Internet and Facebook Use among University Students

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Abstract – The Malaysian government continues to invest heavily in computing and Internet resources in the belief that the Internet can improve the academic performance of students, offer e-learning for undergraduates, and provide the flexibility of distance learning for adult students. The use of the Internet and Facebook for educational purposes has been a topic of high interest among researchers in recent years. In Malaysia, Internet access is relatively easy, fast, and affordable. It is also a valuable source of information. Research shows that online consumers in Malaysia, Thailand and the Philippines are the most likely to have engaged on social media sites such as Facebook. For this very reason, students must be well-equipped with the requisite skills to exploit to the full the benefits of the Internet and Facebook by the time they graduate. Such skills would certainly help to enhance their employability in the competitive labour market. This study seeks to examine relevant literature regarding the extent of Internet and Facebook use among university students. The literature review will also explore how the use of the Internet and Facebook has impacted the academic performance of university students.

Keywords: Facebook use, internet use, university students

Introduction

The widely held belief that students' academic achievement is impacted, either positively or negatively, by their use of the Internet as well as Facebook (Irwin, Ball & Desbrow, 2012) has led to much discussion among researchers. In a study by Sapari (2008), it was reported that the majority (64.5%) of Malaysian university students from various science and social science faculties use the Internet mostly for communication and information. This is not surprising as university students are encouraged to use the Internet to broaden their knowledge by accessing vital information and also communicating online with the academic community through Facebook (Boach, 2009). Several studies relating to Malaysian university students' purpose of Internet usage had been conducted by researchers such as Luan, Fung, Nawawi, and Hong (2005), Sam, Othman, and Nordin (2005), Sapari (2008) and Muniandy (2010), and their findings suggested that Malaysian university students used the Internet for similar reasons as their counterparts in more developed countries. With regard to social networking, it can be a healthy form of communication if the user does not indulge in it excessively. Hamat, Embi, and Abu Hassan (2012) reported from their survey that university students made use of social networking sites for informal learning and exchanging information of mutual interest. Selwyn (2007) also found that students' use of social networking sites had an impact on informal education.

Purpose of the Study

Encouragement by lecturers and tutors to exploit Information and Communication Technology (ICT) has led to more time being spent on the Internet by university students. A recent study by Newsweek Japan (as cited in Calderon, 2012) reported high Facebook usage amongst university students in Malaysia, especially among females. Hence there is a need to investigate the extent to which the use of the Internet and Facebook impacts the academic performance of university students.

Method

A comprehensive search of the literature (magazines, dissertations, journals, and conference papers) through the early 1990sto 2012 was carried out to collect relevant information and data. The main objective of this article is to carry out a comparative literature review of studies on the use of the Internet and Facebook amongst university students in various parts of the world.

Literature Review

Malaysia was ranked 30th on the Global Networked Readiness Index (Global Information Technology Report, 2014). The most networked ready country was Finland, followed by Singapore in second position, and Sweden in third position. The last country on the list of 148 listed was Chad. Being one of the top 30 countries with network readiness meant that Malaysians used the Internet and were engaged on Facebook more than many other countries. According to official figures, Internet penetration in Malaysia by mid-2011 was among the highest in Asia, reaching as high as 17.5 million users or 60 percent of the population. The figure was further increased after the implementation of Kuala Lumpur Municipality's new policy which required food and beverage businesses to provide free or low cost WiFi service at their outlets (Choong, 2012). Malaysia's Communications and Multimedia Commission (MCMC) (2014) also reported that the high Internet penetration in Malaysia in the second Quarter of 2014 was concentrated in Wilayah Persekutuan Putrajaya (98.9%), followed by Wilayah Persekutuan Labuan (86.7%), and Wilayah Persekutuan Kuala Lumpur (81.7%).

Malaysia was dubbed the country with the most social network friends in 2010 and Facebook accounted for 77% of social network users (as cited in Calderon, 2012). Malaysia experienced a 26.4% growth in Facebook penetration within 12 months, with male users comprising 53% of Facebook accounts. By early 2012, Facebook was among the top five most visited websites, and Malaysians over the age of 15 spent approximately one-third of their time on social-networking services (ComScore, 2010). Facebook's popularity will likely continue to soar with more people gaining access to the mobile web through the convenience of their smartphones.

