Impact of Social Media for Educational Use and Educational Information-Sharing on Students' Academic Performance

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Abstract

Social media has contributed significantly to the academic field. Students are keen to use the social media as a platform to grasp academic-oriented information and materials online. As such, in light of the Social Learning Theory (SLT), this study tries to examine the impact of the social media for educational use and educational information-sharing on students' academic performance at the International Islamic University Malaysia (IIUM). The SLT helps to explain the impact on students' academic performance when the social media is utilised for their study. Students are able to secure a better Cumulative Grade Point Average (CGPA) when they positively use the social media for their academic-related purposes. As SLT stress on the positive rewards, thus, the social media is widely used by the students since the advantages of using it is outweigh the disadvantages. This is the main contributor to the use of the social media in the academic field. A quantitative research design is employed, using the survey method with questionnaire as an instrument for data collection. A total of 440 undergraduate students from Kulliyyah of Islamic Revealed Knowledge and Human Sciences (KIRKHS) participated in this study. The study finds that students' academic performance is positively correlated with their social media for educational use and their educational information-sharing activities. Educational information-sharing is also found to partially mediate the relationship between the social media for educational use and students' academic performance. Therefore, this study contributes to their utilising the social media positively in the academic field, which in turn, improves their academic performance. With this, the SLT theory holds true.

Keywords: Academic performance; educational information-sharing; Malaysia; Social Learning Theory (SLT); social media for educational use.

INTRODUCTION

The usage of the social media is inevitable; it is used on a regular basis for multiple purposes. The advanced setting of social media which is user-friendly, effective and easy to use becomes valid reasons for its use in the academic field (Wan Roslina, Ziti Fariha & Nurul Haslinda, 2017). Such a setting allows students to have educational information-sharing activities among their classmates and peers such as uploading, transferring information, voice calling, and video calling (Nur Hananie & Nurhidayah, 2016). In addition, with the advanced setting, lecturers can utilise the social media for effective academic discussions with their students both within and outside the classrooms (Waleed, Mohd Shahizan & Mahdi, 2014). As such, the social media is believed to be an effective tool in facilitating students' studies ultimately resulting in their better academic performance. Thus, it implies that social media benefits students in their academic as well as personal purposes.

Despite the benefits of social media discussed, there are, however, some notable disadvantages of its usage on students' academic performance. The social media was initially used for leisure activities but it has now become a daily routine for students which could develop into an obsession. Extended over time it can give a negative impact on students' academic performance (Munkaila & Iddrisu, 2015). This is because most students cannot divide their time wisely between their academic and personal purposes.

The scenario of social media usage among students and in the academic field indicates that there is a need to conduct a study on the impact of the usage of social media for educational use and educational information-sharing on students' academic performance. Besides, scarcely research done on the impact of social media for educational use on students' academic performance with educational information-sharing as the mediating effect. Previous studies are more focused and tested on information sharing and/or knowledge sharing instead. For instance, other areas like marketing (Wu, 2008) and organisation (Butler, 1999; Roslina & Skaik, 2014) used information sharing and/or knowledge sharing as their oriented of study but not as the mediating effect. Thus, this study's finding may contribute in examining the mediating effect of educational information-sharing on the relationships between social media for educational use with students' performance. In addition, the study helps to provide the foundation for understanding the role of the social media in facilitating students' studies and in improving their academic performance. This is due to the fact that the social media is able to fulfil both academic and personal purposes. Students should be able to differentiate between the two purposes while they are online. Hence, it is important to keep in track as they know that the social media allows various of activities like sharing, sending and receiving any files and documents. As such, they can have own initiative to improve their grades like gather materials and find study partners online. Therefore, this study may shed some light on how to utilise the social media for students' own good.

The study aims to investigate the following objectives: (1) to identify the level of social media usage for educational use, educational information-sharing, and academic performance; (2) to test the relationships between social media for educational use, educational information-sharing and academic performance; and (3) to analyse the mediating effect of educational information-sharing between the social media for educational use and academic performance.

LITERATURE REVIEW
Academic Performance

Academic performance is defined by two grade points, namely, a trimesters' grade point average (GPA) and an academic years' cumulative grade point average (CGPA) (Banquil, Chua, Leano, Rivero, Burce, Dianalan, Matieno & Timong, 2009). Most of the tertiary institutions used GPA score to measure the academic performance of the students. It is a good measurement because from there they can determine the relative level of academic performance of students (Banquil, Chua, Leano, Rivero, Burce, Dianalan, Matieno & Timong, 2009). To elaborate, in determining the GPA score, several criterions should be taken into account, for example, students' performance in tests, course work and examinations. Thus, an increase of the GPA score reflects the better academic achievement of the students.

