

The Influence of Social Network Sites (SNS) upon Academic Performance of Malaysian Students

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Abstract

Social network sites (SNS) have attracted considerable attention among teens and young adults who tend to connect and share common interest. Despite this popularity, the issue of students' adoption of social network sites is still being unexplored fully in Malaysia. Driven by this factor, this study was designed to analyze the impact of social network sites on students' academic performance in Malaysia. Using a conceptual approach, the study gathered that more students prefer the use of Facebook and Twitter in academic related discussions in complementing conventional classroom teaching and learning process. Thus, it is imperative that lecturers and academic institutions should implement the use of these applications in promoting academic excellence. As for profit oriented organizations such as bookshops, computer and smartphone vendors, they can promote their products through these applications and engage students to make purchases via them having understood that many students prefer and use Facebook, Twitter and Google+. The discussion from this study however does not represent the general sampling of Malaysian university students.

Keywords: Effects, Social Network Sites (SNS), Academic Performance, Students, Private and Public Universities

Introduction

Social network site (SNS) has become the most dynamic Web 2.0 application which enables students not only to socialize with friends but also interact with lecturers (Hamat, *et al.* 2012). The growing popularity of the sites is further influenced by the free access for whomever that desire to interact with friends and lecturers with a view to generating collective knowledge. Despite the popularity of SNSs among students (Valenzuela, *et al.* 2009; Harris and Dennis, 2011; (Boyd & Ellison, 2007; Moorman and Bowker, 2011; Rambe, 2011; Zhu, *et al.* 2011; Abdullahi, *et al.* 2012; Brenner, 2012), review of academic articles indicates that only few studies have been conducted on how the use of social media sites impact on student's academic performance in Malaysia. Driven by this, this study is conducted to determine the impact of the use of SNSs on student's academic performance.

Social Network Sites Issues

Review of existing literatures on SNSs revealed that it has attracted millions of users due to affordance and reach. In spite of the fact that SNSs has been accepted widely by many higher learning institutions globally, review of relevant literature indicates that how well Malaysian students adopt social media in the academic environment is yet to be explained thoroughly (Hamat, *et al.* 2012). Also, while SNSs has attracted considerable attention among academic and industry researchers over the years (Boyd and Ellison, 2007; Hargittai & Hsieh, 2010), review of existing literature on SNSs and academic performance relationship is scanty especially in the Malaysian academic context (Leng, *et al.* 2011; Moorman and Bowker, 2011).

Also, little is known on how gender, age, cultural and religious differences mediate the relationship between usage and student's performance as regards level of engagement with SNS social practices. This indicates that there is an incomplete picture of the SNSs use and student's performance relationship in the Malaysian academic environment. Thus, this study is designed to address this gap so as to provide useful insights for future researchers.

What are Social Network Sites?

Social network site is a web based service which allows people to sign up in a bounded system, articulating group of people within the same system so as to share personal or academic related information (Boyd and Ellison, 2007). This indicates that SNS entails a place where people connect with each other and share common issues relating to relationship, sports, politics or academics. However, Boyd and Ellison argue that participants from certain social media sites are not primarily there to connect with people they are not familiar with, rather they sign up to connect and catch up with loss but found offline friends as well as close ones. Leng, *et al.* (2011) claim that SNSs allow users to meet strangers resulting in connections between individuals that would not otherwise have been made.

