and Saudi participants, with 212 of males and 207 of females and with an average age of (19.69) and a standard deviation of (2.16). The participants were selected randomly, through applying the online questionnaire.

The Research Instrument

First, a preliminary questionnaire was derived from earlier literature. Then, the survey was modified in response to reviewers' feedback. After that, it was pilot tested on a small group of university students who represented the survey's target sample. In response to feedback from the pilot group, the survey was further modified. The final survey had 20 items, each with a Likert scale rating from 1 (Strongly Agree) to 5 (Strongly Disagree). A high score on the scale, which ranges from 20 to 100, indicates high level of using social networking. The survey was made up of two sections: the first section consisted of five (3) demographic questions of the respondents, participant's Grade Point Average (GPA), gender, and country of residence. On the other hand, the second section had 20 items, five items for each of the four (4) themes: the level of using social networking sites as educational platforms among university students; the importance of using social networking sites as educational platforms among university students; the level of the quality of using social networking sites in teaching by faculty members; and the effectiveness of using social networking sites as educational platforms in achieving learning outcomes.

Analyzing of Data

The data of the study were statistically analyzed using the following techniques: mean, standard deviations, t-tests for differences between independent samples, one-sample t-tests, one-way variance analysis, and simple linear regression.

Results

The first hypothesis: According to the first hypothesis, "there is a low level of using social networks as educational platforms among university students." To verify the validity of this hypothesis, "T-Test" was used for one statistic sample, where the default mean of the scale of using social networks as educational platforms among university students, with its four themes, was compared with the average scores of the research sample students on the scale with its themes as is shown in table 1:

Table 1: The results of the "T" test for one sample, highlighting the significant differences between the hypothetical mean and the research sample students' mean scores on the scale of using social networks as educational platforms for university students.

Use of social networks	hypothetical mean	Mean	Std. Deviation	Mean Difference	df	t value	Sig.
The role of students in employing social networks in education	15	19.3150	3.93743	4.31504	418	22.433	<.000
Efficiency of social networks in the learning process	15	19.6158	3.97334	4.61575	418	23.779	<.000
The role of teachers in employing social networks in education	15	18.4320	4.14591	3.43198	418	16.945	<.000
The extent to which social networks achieve learning outcomes	15	17.9737	4.53448	2.97375	418	13.424	<.000
Total scores	60	75.3365	14.67100	15.33652	418	21.398	<.000

The previous table shows that there are statistically significant differences at the level of (0.01) between the hypothetical average and the average score of the research sample students on the four themes and the total score of the measure of using social networks as educational platforms for university students. It is also noted that the average score of the research sample students on the four themes and the total score was greater than the hypothetical mean, which means that there is a higher than average level among the users of social networks as educational platforms participating in the research.

The result of the second hypothesis, which states: "There are no statistically significant differences between the mean scores of the students participating in the research on the scale of using social networks as educational platforms and its themes, according to the variable of the country of residence." In order to verify the validity of this hypothesis, the T-Test was used for independent samples, in order to reveal the significant differences between the mean scores of the students participating in the research on the scale of using social networks as educational platforms for university students and its themes, according to the variable of the country of residence (Egypt - Saudi Arabia). As shown in the following table:

Table (2): The results of the "T" test to reveal the significance of the differences between the mean scores of the students participating in the research on the scale of the use of social networks as educational platforms for university students and its aspects according to the variable of the country of residence.

Themes	Country	N	Mean	Std. Deviation	Std. Error Mean	df	t value	Sig
The role of	Egypt	207	69.7343	13.85017	1.32891	417	8.332	NO

students in employing social networks in education	Saudi Arabia	212	80.8066	13.35144	1.32949			
The effectiveness of using social networks in the learning process	Egypt	207	18.0483	3.97902	.36517	417	6.856	NO
	Saudi Arabia	212	20.5519	3.48486	.36575			
The role of teachers in employing social networks in education	Egypt	207	18.2754	3.79275	.36643	417	7.230	NO
	Saudi Arabia	212	20.9245	3.70781	.36653			
The extent to which social networks achieve learning outcomes	Egypt	207	16.7826	3.83597	.37286	417	8.743	NO
	Saudi Arabia	212	20.0425	3.79612	.37291			
Total scores	Egypt	207	16.6280	4.31657	.42406	417	6.272	NO
	Saudi Arabia	212	19.2877	4.36240	.42401			

It is clear from the previous table that there are no statistically significant differences between the mean scores of the students participating in the research in the total score and the themes of the scale of using social networks as educational platforms, according to the variable of the country of residence.