Social Media for Educational Use and Academic Performance

Social media acts as a learning platform. Students use the social media to gain relevant materials and at the same time it helps to broaden their views on certain topics assigned to them in class (Kanagarathinam, 2014). This is because social media like Twitter, Facebook (Waleed & Mohd Shahizan, 2013), Instagram (Adam and Nor Zairah, 2014) and blogs (Silvia and Reza, 2013) enable students to get in touch with scholars or experts from whom they can ask questions and they can also view their peers' comments on the same topics (Ahmed & Qazi, 2011; Nandez & Borrego, 2013). Thus, having a clear picture on the topic can help them produce better project papers, resulting in better grades.

In addition, the social media also provide a medium that can facilitate discussions with a large number of participants. Students can add their classmates, peers and their lecturers to join in the online discussions which can benefit students especially during the examination period when they can clarify confusing topics and discuss it with others (Yeboah & Ewur, 2014; Ziqing & Jinping, 2013). As a result, they can score better grades as they have understood the subject matter well.

In Malaysia setting, several studies support the usage of social media in academic fields as well as a mean in improving students' grades (Adam, Nor Zairah & Oye, 2012; Waleed et al., 2014). Their studies find that the attachment with the social media imposes more positive impacts on University of Technology Mara (UiTM) students' grades. This is due to the social media applications which help them a lot especially in completing their academic-related tasks. Therefore, this study postulates the following hypothesis:

H1: Social media for educational use is positively correlated with students' academic performance.

Social Media for Educational Use and Educational Information-Sharing

Social media for educational use is closely related to educational information-sharing. Students are interested in using the social media because they can easily conduct educational information-sharing activities (Athirah, Khairul Mizan, Siti Munira, Dang Merduwati & Saiful Farik, 2011). It becomes more interesting when they not only can share but are also able to send and receive the information. This online activity can be done because of the interactive

setting of social media (Yeboah & Ewur, 2014; Ziqing & Jinping, 2013) which can be upgraded from time to time to suit the needs of users, especially students. This explains the increasing importance of social media in the academia. Waleed and Mohd Shahizan (2013) find that social media can impose a good impact on students' grade when they utilise it for their studies. As previous studies found the positive relationship between social media for educational use and educational information-sharing, hence, this study postulates that:

Hofstede's cultural dimensions theory

The Hofstede theoretical framework with its cultural dimension provides a holistic cultural understanding of values. The framework can be understood in terms of five cultural dimensions, namely power distance, individualism, masculinity, uncertainty avoidance, and long term orientation and indulgence (Hofstede, 2010). The uncertainty avoidance framework by Hofstede, Hofstede and Minkov (2010) underpins the analytical framework of the present study.

H2: Social media for educational use is positively correlated with educational information-sharing.

Educational Information-Sharing and Academic Performance

Social media has become a means for sharing information fast. The intended information can be shared within a short time. Consequently, students are actively sharing educational information with their classmates and peers. Other reasons that contribute to the habit of sharing educational information is that the social media facilitate students in downloading, retrieving and saving the shared information in their online groups (Kim, Sin & He, 2013; Noor Azuan, Nor Liza, Rosmah & Hawati, 2015; Waleed, Norma, Mohd Shahizan, Ibrahim, Akram & Ali, 2017). Thus, they can add more references in their project paper and earn more points in elaborating as well as comparing the subject matter. With abundance of information in hand can help them to produce a quality project paper and gain more mark from their lecturers (Ahmed & Qazi, 2011). Previous studies also support that social media can help students in improving or maintaining their academic performance due to an excellent project paper (Azrinawati, Mohamad Afiq, Mohammad Khairi & Kee, 2013; Kanagarathinam, 2014; Wan Roslina et al., 2017). They have a good command of language and are knowledgeable in the academic writing style. Therefore, it implies that social media can lead to a good academic performance. As such, this study crafts this hypothesis:

H3: Educational information-sharing is positively correlated with academic performance.
The Mediating Effects of Educational Information-Sharing between Social Media for Educational