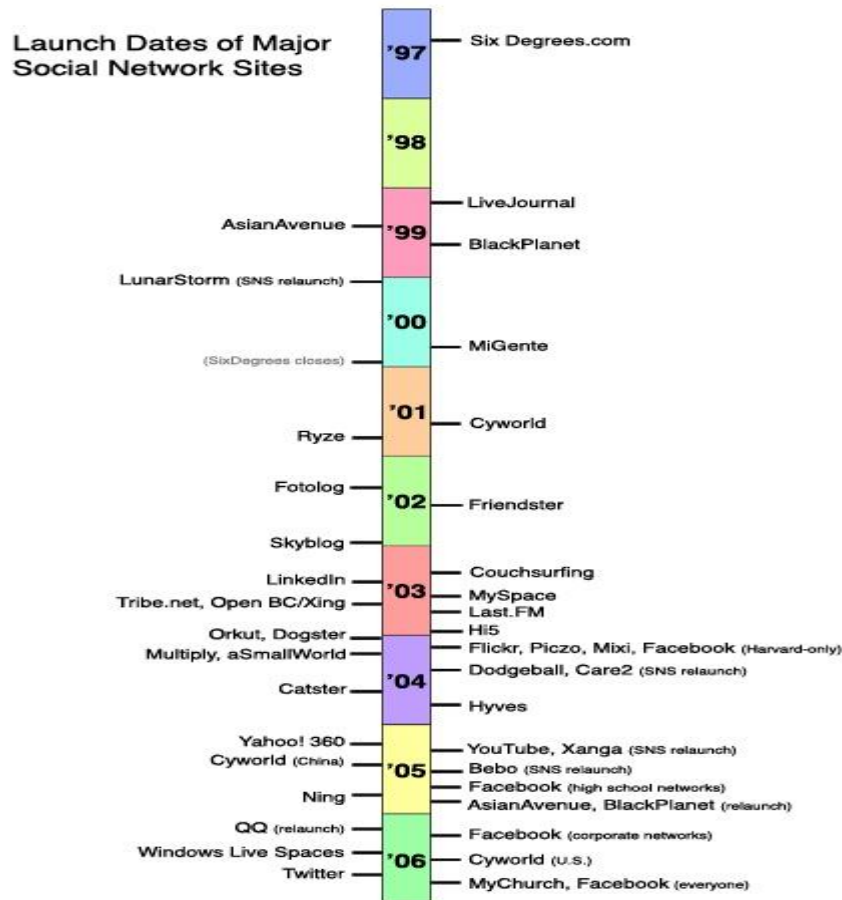
The Importance of SNSs to Students

Social network sites have attracted considerable attention among scholars and educators due to the growing popularity among students and the potential effect on academic performance. However, the studies appear from two opposing views on the impact of SNSs on users. While proponents argue that it allows users in connecting people of common interest and value, opponents claim that excessive use of these sites affect the social, mental and physical health of the users. Leng, *et al.* (2011) asserts that SNSs enable students to connect with friends and share information as well as organize their offline meetings and group work. However, Henderson (2013) assert that while evidence for Social Media Anxiety Disorder is largely at present, a study conducted in UK among social media users found that more than 50% users indicated that social media use is associated with negative impact.

Trends in SNSs in the Last 12 Years

The history of social network sites dates back to the late twentieth century. For example, Boyd and Ellison, (2007) assert that the earliest social network site – SixDegrees, was founded on the 1997. According to the authors, the site enables people to create profile and choose the friends. Following the success of SixDegrees, other community oriented sites took suit from 1997 to 2001. For example, AsianAvenue, BlackPlanet, and MiGente were launched which allow people to create personal, professional, and dating profiles. In 1999, LiveJournal was launched which enables people to celebrate friends to follow their journals and manage privacy settings. Subsequently, other social network sites were launched including Facebook (Bateman, *et al.* 2010; Evans-Cowley, 2010; Akyildiz and Argan 2012; Brenner, 2013). See Figure 2.1

Figure 2.1: The Launch of Major Social Network Sites



Source: (Boyd and Ellison, 2007)

Differences in Student Attitudes toward SNSs

While SNSs are often designed to be widely accessible, many attract homogeneous populations initially. So, it is not uncommon to find groups using sites to segregate themselves by nationality, age, educational level, or other factors that typically segment society, even if that was not the intention of the designers. Thus, differences in attitudes and use of SNSs on the bases of gender, age and cultural/religious is discussed here.

Gender Differences

Prior studies on SNSs have indicated that there is a gender difference in usage and attitudes. One school of thought believes that women are significantly more likely to use SNSs than men. For example, a study conducted in December 2012 by Brenner, (2013) found that 71% of women were users of SNSs compared with 29% of men. However, others believe that more men use the internet in its nascent years than did women. For example, a survey on internet usage concludes that men report higher levels of internet usage than do women due to privacy concerns. Supporting this finding, the study of Cho, *et al.* (2009) found that older female internet users from an individualistic culture are more concerned about online privacy than males. Similarly, Akyildiz and Argan, (2012) found that male students use Facebook more frequently than female students with more friends and spend significantly more time on Facebook than female students.

Furthermore, prior studies indicate that subjective norms and identification influences women more strongly than men. Peluchette and Karl, (2008); Nemetz, (2010) found that significant gender differences were found regarding the type of information posted on SNSs. Also, Shen, *et al.* (2010) found that men are more likely to engage in task-oriented or instrumental behavior and therefore attitude toward the use of information technology will be more salient for men than women.

However, the study discovers that women are more likely to conform to a majority opinion and more relationship-oriented than men. It can be concluded that while considerable study is done on gender differences in SNSs usage, little is known about attitudes toward SNSs.