The result of the third hypothesis: which states that: "There are no statistically significant differences between the mean scores of the students participating in the research on the scale of using social networks as educational platforms and its themes, according to the gender variable." In order to verify the validity of this hypothesis, the T-Test was used for independent samples, in order to reveal the significance of the differences between the mean scores of the students participating in the research on the scale of the use of social networks as educational platforms among university students, according to the gender variable, as shown in the following table:

Table (3) The results of the "T" test to reveal the significance of the differences between the mean scores of the students participating in the research on the scale of the use of social networks as educational platforms for university students and its themes according to the gender variable

Themes	Gender	N	Mean	Std. Deviation	Std. Error Mean	df	t value	Sig
The role of students in employing social networks in education	Males	212	19.2877	4.36240	.42406	417	6.272	NO
	Females	207	16.6280	4.31657	.42401			
The effectiveness of using social networks in the learning process	Males	212	20.5519	3.48486	.36517	417	6.856	NO
	Females	207	18.0483	3.97902	.36575			
The role of teachers	Males	212	20.9245	3.70781	.36643	417	7.230	NO

in employing social networks in education	Females	207	18.2754	3.79275	.36653			
The extent to which social networks achieve learning outcomes	Males	212	20.0425	3.79612	.37286	417	8.743	NO
	Females	207	16.7826	3.83597	.37291			
Total scores	Males	212	80.8066	13.35144	1.32891	417	8.332	NO
	Females	207	69.7343	13.85017	1.32949			

As indicated in table 3, there are no statistically significant differences between the mean scores of the students participating in the research in the total score and the axes of the measure of using social networks as educational platforms, according to the gender variable, where the values of (t) were all non-statistically significant.

In accordance with the fourth hypothesis, "the academic performance cannot be predicted by knowing the students' scores on the scale of using social networks as educational platforms for university students in a statistically significant manner." To validate this hypothesis, Simple Linear Regression was used, considering academic performance as a dependent variable and the scale of using social networks as educational platforms as an independent variable. Simple Linear Regression analysis was performed as shown in the following table:

Table (4): The results of a simple linear regression analysis to predict the academic performance of the research sample students through their scores on the scale of using social networks as educational platforms

Variables	B	Std. Error	Beta	f value	t value	R	R ²	Adjusted R ²
Constant	81.687	2.035	.137	8.012**	40.143**	0.372	.019	.016
Using social networks	.075	.027			2.830**			

**significant at (0.01)

According to table 4, the value of "F" was (8.012), which is a statistically significant value at the level of significance of 0.01. The value of the multiple correlation coefficient R was (0.372), and the value of the square of the multiple correlation coefficient (determination coefficient) was R² (0.019), meaning that the independent variable (the use of social networks) explains the percentage of (01%) of the total variance in the dependent variable (academic performance). This means that the use of social networks contributes significantly to predicting the academic performance of students in the research sample in a statistically significant way.

Discussion

There has been a great deal of inconsistency in the reported findings regarding the relationship between using social networking sites and undergraduate students' academic performance, with some studies reporting negative relationships and others reporting positive relationships (Astatke et al., 2021; Masrom et al., 2021). In light of this, the researchers hypothesized and found evidence to support the relationship between undergraduate students' academic performance and their use of social networking sites as educational platforms. By verification of the validity of the first hypothesis, it was noted that there was a higher than average level of using social networks as educational platforms by the research participants.

This result aligns with earlier findings of prior studies, (Reeves, Alkhalaf, & Amasha, 2019.), that aimed to comprehend the popularity of various social media platforms, like WhatsApp and Facebook, among university students in the Saudi higher education setting. According to them, WhatsApp was cited as the most widely used social media platform in Saudi Arabia. In a similar vein, Asiedu and Badu (2018) also supported WhatsApp's status as the most widely used social media platform among two universities in Ghana.