Use and Academic Performance

Educational information-sharing has the potential to mediate the relationship between social media for educational use and academic performance. This is because the new features of social media have inbuilt shared applications. Hence, it contributes to the sharing activities among students. Mensah and Ismail (2016) find that educational information-sharing activities help Malaysian students do well in their studies. However, now that students can view their

computers from multiple screens simultaneously, they are finding it difficult to allocate their time wisely. They can now surf the social media for their academic purpose and navigate their personal interest websites simultaneously. Thus, this will somehow drag their focus from the intended purpose to find study materials online and might lead to a drop in their grades. The indicator is that students' academic performance will improve when they utilise the social media for their academic purpose. Several studies support that social media can help improves students' academic performance when they use it as a platform to exchange educational-information with their classmates and peers (Mehmood & Taswir, 2013; Noorriati & Shireen, 2012). Athirah et al. (2011) study also finds that UiTM students utilised the social media for the sake of their study, specifically, in sharing materials online with their classmates and peers; thus, improved their academic performance. Therefore, educational information-sharing can mediate the relationship between social media for educational use and academic performance. Hence, the hypothesis has been crafted:
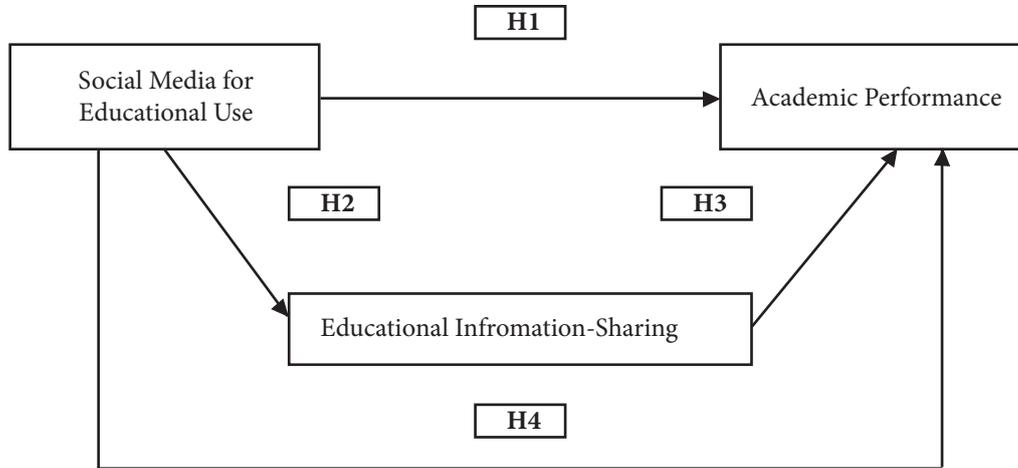
H4: Educational information-sharing mediates the relationship between social media for educational use and academic performance.

Social Learning Theory (SLT)

Bandura's Social Learning Theory (Bandura, 1971) is used to support this study with regards to the impact of social media usage for educational use and educational information-sharing on students' academic performance. This is because SLT posits three important elements where (1) the individual is the learner; (2) peers and; (3) situations. These three elements can affect the individuals' learning outcome. To further explain, students acquire new patterns of behaviour through: (a) observing the behaviour of others; and (b) modelling. However, they do not directly imitate an individual action or behaviour. They are more likely to apply behaviour that gives them benefits such as being rewarded. Thus, this means that students may directly observe the actions and behaviours of their peers but may imitate only when they find them beneficial. Current studies also use SLT to explain the impact of social media on students' studies (Amukune, 2013; Vicera, 2016). In this context, SLT is applied to elaborate on the wide use of social media in the academic field. Students use social media as a tool in facilitating their studies. They use it to communicate their academic tasks, for example, to get relevant materials, share educational-information and discuss their assignments or projects. This indicates that by using the social media, students can complete their tasks easily. SLT clarifies this situation as a positive reward where the social media use gives an advantage to the students. Meaning that, students observe and model others' action in utilising social media for their own benefit. Therefore, the SLT theory can help to support this study.

Conceptual Framework

The literature review discussion attempts to describe the relationships in the conceptual framework, as illustrate below:

Figure 1: Conceptual framework of the impact of social for educational use and educational information-sharing on academic performance

Summary of the Hypotheses

Hypotheses testing summary are listed in the Table 1.

Table 1: Hypotheses testing summary

No.	Hypotheses
H1	Social media for educational use is positively correlated with students' academic performance
H2	Social media for educational use is positively correlated with educational information-sharing
H3	Educational information-sharing is positively correlated with academic performance
H4	Educational information-sharing mediates the relationship between social media for educational use and academic performance

RESEARCH METHODOLOGY

The study employs a quantitative research design where the respondents consist of IIUM undergraduate students from *Kulliyyah* of Islamic Revealed Knowledge and Human Sciences (KIRKHS). A questionnaire is used to gather the data for the study, starting from 1st September 2017 until 30th September 2017. A total of 440 respondents participated in the study where 343 are females and the rest are males with ages ranging from 18 to 29 years old (M=21.918, SD=0.564).