Internet users go online for various reasons. The Internet is used for both work and pleasure (Hills & Argyle, 2003). Besides providing entertainment and education materials for young and old (Madell & Muncer, 2004), it is also a platform for buying and selling products (Kraut, Lundmark, Kiesler, Mukhopadhyay, & Scherlis, 1997). As a result, the Internet has quickly become a natural part of everyday life (Bargh& McKenna, 2004). Nielsen, a leading global information and analytics provider, revealed in its survey that 1,321 Malaysian digital consumers who were surveyed spent close to 20 hours online each week ("Surging Internet Usage", 2011). According to the same survey, 53% of those surveyed accessed the Internet daily, 5% accessed it once or twice a month while the rest were less often Internet users. The report by Nielsen concluded that Malaysians were among the top users of the Internet in Southeast Asia.

A recent summary of studies on Internet use in various countries was carried out by Wong, Bakar, Ayub, Sapari, Moses, and Khambari (2012). Their findings, which included the purpose of Internet use in various countries, reviewed a total of nine related studies. Table 1 depicts how undergraduate students used the Internet for various academic and non-academic activities.

As can be seen in Table 1, Malaysian students generally used the Internet to perform four major and similar activities, namely information gathering, e-mailing, downloading software, and reading online newspaper. Other uses of the Internet included social networking, online banking, online shopping, online games, video watching and downloading music. Wong et al. (2012) concluded that Malaysian students used the Internet no differently from their counterparts in countries where Internet access was more readily available.

Table 1: Summary of Studies for Internet Use in Various Countries

Authors	Design	Sample/Location	Age (yrs)	Size	Purpose of Internet use
Study 1: Weiser (2000)	Survey	University students/Texas, USA	Exact age range is not stated	506	Entertainment, e-mail; educational & academic assistance; interpersonal communication; course information; research
Study 2: Palesh, Saltzman &Koopman (2004)	Survey	University students/Moscow, Russia	Exact age range is not stated	198	School-related activities; e-mail; entertainment; chat & pornographic materials
Study 3: Jones, Johnson-Yale, Millermaier& Pérez (2008)	Survey	College students/USA	Age range: 18-24	7421	Information, e-mail, instant messaging, wikis & chat
Study 4: Okon (2010)	Survey	University students/Nigeria	Not stated	536	Research; admission registration & tuition fees payment; e-mail; scholarship application; online newspaper
Study 5: Tutgun, Deniz, & Moon (2011)	Survey	University students/Korea & Turkey	Age range: 17-37	595	Friendship; games; chat; develop websites & blogs; shopping, pornographic materials; gambling; games
Study 6: Luan, Fung, Nawawi and Hong (2005)	Survey	University students/Malaysia	Mean age: 22.63	310	Information; e-mail; download software; online newspaper; games; shopping; e-banking
Study 7: Sam, Othman and Nordin (2005)	Survey	University students/Malaysia	Mean age: 23.8	148	Information; e-mail; download software; online newspaper; games; shopping;
Study 8: Sapari (2008)	Survey	University students/Malaysia	Age range: 21-26	361	Information; e-mail; download software; online newspaper; games; shopping; e-banking; & pornographic materials
Study 9: Muniandy (2010)	Survey	University students/Malaysia	Age range: 20–34	92	Information; e-mail; download software; upload files

Adapted from "Malaysian Students' Internet Use: Some Research Evidence" by S.L**.** Wong, A. R. Bakar, A. F. M.Ayub, N. A., Sapari, P., Moses, & M. N. M. Khambari, 2012, In Chang, B. et al. (Eds). Workshop proceedings of the 20th International Conference on Computers in Education, p. 102.Copyright 2012 by the Asia Pacific Society of Computers in Education.

Generally, 84% of students who used the Internet for academic purposes believed that the Internet had positively impacted their academic performance (Jones, Johnson-Yale, Millermaire & Perez, 2008).Today, most university libraries offer free access to hundreds of electronic databases and thousands of peer-reviewed journals, books and other online resources. The Internet has enabled education to be borderless and limitless. It is a just a matter of whether students know how to exploit these resources for their educational advancement (Wang & Artero, 2005).

The Internet is clearly recognised as a powerful technological tool with various academic benefits, including access to abundant sources of news and information. Universities have begun to use management systems such as Blackboard and portals that connect them to online university resources and services. In fact, 94% of students reportedly used the Internet as a source of information when conducting research for their courses (O'Brien, 2011). Results of a research regarding the use of the Internet for academic communication purposes revealed that 84% of students used the Internet to communicate with their professors; they also agreed that using the email helped them express thoughts that they otherwise would not have shared in a classroom (Jones et al., 2008). The email is also extremely useful for student-instructor communication as queries on assignments, progression checks, feedback, and administrative matters can be conveyed with ease. Group projects are also made easy via email. One considerable advantage of the email is its ease of communication. One can write and receive emails anytime and anywhere if network connections are available.