The second hypothesis was verified, and the results showed that there were no statistically significant differences between the mean scores of the research participants in the overall score and the themes of the scale of using social networks as educational platforms, according to the variable of their country of residence, namely, Egypt and Saudi Arabia. This finding runs counter to what was discovered in the study by Hartshorne, Ajjan, and Cao (2016) who claimed that British and American students behave in different ways when using social networks for academic purposes.

The third hypothesis' verification revealed that there were no statistically significant differences between the mean scores of the research participants in the total score and the themes of the scale of using social networks as educational platforms, according to the gender variable, where the values of (t) were all non-statistically significant. Interestingly, this hypothesis is supported by this result which is consistent with a similar trend in international samples, which demonstrated that neither age nor gender are significant predictors of social networking use in studies of professional use rather than explicitly educational use (Benson and Filippaios 2015).

The result of the verification of the fourth hypothesis indicated that the use of social networks as educational platforms contributes significantly to predicting the academic performance of students in the research sample. Generally, the study sample students' responses showed that they would be motivated to use social networks as educational platforms because of its alignment with their desire to be interactive (Kilian et al., 2012). Overall, it is evident that students see the most benefit in using social networks as educational platforms for sharing information and conversations that they can participate in and learn from. Additionally, previous research indicates that in a traditional lecture setting, technology-mediated discussion is preferred over face-to-face discussion (Owens & Price, 2010).

Conclusion

This study set out to examine the relationship between the level of using social networking sites as educational platforms and undergraduate students' academic performance through a comparative perspective between Egypt and Saudi Arabia. Our research findings have allowed us to conclude that undergraduate students in Egypt and Saudi Arabia use social media for academic-related purposes such as sharing files, textbooks, course materials as well as online research resources. Social networks were used by undergraduate students to have conversations about academic subjects. According to the survey of 419 Saudi and Egyptian undergraduate students, it is seen that there is a positive relationship between the level of using social networks as educational platforms and academic performance of students. Participants in the survey who use social networks as educational platforms for academic-related activities have stated solid support for the ongoing use of social networks for this purpose. They consider using social networks as educational platforms to be a welcoming, collaborative environment where they can start conversations whenever it suits them and where they have constant, flexible peer access for information sharing and discussions about their academic pursuits.

Literature supports the idea that using social networks as educational platforms could be used to supplement traditional classroom instruction. Therefore, it is now the responsibility of the educators to explore ways to integrate social networks as educational platforms in higher education institutions. According to the study, it is important for the undergraduate student to be aware of the benefits and drawbacks of using social networks as educational platforms in different school subjects and academic activities. Overall, the researchers found that using social networks as educational platforms is well received by students. Educators should think about using social media as possible educational platforms if they want to promote open communication and the expression of ideas among their students both inside and outside the classroom. Educators should thoughtfully integrate social networks into the classroom in a way that supports the course's objectives for greater integration, interactivity, and insightful discussion.

Recommendations

The findings of this study could have broad recommendations and implications for both research and practice in a variety of contexts and for a wide range of stakeholders. With regard to research, and due to the explosion in the use of social networking sites by university students, the potential drivers of student motivation to use social networking sites for academic purposes must be of interest to higher education institutions practitioners and researchers. As social media applications continue to invade every aspect of our lives, it is now more important than ever for educational institutions to create policies and practices that support the positive effects of compulsive social media use while minimizing its negative effects. The findings of this study serve as a basis for further investigation into the relationship between the use of social networking sites and academic performance in other countries and other educational contexts. In regard to the practical implications, the findings of this study, which have several implications for social media practitioners and other stakeholders, demonstrated that personal motivation for using social networking sites for educational purposes are more important than demographic traits like age and gender. As part of open communication with their students, educators should discuss the academic use of social networking sites and the expectations for their use in the classroom.