This study uses a stratified random sampling procedure. The sampling procedure helps to determine the divisions of a population involved and leads in dividing it into smaller groups or known as strata (Wimmer & Dominick, 2014). As for this study, the population is divided into two stratums: (a) Islamic Revealed Knowledge (IRK); and (b) Human Sciences (HS) divisions.

As this study used questionnaire to gather data, there are two steps applied in getting the respondents. First, it is really important to obtain a permission letter from Academic Management and Admission Divisions, especially, in conducting the research among IIUM students. The permission letter could help in getting lecturers' consent, so that, the questionnaires can be distributed to their respective students during class time. Second, the data collections process take place in the areas that students normally congregate. For instance, the questionnaires were distributed at the mosque, library, around Hs café and also in Mahallah café. It easier to seeks their help to answer the questionnaire since they are free before going to class.

The survey questionnaire consists of demographic information which specifically looks at gender, age (years old) and nationality. Social media for educational use is adopted from the Mingle and Adams' (2015) study with seven items measured, for example, "I use social media to form a course/study group" and the Cronbach's Alpha value is 0.86. Educational information-sharing items (21) are adapted from McGraw Hill Education (2015) and its Cronbach's Alpha of 0.96. Effects of the social media participation on academic performance contain sixteen items where four items are adopted from Mingle and Adams (2015), for example, "I experience an improvement in my academic performance after participating in the social media" and another twelve items are adopted from Adam and Nor Zairah (2014) where one of the statements is "I use social media to help me perform well in my studies" and the Cronbach's Alpha is 0.94.

RESULTS
Level of Social Media for Educational Purposes

Table 2 presents the level of social media for educational use. There are seven items measured to determine the level of social media for educational use among students with a 5-point Likert-scale from 1=strongly disagree to 5= strongly agree.

Table 2
One sample t-test for social media use for educational purpose

No.	Social Media for Educational Use	M*	SD	%	t**	df	P
1.	I use social media to collaborate for assignments.	4.061	0.973	81.2	22.889	439	.000
2.	I use social media to search for course topics, key-words, and expert names.	4.000	1.024	80.0	20.492	439	.000
3.	I use social media to form a course/study group.	3.996	1.006	80.0	20.763	439	.000
4.	I use social media applications like YouTube to search for videos and playlists for extra learning on challenging class topics.	3.798	1.096	76.0	15.272	439	.000
5.	I use social media to ask questions to experts.	3.280	1.189	66.0	4.932	439	.000
6.	I use social media to get study group online.	3.218	1.249	64.4	3.664	439	.000
7.	I use social media to follow authors who have written books that are being used in class.	3.218	1.249	64.4	3.664	439	.230
	Overall for Social Media towards Educational Use (α=0.863)	3.431	0.938	69.0	9.626	439	.000

*5-point scale whereby 1=never (1-20%), 2=rarely (21-40%), 3=sometimes (41-60%), 4=often (61-80%), 5=always (81-100%).
**Test value is 3.

The results show that majority of the respondents make use of their social media accounts for their study such as: (a) to collaborate for assignments (81.2%); (b) to search for course topics, keywords and expert names (80.0%); and (d) to form a course or study group (80.0%). Moreover, three-quarters of them (76.0%) are more interested in utilising YouTube applications, specifically, to search for videos and playlists for extra learning on challenging class topics. The rest of the respondents agree that the social media is helpful for their study since they can: (a) ask questions to experts (66.0%); (b) get study group online (64.4%); and (c) follow authors who have written books that are being used in class (64.4%). It can be indicated that students are keen to use the social media for specifics reasons and for certain tasks only. This is because there is one item reported as not significant. The item is "I use social media to follow authors who wrote the books that are being used in class" (M=3.218, SD=1.249, t(439)=3.664, p=.230). This means that the students did not see the importance of following authors who wrote the books that are being used in class. This is due to the fact that there are no official textbooks used for the class. Normally, the readings materials are taken from various sources like journal articles and not depending to only one book. However, for overall result, the respondents (69.0%) agree that the social media applications help them in their study (M=3.431, SD=0.938, t(439)=9.626, p=.000). This indicates that they use this online platform for the betterment of their knowledge.

Level of Educational Information-Sharing

Educational information-sharing is divided into three types such as receiving, sending and sharing of information. There are seven items measured for each type of information-sharing with a 5-point Likert scale from 1=strongly disagree to 5=strongly disagree (Table 3).