Age Differences

Prior studies indicate that age and technology adoption has an inverse relationship in various technology contexts. According to these studies, older people tend to exhibit more negative perceptions of new technologies and feel greater reluctance to adopt them when compared to young adults. For example, a study by Akindehin and Akindehin (2011) found that young adults are more likely to accept and use specific internet-related technologies, such as online chat rooms, Webcasting and social media. Similarly, Peluchette and Karl, (2008); Nemetz, (2010) found that significant age difference is found regarding the type of information posted on SNSs in that older females are more likely to find some conventional postings and personal choice intrusions by faculty more inappropriate than younger males students.

While the foregoing indicates that the older people become, the less likely they would accept new technologies, the findings of Kwon and Noh, (2010); Svorc (2012) suggest otherwise that age and general internet experience show limited influences on individuals' perceptions and usage of the internet. According to this claim, older people do not exhibit negative perceptions towards new technologies based on age.

Cultural and Religious Differences

Although research on the relationship between individuals' cultural and religious difference and attitudes towards SNSs use is scant, there is evidence that an individual's cultural or religious characteristics might affect his/her attitude towards SNSs and usage. For example, a study by Cho, *et al.* (2009);Hugl (2010) show that national culture significantly influences internet users' privacy concerns to the extent that older internet users from an individualistic culture were more concerned about online privacy than their counterparts. Similarly, Pew Research, (2012) found that over seven-in-ten Arab publics share views on religious issues when compared with a cross-national median of just 46%. However, opponents of this viewpoint argue that cultural/religious difference is not a strong determinant of SNSs use. According to this claim, SNSs use is not influenced by users' cultural/religious differences given the influence of western culture on others.

While SNSs has attracted considerable attention among academic and industry researchers over the years (Boyd and Ellison, 2007; Hargittai& Hsieh, 2010), little is known in relation to gender, age, cultural and religious differences in level of engagement with SNS social practices. The link between SNSs use and academic performance will be discussed in the next section.

Usage of SNSs as an Antecedent of the Academic Performance of Students

In the previous section, an overview of the SNS construct was investigated. In this section, the focus is placed on the interaction between SNSs and student's academic performance. The following three issues will be discussed: definition of academic performance, the relationship between social networking and academic performance and measurement of academic performance.

What does it Mean by Academic Performance?

Academic performance is a multidimensional construct consisting of three dimensions: student's characteristics, teacher/lecturer's competencies and academic environment. The student's characteristics dimension of the academic performance concerns how students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers help define the extent of performance (Loo and Choy, 2013). The determinants of this dimension are student's intelligence, personality and the socio-economic status. Within the academic context, for example, student's ability to study and remember facts and being able to communicate their knowledge verbally or down on paper enhances academic performance. Teacher's competencies dimension of academic performance, on the other hand, concerns how well teachers can impart knowledge on students. However, the number of non-human elements in the academic environment and their functionality help define the academic performance of students. Within the academic environment, for example, the amount and quality of facilities such as library, laboratory, suitable classrooms, decent hostels and other teaching aids could enhance or suppress student's performance.

The Relationship between the Use of SNSs and Academic Performance of Students

Two competing perspectives offer explanations on how SNSs affects student's academic performance. On one hand, studies portray the role of SNSs on academic performance in a positive light saying that while students formulate group discussions to exchange ideas and communicate to their teachers and appeal to their friends about assignments on SNSs, teachers share course related materials with their students and create student groups to collaborate on projects cum communicate with their fellow lecturers from other universities through SNSs, thus facilitating teaching and learning process and the enhancement of academic performance. Griffith and Liyanage, (2008) found that support from instant messaging, wikis, blogs, discussion boards, and other Web 2.0 facilities can complement what is taught in a traditional classroom setting. Also, Boyd and Ellison, (2007) assert that the copy and paste practices on MySpace serves as a form of literacy involving social and technical skills.

However, an alternative view casts the interaction between SNSs and academic performance in a more negative light. According to this viewpoint, SNSs use has no academic relevance since most of the users use it for socializing purposes. Study conducted by Hargittai & Hsieh, (2010) found that neither SNS usage intensity nor social practices performed on these sites is systematically related to students' academic performance, findings that challenge some previous claims to the contrary. This claim supports the findings of Akyildiz and Argan, (2012); Hamat, *et al.* (2012) who concludes that SNS users spend more time for socializing rather than learning. This indicates that excessive use of SNSs reduces student's academic performance since time meant for studies is used on non-academic issues like chatting and making friends.