Limitations

One of the limitations of the study is the self-reported data collection method used to explore the level of using social networking sites as educational platforms, which might be potentially biased by social desirable answers. In order to overcome these limitations the findings reported in this paper could be tested in other higher educational contexts by utilizing direct measures and qualitative research techniques like, interviews, observations and experimental methods to assess the effectiveness of using social networking sites in higher education institution. Students' interviews, both semi-structured and in focus groups, may offer more in-depth data that can be used to validate the results of this study through using triangulation methodology. Additionally, despite the fact that the data was collected from a reasonable population of social networking sites users in Egypt and Saudi Arabia, the sample size was relatively small compared to the total number of social networking sites users in both countries. The sample might not provide a true representation of the entire student population in both countries. Furthermore, due to the study sample's overrepresentation of male participants (00.0%), a greater balance between participant genders should be sought in future studies. Finally, students were not classified in this study based on their individual differences or learning styles. Future studies should explain the relationships between various learning styles and web-enabled teaching strategies. These limitations must be taken into consideration when applying the findings to new higher education settings.

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Conflict of interest

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References

- Adalberon, E., & Säljö, R. (2017). Informal Use of Social Media in higher Education: A case Study of Facebook Groups. *Nordic Journal of Digital Literacy*, 12(04), 114–128. https://www.idunn.no/dk/2017/04/informal_use_of_social_media_in_higher_education_a_case_st
- Alabdulkareem, S. A. (2015). Exploring the Use and the impacts of Social Media on Teaching and Learning Science in Saudi. *Procedia-Social and Behavioral Sciences*, 182, 213–224. <https://doi.org/10.1016/j.sbspro.2015.04.758>
- Al-Qaysi, N., Mohamad-Nordin, N., & Al-Emran, M. (2021). Developing a comprehensive theoretical model for adopting social media in higher education. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2021.1961809>
- Al-Rahmi, W. M., Yahaya, N., Alturki, U., Alrobai, A., Aldraiweesh, A. A., Omar Alsayed, A., & Kamin, Y. B. (2020). Social media-based collaborative learning: the effect on learning success with the moderating role of cyberstalking and cyberbullying. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2020.1728342>
- Al-Rahmi, W. M., & Zeki, A. M. (2017). A Model of Using Social Media for Collaborative Learning to enhance Learners' Performance on Learning. *Journal of King Saud University – Computer and Information Sciences*, 29(4), 526–535. <https://doi.org/10.1016/j.jksuci.2016.09.002>
- Alt, D. (2015). College students' academic motivation, media engagement and fear of missing out. *Computers in Human Behavior*, 49, 111–119.
- Asiedu, N. K., & Badu, E. E. (2018). Motivating Issues Affecting Students' Use of Social Media Sites in Ghanaian Tertiary Institutions. *Library Hi Tech*. <https://doi.org/10.1108/LHT-10-2016-0108>
- Astatke, M., Weng, C., & Chen, S. (2021). A literature review of the effects of social networking sites on secondary school students' academic achievement. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2021.1875002>
- Benson, Vladlena, and Fragkiskos Filippaios. 2015. "Collaborative Competencies in Professional Social Networking: Are Students Short Changed by Curriculum in Business Education?" *Computers in Human Behavior* 51: 1331–1339.
- Cao, X., Masood, A., Luqman, A., & Ali, A. (2018). Excessive use of mobile social networking sites and poor academic performance: Antecedents and consequences from stressor-strain outcome perspective. *Computers in Human Behavior*, 85, 163–174.
- Çetinkaya, L., & Sütçü, S. S. (2018). The effects of Facebook and WhatsApp on success in English vocabulary instruction. *Journal of Computer Assisted Learning*. doi: <https://doi.org/10.1111/jcal.12255>
- Coetzee, S. A., Leith, K., & Schmulian, A. (2019). Accounting Students Access to Social Media Related Resources and the Risk of Tacit Social Exclusion. *Accounting Education*. (world). <https://www.tandfonline.com/doi/abs/10.1080/09639284.2019.1641116>
- Dadzie, O. S. O. (2019). Effects of Social Media Use on the Academic Performance of Students of Public Tertiary Institutions in Ghana [Mphil Thesis, University of Ghana]. <http://ugspace.ug.edu.gh/handle/123456789/33361>