Table 3
One sample t-test for educational information-sharing

No.	Receiving Educational Information	M*	SD	%	t**	df	P
A	**Receive Educational Information**						
1.	I use social media to receive class-related announcements.	4.075	0.941	81.5	23.969	439	.000
2.	I use social media to receive class-related documents.	4.041	0.951	80.8	22.953	439	.000
3.	I use social media to receive updates on class assignments/projects.	4.025	0.951	80.5	22.617	439	.000
4.	I use social media to receive reminders regarding class assignments/projects.	3.943	1.001	78.9	19.771	439	.000
5.	I use social media to receive feedback regarding class assignments.	3.705	1.021	74.1	14.475	439	.000
6.	I use social media to receive class-related video.	3.596	1.041	71.9	11.995	439	.000
7.	I use social media to receive streaming and recorded lectures.	3.418	1.199	68.4	7.316	439	.000
	Overall Receive Educational Information (α=0.931)	3.829	0.856	76.6	20.322	439	.000

No.	Sending Educational Information	M*	SD	%	t**	df	p
B	**Send Educational Information**						
1.	I use social media to send queries to my group mates regarding assignments.	3.998	0.946	80.0	22.120	439	.000
2.	I use social media to send drafts of ideas on projects or assignments.	3.911	0.978	78.2	19.555	439	.000
3.	I use social media to send assignment progress reports.	3.911	1.014	78.2	18.850	439	.000
4.	I use social media to send collected study materials online.	3.823	1.028	76.5	16.783	439	.000
5.	I use social media to send academic-related online news.	3.727	1.098	74.5	13.894	439	.000
6.	I use social media to send motivational words.	3.496	1.129	69.9	9.202	439	.000
7.	I use social media to send e-books regarding study to friends.	3.372	1.170	67.4	6.683	439	.000
	Overall Send Educational Information (α=0.921)	3.748	0.868	75.0	18.085	439	.000

No.	Educational Information-Sharing	M*	SD	%	t**	df	p
C	**Share Educational Information**						
1.	I use social media to share links related to classes with friends.	3.707	1.051	74.1	14.103	439	.000
2.	I use social media to share online academic materials with friends.	3.693	1.045	73.9	13.912	439	.000
3.	I use social media to share past examination questions with friends.	3.500	1.137	70.0	9.220	439	.000
4.	I use social media to share notes for missed classes or lectures with classmates.	3.414	1.134	68.3	7.650	439	.000
5.	I use social media to share study tips.	3.341	1.100	66.8	6.503	439	.000
6.	I use social media to share upcoming seminars or conferences updates with online groups.	3.304	1.191	66.1	5.362	439	.000
7.	I use social media to invite lecturers who use social media to follow group conversations or join chatrooms on academic matters.	3.055	1.254	61.1	0.912	439	.000
	Overall Share Educational Information (α=0.924)	3.431	0.938	68.6	9.626	439	.000

*5-point scale whereby 1=never (1-20%), 2=rarely (21-40%), 3=sometimes (41-60%), 4=often (61-80%), 5=always (81-100%).
**Test value is 3

For receiving education information section, majority of the respondents' claimed that they actively use the social media to receive educational information from their classmates and peers. The activities that they are often involved in are: (a) receive class-related announcements (81.5%); (b) receive class-related documents (80.8%); and (c) receive updates on class assignments or projects (80.5%). Three-quarters of the respondents (78.9%) admit that they use the social media for receiving reminders regarding class assignments or projects. Besides, they are also interested in receiving feedback regarding class assignments (74.1%) and receiving class-related video (71.9%). Apart from that, two-third of the respondents (68.4%) stated that they utilised the social media to receive streaming and recorded lectures. As all items for receiving educational information are positively rated and significant, it indicates that social media is

an important tool to absorb all the class-related information from their classmates and peers. This is supported with the overall percentage of 76.6% where the respondents stated that social media help them to catch-up and receive class information effectively (M=3.829, SD=0.856, t(439)=20.322, p=0.000). This means that the social media have been seen as a medium in keeping updated and abreast with the studies.