Online voice mail and video conferencing have emerged as technologies that can enhance long distance learning and online courses. Student interactions and student-lecturer interactions are made easy by these emerging technologies which are supported by the Internet (Carr-Chellman & Duchastel, 2000). The Internet allows lecturers and students to exchange thoughts, engage in intellectual discourse, brainstorm ideas, and share knowledge; lecturers can also offer their students emotional support (Baker, 2000).

However, not everyone shares the view that the Internet and Facebook positively impact academic performance. Nie, Hillygus, and Erbring (2002) assert that time spent on the Internet displaces time for other activities while Franzen (2000) suggests that the Internet enables its users to increase efficiency and save time. Eberhardt (2007) reiterates that more research is needed to determine whether time spent on social network sites diminishes time spent on schoolwork or studying. It is unsure whether blame should be placed on the Internet and social networking sites as students already had the habit of procrastination long before the Internet and Facebook came into being (Wesley, 1994).

A study by Kuh and Hu (2001) showed a positive relationship between the use of the Internet and engagement in effective educational practices. Communale, Sexton, and Voss (2002) found evidence to suggest that higher course grades were related to more frequent website use whilst a study conducted in a university in Sarawak revealed that in general, students had positive attitudes towards learning using the Internet regardless of their scholastic ability. It was found that students from the Faculty of Information Technology, Faculty of Engineering, and Faculty of Resource Sciences and Technology had more positive attitudes compared to students from other faculties. This could be because the students in these faculties were more exposed to the Internet for course related activities. These students had basic skills in using the Internet and were able to supplement their learning with the assistance of the Internet to improve their studies (Hong, Ridzuan & Kuek, 2003).

A large majority of undergraduates have benefitted from the use of the Internet to do research and to communicate with their faculty and classmates (Jones et al., 2008). Facebook too, has been incorporated into classroom activities in universities globally. It helps university students better understand their assignments by enhancing their classroom experiences. It offers students a chance to break out of the traditional education norms. Facebook can create a school climate that is beneficial to both learning and growing (Olabanji, 2011).

Boogart (2006) observed that students who were frequent Facebook users reported a closer connectedness to their university than those who accessed it less frequently. It has also been reported

that engaging on Facebook also helps build and maintain relationship among students. However, the same study reported a correlation between heavy Facebook engagement and lower GPAs. Another highly publicised report by Kirschner and Karpinski (2010) suggests that a relationship exists between the use of Facebook and low grades.

Hamatet al. (2012) observe that the surge of interest to incorporate social media tools into education is due to their characteristics which allow interactivity and collaboration. Learning, according to advocates of socio-cultural theories of learning (Selwyn, 2007), becomes more effective in a social setting.Students and lecturers can communicate with one another because Facebook is an interactive website where messages and chats can be shared instantaneously. It can be used as a tool to enhance the academic integration of students (Madge, Meek, Wellens, & Hooley, 2009). Many students use Facebook to schedule group meetings and exchange information about assignments and deadlines. Lecturers post class announcements and offer reviews and academic support online. Facebook has the potential to be used as a technology that enhances classroom engagement. From the student's perspective, education becomes more meaningful, and this will help to improve his or her academic performance (Olabanji, 2011). Facebook is considered as an extension of the classroom where different kinds of connection take place (Schwartz, 2009).

In contrast, studies on the relationship of Internet use and academic performance by Chou and Hsiao (2000), Kubey, Lavin, and Barrows (2001) and Niemz, Griffins and Banyard (2005) revealed a negative association between Internet use and perceived impact on academic performances. However, a study by Gulek and Demitras (2005) found that after a year in a laptop immersion program, students showed significantly higher achievement in overall grade point average (Gulek & Demitras, 2005).

Conclusion

Rather than alienating the space between the home and university, educators should understand that the present generation of students is exposed to ICT at a very young age outside the classroom. By implementing the use of the Internet and Facebook engagement in the syllabi, students would benefit from making a meaningful connection between their personal lives and their academic lives. The most effective way to determine whether the Internet and Facebook have been properly integrated into the education of students is to observe the academic progress of the students who have used the technology (Hayes, 2006). Over-dependence on technology can be avoided if students are taught, prior to the integration of technology in the classroom, that they are not to rely solely on the Internet and Facebook but rather to use it as a tool to access and share ideas and information.

Lastly, the authors of this paper acknowledge that the review was limited to studies carried out between the early 1990s and 2012. By and large, the Internet and social media technologies available to students during that period of time maybe different from the ones students have today. As the Internet and Facebook have become ubiquitous now, the authors feel itis important to provide a glimpse of students' Internet and Facebook use to understand what they do online and what the implications of their use maybe for other university students.

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