- Dumpit, D. Z., & Fernandez, C. J. (2017). Analysis of the use of social media in Higher Education Institutions (HEIs) using the Technology Acceptance Model. *International Journal of Educational Technology in Higher Education*, 14(1), 1–16.
- Ellison, N., & Boyd, D. (2013). Sociality through social network sites. In W. Dutton (Ed.), *The Oxford handbook of internet studies* (pp.151–172). Oxford University Press.
- Felisoni, D. D., & Godoi, A. S. (2018). Cell phone usage and academic performance: An experiment. *Computers & Education*, 117, 175–187.
- Gazit, T., Aharony, N., & Amichai-Hamburger, Y. (2019). Tell me who you are and I will tell you which SNS you Use: SNSs Participation. *Online Information Review*, 44(1), 139–161. <https://doi.org/10.1108/OIR-03-2019-0076>
- Hargittai, Eszter, and Yu-li Patrick Hsieh. 2010. “Predictors and Consequences of Differentiated Practices on Social Network Sites.” *Information, Communication & Society* 13 (4): 515–536.
- Hartshorne, Richard, Haya Ajjan, and Yingxia Cao. 2016. “Exploring the Impact of Social Media Compulsive Use on College Student’s Performance: A Gender Comparison.” In *Society for Information Technology & Teacher Education International Conference*, 1066–1070. Association for the Advancement of Computing in Education (AACE).
- Hogan, S. C., van Hees, C., Asiedu, K. B., & Fuller, L. C. (2019). WhatsApp Platforms in tropical Public Health Resource-poor Settings. *International Journal of Dermatology*, 58(2), 228–230. <https://onlinelibrary.wiley.com/doi/full/10.1111/ijd.14237>
- Hoi, N. V. (2021). Augmenting student engagement through the use of social media: The role of knowledge sharing behaviour and knowledge sharing self-efficacy. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2021.1948871>
- Junco, R. (2015). Student class standing, Facebook use, and academic performance. *Journal of Applied Developmental Psychology*, 36, 18–29.
- Junco, R., & Cotten, S. R. (2012). No A 4 U: The relationship between multitasking and academic performance. *Computers & Education*, 59(2), 505–514. <https://doi.org/10.1016/j.compedu.2011.12.023>
- Kane, G. C., Alavi, M., Labianca, G., & Borgatti, S. P. (2014). What’s different about social media networks? A framework and research agenda. *MIS Quarterly*, 38(1), 274–304.
- Karpinski, A. C., Kirschner, P. A., Ozer, I., Mellott, J. A., & Ochwo, P. (2013). An exploration of social networking site use, multitasking, and academic performance among United States and European university students. *Computers in Human Behavior*, 29, 1182–1192.
- Kilian, T., Hennings, N., & Langner, S. (2012). Do Millennials read books or blogs? A media usage typology. *Journal of Consumer Marketing*, 29, 114–124.
- Kirschner, Paul A., and Aryn C. Karpinski. 2010. “Facebook® and Academic Performance.” *Computers in Human Behavior* 26 (6): 1237–1245.
- Knop, K., Öncü, J. S., Penzel, J., Abele, T. S., Brunner, T., Vorderer, P., & Wessler, H. (2016). Offline Time is Quality Time. Comparing Within-group Self-disclosure in Mobile Messaging Applications and face-to-face Interactions. *Computers in Human Behavior*, 55, 1076–1084. <https://doi.org/10.1016/j.chb.2015.11.004>
- Koomson, W. K. (2018). Mobile Learning: Application of WhatsApp Messenger as a Learning Tool in a University Distance Learning Program in Ghana. *International Association for Development of the Information Society*. <https://eric.ed.gov/?id=ED600588>
- Lampe, C., Wohn, D. Y., Vitak, J., Ellison, N. B., & Wash, R. (2015). Student use of Facebook for organizing collaborative classroom activities. *Computer Supported Collaborative Learning*, 6, 329–347.
- Lau, W. W. F. (2017). Effects of social media usage and social media multitasking on the academic performance of university students. *Computers in Human Behavior*, 68, 286–291.
- Lemay, D. J., Bazalais, P., & Doleck, T. (2020). Patterns of social networking use and academic performance: Examining the link between quality and frequency of social networking use and