In addition, for sending educational information section, majority of the respondents (80.0%) agree that the social media is utilised for sending queries to their group mates regarding assignments. Moreover, three-quarters of them attached to their social media accounts because it helps them in: (a) sending drafts of ideas on projects or assignments (78.2%); (b) sending assignment progress reports (78.2%); (c) sending collected study materials online (76.5%). Moreover, seven out of ten of the respondents (74.5%) make use of their social media to send academic-related online news to their classmates and peers. They also use the social media for other purposes, for example, to send motivational words (69.9%) and 67.4% of them send e-books regarding their studies to classmates and peers. The results show that students use social media effectively for their studies. It also reflects the ability of students to adjust the offered social media applications to their needs, mainly for their academic purposes. By and large, for this section, respondents (75.0%) agree that they use the social media to send educational information to their classmates and peers (M=3.748, SD=0.868, t(439)=18.085, p=.000). This means that this online activity gives them the advantage as they can extend their academic knowledge to one another.

As for sharing educational information section, it is reported that seven in ten of the respondents utilise social media to: (a) share links related to classes with friends (74.1%); (b) share online academic materials with friends (73.9%); and (c) share past examination questions with friends (70.0%). This means that the students know the benefits of sharing educational information via social media with their classmates and peers. Furthermore, they also admit that the social media do assist them in other sharing activities since the items gain about two-thirds of the percentage. The items are: (a) share notes for missed classes or lectures with classmates (68.3%); (b) share study tips (66.8%); and (c) share upcoming seminars or conferences updates with online groups (66.1%). Only six in ten (61.1%) of the respondents make use of their social media accounts to invite lecturers who use social media to follow group conversations or join chartrooms on academic matters. The overall percentage stated as 68.6% in the sharing process and it also show a significant result (M=3.431, SD=0.938, t(439)=9.626, p=.000). This implies that educational information-sharing activity benefit students' study. It helps them in sharpening and building critical thinking where it could assist them to evaluate the subject matter well. They also may have different angles when look at things which it is good in developing their learning process.

Level of Effect of Social Media Participation on Academic Performance

This section, specifically, measured sixteen items to test social media participation on academic performance, with a 5-point Likert scale, from 1=strongly disagree to 5=strongly agree (Table 4).

Table 4

One-sample t-test for effect of social media participation on academic performance

No.	Effect of Social Media Participation on Academic Performance	M*	SD	%	t**	df	P
1.	I receive announcements from lecturers and faculty members through social media.	3.977	0.915	80.0	22.397	439	.000 .000
2.	I use social media to gain more vocabulary, improve writing and reduce spelling mistakes.	3.973	0.952	79.0	21.438	439	.000
3.	I use social media to improve my English language proficiency.	3.971	0.965	79.4	21.100	439	.000
4.	I arrange group discussions with my classmates using social media.	3.886	0.936	78.0	19.871	439	.000
5.	I discuss my assignments with friends online.	3.886	0.926	78.0	20.081	439	.000
6.	I use social media to facilitate academic activities.	3.736	0.879	75.0	17.566	439	.000
7.	I use social media to improve my reading skills.	3.725	0.975	75.0	15.590	439	.000
8.	I use social media to improve my interactions with classmates and lecturers for academic performance.	3.714	0.928	74.3	16.134	439	.000
9.	I make an appointment with my lecturer through social media regarding assignments.	3.680	1.041	74.0	13.692	439	.000
10.	I use social media to do examination discussion with my friends.	3.618	0.971	72.4	13.355	439	.000
11.	I use social media for educational purposes.	3.521	0.923	70.4	11.831	439	.000
12.	I experienced an increase in my academic performance after participating in social media.	3.443	0.899	69.0	10.344	439	.000
13.	I use social media to have a positive influence on my academic performance.	3.296	0.932	66.0	6.647	439	.000
14.	I use social media to help me perform well in my studies.	3.252	0.929	65.0	5.695	439	.000
15.	I spend a lot of time reading books online to improve my academic performance.	3.100	1.021	62.0	2.055	439	.021
16.	I use social media so that I can concentrate more in my studies.	2.841	0.991	57.0	-3.368	439	.001
	Overall Students' Academic Performance (α=0.936)	**3.601**	**0.679**	**72.0**	**18.583**	**439**	**.000**

*5-point scale whereby 1=strongly disagree (1-20%), 2=disagree (21-40%), 3=slightly agree (41-60%), 4=agree (61-80%), 5=strongly agree (81-100%).
**Test value is 3.

Majority of the respondents (80.0%) admit that they receive announcements from lecturers and faculty members through social media. The respondents do not only focus on this specific reason but they also have other interest in using social media as more than three-quarters of them use it to: (a) gain more vocabulary, improve writing and reduce mistakes (79.0%); (b) improve their English language proficiency (79.4%); (c) arrange group discussions with their classmates (78.0%); (d) discuss their assignments with their friends online (78.0%); (e) facilitate their academic activities (75.0%); and (f) improve their reading skills (75.0%). It is notable that the respondents use the social media for other purposes as seven over ten of them agree that this online platform can help them to: (a) improve their interaction with classmates and lecturers for academic performance (74.3%); (b) make an appointment with their lecturer through social media regarding assignment (74.0%); (c) do examination discussion with their friends (72.4%); and (d) use it for educational purposes (70.4%).