Although research on SNSs-academic performance relationship is scanty especially in the Malaysian academic context (Leng, *et al.* 2011), there is evidence that student's use of SNSs might affect their performance. This indicates that while some students use SNSs for socializing, others might use it for learning activities thus enhancing academic performance. Pasek, *et al.* (2009), citing the findings of Karpinski, (2009) suggest that Facebook use might be related to lower academic achievement in college and graduate school. However, another finding by Towner and Muñoz, (2011) concludes that Facebook and education can indeed be connected. The latter claim parallels our proposition that there exists a relationship between SNSs use and student's academic performance. Thus, it seems reasonable that SNSs should influence student's performance.

Measuring Academic Performance of Students

Accurately measuring academic performance is a vital component in planning for student's education. Measuring performance determines how well students have achieved desired educational goals. It is commonly measured by examinations or continuous assessment (Quenemoen, *et al.* 2003). However, there is no general agreement on how it is best tested or which aspects is the most important procedural knowledge such as skills or declarative knowledge such as facts. For example, student's achievement is measured by the Academic Performance Index in California.

To conclude, academic performance is how well students achieve educational goals and it is influenced by diverse variables. The potential mediators of SNSs and academic performance will be discussed in the next section.

Potential Mediators of the SNSs and Academic Performance Relationship

The focus is placed on the potential mediators of SNSs and academic performance relationship. The issues discussed here are: time and type of SNSs as mediators.

Time as a Mediator

Previous studies show that there is a notable variation in the duration of SNS usage among people. This indicates that while some users spend less time on it, others spend considerable time. Findings of TNS indicate that Malaysian spend nine hours on SNSs such as Facebook while Russians spend 8.1 hours and Turkish spent 7.7 hours weekly (The Star Online, 2010). However, Hugl, (2011); Akyildiz and Argan, (2012) report that student spend 15-30 minutes on Facebook daily. Having established earlier that some students use SNSs for socializing while others use it for academic purposes, time spent can determine students' performance although there are limited studies to support this claim especially in the Malaysian context. For example, when SNSs is used for only socializing purposes and excessive time is spent, it will reduce students' academic performance since much time meant for studies is used on chatting and connecting with friends.

However, when more time is spent on SNSs to connect with lecturers and classmates where knowledge is shared, it will enhance academic performance and vice versa. Therefore, it can be assumed that time spend mediates the relationship between SNSs and student's academic performance.

Type of SNS as a Mediator

Prior studies show that SNS usage and the impact depend on a specific SNS. For example, while some sites are social-oriented, others are business or relationship oriented. This indicates that the activities the users will engage on depend on the orientation. Gangadharbatla, (2008);Subrahmanyam, (2008) assert that while socially-organized sites like Facebook and Twitter attract broad audiences who socialize, LinkedIn and Tribe.net are business-oriented sites that attract professional businessmen who share business ideas and strategies. However, Care2 helps activists meet, MyChurch joins churches' members while Match.com and Friendster help friends-of-friends meet for potential romantic partners. This indicates that although the key technological features of most SNSs are fairly consistent, the activities users engage on depend on the type of site since Boyd and Ellison, (2007) posit that the cultures that emerge around SNSs are varied.

Although there has been limited studies indicating that the type of SNSs used mediate the relationship between SNS and academic performance especially in the Malaysian academic context (Leng, *et al.* 2011), there are reasons to believe that the nature of SNS used might determine what students do which could in return affect their performance. Therefore, the SNSs and academic performance relationship can be determined by the type of SNS in question. Thus, it is proposed that the nature of SNS can mediate the relationship between SNS and academic performance.

To conclude, time spent and specific types of SNSs mediate the SNSs and academic performance relationship although there are little/no studies to buttress this claim.

Conclusion

Review of existing literature on social network sites revealed that it has attracted millions of users due to affordance and reach. The review shows that it is used for different purposes. While some use it for socializing purposes, others use it for academic purposes to complement classroom teaching and learning activities. However, despite SNS gaining acceptance in universities around the world, the study on students' adoption of SNS is still unexplored fully in Malaysia. Thus, this study is designed to address this gap so as to provide useful insights for future researchers.

Future Research Areas

Although the study provides some insights for both academic institutions and scholars, there are some limitations which further researchers would like to address in future studies. For example, the generalizability of the study is not guaranteed because it is a conceptual paper. Given this, future research should include larger samples and comparative studies from diverse settings using quantitative empirical approach. Secondly, the narrow age range of participants given the declining age range of nowadays college students limit drawing valid conclusion on users' age and social media use. Therefore, future studies should include larger age range so as to give room for drawing valid conclusions on users' age and social media use.

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