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- academic performance among college-level students. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-019-10065-7>
- Lepp, A., Barkley, J. E., & Karpinski, A. C. (2015). The relationship between cell phone use and academic performance in a sample of US college students. *SAGE Open*. <https://doi.org/10.1177/2158244015573169>
- Madge, C., Breines, M. R., Dalu, M. T. B., Gunter, A., Mittelmeier, J., Prinsloo, P., & Raghuram, P. (2019). WhatsApp Use among African International Distance Education (IDE) Students: Transferring, Translating and Transforming educational Experiences. *Learning, Media and Technology*, 44(3), 267–282. <https://www.mendeley.com/catalogue/94145a1c-6f24-3b59-944e-5bed27cf1690/>
- Marker, C., Gnambs, T., & Appel, M. (2018). Active on Facebook and failing at school? Meta-analytic findings on the relationship between online social networking activities and academic achievement. *Educational Psychology Review*. <https://doi.org/10.1007/s10648-017-9430-6>
- Masrom, M. B., Busalim, A. H., Abuhassna, H., & Mahmood, N. H. N. (2021). Understanding students' behavior in online social networks: A systematic literature review. *International Journal of Educational Technology in Higher Education*, 18(1), 1–27.
- Owens, J. D., & Price, L. (2010). Is e-learning replacing the traditional lecture? *Education + Training*, 52, 128-139.
- Park, E., Song, H., & Hong, A. J. (2018). The use of social networking services for classroom engagement? The effects of Facebook usage and the moderating role of user motivation. *Active Learning in Higher Education*. <https://doi.org/10.1177/1469787418809227>
- Raza, S. A., Qazi, W., Umer, B., & Khan, K. A. (2020). Influence of social networking sites on life satisfaction among university students: A mediating role of social benefit and social overload. *Health Education*, 120(2), 141–164.
- Reeves, A. J., Alkhalaf, S., & Amasha, M. A. (2019). WhatsApp as an educational Support Tool in a Saudi University. *International Journal of Advanced Computer Science and Applications*, 10(8), 394–401. <https://tinyurl.com/8pvxyp>
- Samad, S., Nilashi, M., & Ibrahim, O. (2019). The impact of social networking sites on students' social wellbeing and academic performance. *Education and Information Technologies*, 24(3), 2081–2094.
- Sarwar, B., Zulfiqar, S., Aziz, S., & Ejaz, C. K. (2019). Usage of social media tools for collaborative learning: The effect on learning success with the moderating role of cyberbullying. *Journal of Educational Computing Research*, 57, 246–279.
- Selwyn, N. (2012). Social Media in higher Education. *The Europa World of Learning*, 1, 1–10. <https://www.academia.edu/download/30358379/sample-essay-selwyn.pdf>
- Stainbank, L., & Gurr, K.-L. (2016). The use of social media platforms in a first year accounting Course. *Meditari Accountancy Research*, 24(3), 318–340. <https://doi.org/10.1108/MEDAR-08-2015-0051>
- Tafesse, W. (2020). The effect of social networking site use on college students' academic performance: The mediating role of student engagement. *Education and Information Technologies*, 25, 4747–4763.
- Wang, Y., Niiya, M., Mark, G., Reich, S.M., & Warschauer, M. (2015). Coming of age (digitally): An ecological view of social media use among college students. Paper presented at the proceedings of the 18th ACM conference on computer supported cooperative work & social computing. 571–582.
- Xu, S., Yang, H. H., MacLeod, J., & Zhu, S. (2019). Social Media Competence and Digital Citizenship among College Students. *Convergence*, 25(4), 735–752. <https://journals.sagepub.com/doi/full/10.1177/1354856517751390>

- Yeboah, J., & Ewur, G. D. (2014). The Impact of WhatsApp Messenger usage on Students Performance in Tertiary Institutions in Ghana. *Journal of Education and Practice*, 5(6), 157–164. <https://www.iiste.org/Journals/index.php/JEP/article/view/11241>
- Zhang, Y., & Leung, L. (2015). A review of social networking service (SNS) research in communication journals from 2006 to 2011. *New Media and Society*, 17(7), 1007–1024.