In addition, two-thirds of the respondents (69.0%) report that they experience an increase in their academic performance after participating in the social media and six in ten of them (66.6%) are confident that the online activities have a positive influence on their academic performance. Apart from that, it is also reported that six in ten of the respondents use the social media to help them perform well in their studies (65.0%) and they spend a lot of time reading books online to improve their academic performance (62.0%). More than half of them (57.0 %) use the social media to encourage them concentrate more on their studies. It is supported with the overall percentage for all sixteen items (72.0%) where it indicates that the students admit that the online platform helps in their study like to achieve and to improve their grade or CGPA (M=3.601, SD=0.679, t(439)=18.583 *p*=.000).

Hypotheses Testing

Relationships between Social Media for Educational Use, Educational Information-Sharing and Students' Academic Performance

There are two analyses used to test the relationships between social media for educational use, educational information-sharing and students' academic performance. The analyses are: (a) zero-order and partial correlation; and (b) hierarchical regression.

Table 5
Zero-order and partial correlation between educational information-sharing, social media for educational use and academic performance.

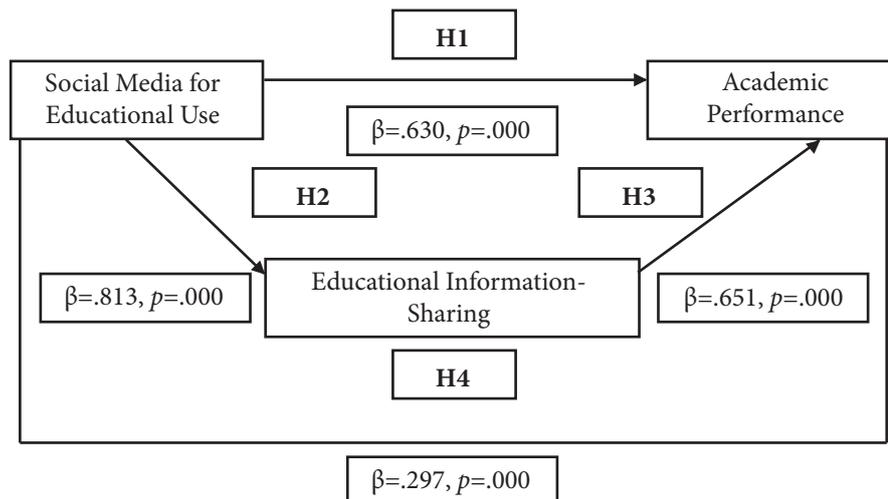| Control variable	Variable (N=440)	Academic performance	Social media for educational use	Educational information-sharing
Zero order	Academic performance	1		
	Social media for educational use	r=.630, ρ=.000	1	
Educational information- sharing (partial)	Educational information-sharing	r=.651, p=.000	r=.813, p=.000	1
	Academic performance	1		
	Social media for educational use	r=.227, p=.000	1	

The correlation between social media for educational use and students' academic performance is strongly positive and it is significant (r=.630; p=.000); hence, hypothesis 1 (H1) is supported (Table 5). Hypothesis 2 (H2) is also supported with a very strong positive relationship (r=.813; p=.000) between social media for educational use and educational information-sharing. In addition, the correlation between educational information-sharing and students' academic performance is strongly positive (r=.651; p=.000); hence, hypothesis 3 (H3) is also supported. As all the criteria for mediating effect have been met where all the correlation tests are significant, thus, a hierarchical multiple regression analysis is performed (Table 6). This analysis is to test the overall model of mediating effect of educational information-sharing on social media for educational use on students' academic performance.

Table 6
Hierarchical regression analysis for students' academic performance with social media for educational use and educational information-sharing

Model		Unstandardized Coefficients		Standardized Coefficients	T	P
		B	**SE**	**B**		
1	(Constant)	1.738	.113		15.422	.000
	Social media for educational use	0.514	.030	0.63	16.961	.000

F(440) =287.688, df1=1, df2=438, p=.000, R=.630, R²= .396, R² Adj.=.395; F change=287.688, df1=1, df2=438, p= .000

2	(Constant)	1.467	.115		12.789	.000
	Social media for educational use	0.242	.050	.297	4.881	.000
	Educational information-sharing	0.343	.051	.410	6.744	.000

F(440)=181.198, df1=2, df2=437, p=.000, R=.673, R²=.453, R²Adj.=.451; F change=45.488, df1=1, df2=437, p=.000

The results show that educational information-sharing partially mediates the relationship between social media for educational use on academic performance. This is due to the Beta weight reduction of .333 from Model 1(β =.630, t=16.961, p=.000) to Model 2 (β = .297, t=4.881, p=.000), yet their relationship is still significant. This is also supported by the reduction of the overall relationship value of 242.2 from F change=287.688 to F change=45.488. Therefore, H4 of the study is supported where educational information-sharing mediates the relationship between social media for educational use and students' academic performance. Figure 2 illustrates the relationships between these three variables, social media for educational use, educational information-sharing and academic performance.

Figure 2: Mediating effect of educational information-sharing and social media for educational use and academic performanceWWW

DISCUSSION

The result shows that hypothesis 1 (H1) is supported as the correlation between social media for educational use and students' academic performance is strongly positive and significant. Studies revealed that UiTM students use the social media mainly for their academic purposes and it yields a better CGPA (Adam et al., 2012; Waleed et al., 2014). Similarly, this study found that IIUM students also make use own social media for their academic purposes. On the same basis, it can be indicated that, IIUM and UiTM students share the same online habit as they use it to get their tasks done and apparently it help them to obtain a better grades. This is also in line with the Kanagarathinam (2014) study where he finds that students experience an improvement in their academic performance when they utilise the social media positively for their studies. In fact, social media opens up the opportunity for them to consult with experts in their field of interested (Ahmed & Qazi, 2011; Nandez & Borrego, 2013). The online activities benefit them because suggestions or comments posted by experts or researchers give them the ideas in improving their assignments and projects.

In addition, hypothesis 2 (H2), social media for educational use is positively correlated with educational-information sharing is also supported. A previous study emphasized how students use social media for educational information-sharing activities with their classmates and peers (Athirah et al. 2011). The advanced setting of social media enables students to share, send and receive information (Yeboah & Ewur, 2014; Ziqing & Jinping, 2013). Waleed and Mohd Shahizan (2013) concur that students will obtain a good grade when they actively use social media mainly for academic purposes.

Hypothesis 3 (H3) is supported with a strong positive relationship between educational-information sharing and students' academic performance. The habit of sharing educational-information may lead to a better grade (Kim et al., 2013; Noor Azuan et al., 2015; Waleed et al., 2017). This is possible because the shared information may receive feedback and comments which give an extra input in completing the academic-related tasks.

Hypothesis 4 (H4): educational information-sharing mediates the relationship between social media for educational use and students' academic performance is also supported with a partial mediating effect. This means that IIUM students do use the social media to share educational information with their classmates and peers. The continuous tradition of sharing activities is helping them to secure a better CGPA. Similarly, students in UiTM also utilise their social media accounts to have educational information-sharing activities with their classmates and peers (Athirah et al., 2011). This implies that engagement with social media helps students in their academic activity. Nonetheless, social media alone without educational information-sharing cannot contribute to an improvement in CGPA. Students will obtain a good CGPA only when they use the social media as a platform for sharing academic-related information with their classmates and peers (Mensah & Ismail, 2016; Noorriati & Shireen, 2012). This proves that social media use contribute less to academic performance due to the existence of educational information-sharing as the mediating effect.

CONCLUSION

All tested hypotheses in the study are supported with significant relationships. Therefore, it indicates that social media for academic purposes gives an advantage in improving students'

academic performance. In addition, educational information-sharing is able to mediate the relationship between social media for educational use and students' academic performance. Thus, this implies that educational information-sharing is a powerful construct in gaining a better academic performance.

There are limitations faced when conducting the study. Among others, the limitation is on the data collection process. The data collection process is quite challenging due to the fact that some respondents were reluctant to answer the questionnaires as they are busy with classes and with their extra-curricular activities. Not only that, some of them did not return the questionnaires as promised. These limitations required the researcher to extend the planned time for data collection.

This study is limited to the KIRKHS undergraduate students only and confined to the arts-based faculties. Therefore, it is suggested for future studies to include other arts-based faculties besides KIRKHS as well as the science-based faculties. In addition, for the future studies, it is suggested to use Structural Equation Model (SEM due to its ability to test the mediating effects with many variables and it is more appropriate to analyse partial correlation and regression rather than using SPSS.

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