USE OF INTERNET FOR ACADEMIC PURPOSES AMONG STUDENTS IN MALAYSIAN INSTITUTIONS OF HIGHER EDUCATION

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ABSTRACT
Students in institutions of higher learning should take advantage of information available on the Internet in their coursework. The Internet is also utilised for social and other non-academic functions. Hence, it is desirable, for students to strike a balance in the time spent online for academic and non-academic purposes. In this study, the durations spent on the Internet for academic and non-academic purposes were investigated based on a survey on 1675 students randomly selected from five different fields of study, viz. social sciences, sciences, engineering, agriculture and computer sciences. On average, the participants accessed the Internet 4.48 hours per day. There were also significant differences in the time spent using the Internet among students in different fields of study, with computer science students spending more time online (5.61 hours per day) than the others. In terms of Internet use for academic purposes, students in social sciences, agriculture and computer sciences scored the highest. In an analysis involving all the students in this study, the total time on the Internet was found to be weakly correlated with the time spent online specifically for academic purposes. For social science students, a low but significant positive correlation existed between the overall time spent online and the time spent on the Internet for academic research. In a similar analysis carried out for science students, a negative low correlation was observed. In the fields of agriculture, engineering and computer sciences, however, no correlation was found between Internet access duration and the use of the Internet for academic purposes. The very low correlations encountered above, even though statistically significant, showed that students who spent more time on the Internet did not make much greater use of it for academic purposes as compared with students who used the Internet less.
Keywords: Internet, use of Internet for academic purposes, time spent on the Internet

INTRODUCTION
The number of Internet users is growing explosively worldwide, with 44.8% Internet users coming from Asia alone (Internet Usage, 2012). In Malaysia, Internet users have increased very rapidly too, from 3,700,000 in 2000 to 17,723,000 in 2010, the latter figure representing 61.7% of the country's population (International Telecommunication Union, 2010). This is a reflection of the current digital era, with the Internet being integrated into our everyday lives. A recent Nielsen analysis revealed that 1, 321 Malaysian surveyed Internet users spent an average of nearly 20 hours online each week (The Malaysian Insider, 2011). More than half of the respondents (53%) accessed the Internet daily while another 35% accessed it several times per week. Six percent of the respondents accessed the Internet once per week and 5% went online once or twice per month (The Nielsen Company, 2011). Based on this report, it can be assumed that Malaysia has one of the highest Internet usages in the South East Asian region. The Malaysian Communications and Multimedia Commission (2010) reported that for the year 2009, 19.2% of Internet home users in Malaysia were between 15 and 19 years old. Those between 20 and 24 years of age made up 14.2% of users.

Table 1: Percent share of household users according to age

Age category	2005	2006	2008	2009
Below 15	6.5	7.3	6.8	8.1
15-19	18.6	18.7	17.9	19.2
20-24	17.2	16.3	15.7	14.2
25-29	12.5	11.3	11.9	12.9
30-34	12.2	12.3	11.7	11.4

35-39	9.9	10.4	11.2	9.5
40-44	9.6	10.6	9.3	9.4
45-49	5.1	6.1	6.1	5.1
50 and above	8.4	7.1	9.4	10.2

(Malaysian Communications and Multimedia Commission (2010, p. 10)

These statistics reveal that most Internet users in Malaysia were aged between 15 -34 years; thus this age group encompasses Malaysian higher education students who are normally of ages between 19 and 34 years. Besides the library, the Internet is an important source for information for learning and research. The Internet allows students to broaden their academic experience, access important information and communicate with others within the academic community (Tella, 2007). This has a significant impact on learning, especially for students in higher learning institutions (Edmunds, Thorpe & Conole, 2010).

Despite the many obvious advantages of the Internet to students, the amount of time spent by some higher education students online might be cause for concern. Students who have difficulty controlling their time spent online may suffer from Internet Addiction, resulting in their studies being adversely affected (Young, 1998; Chen & Peng, 2008, Cao & Su, 2007). Much research has been conducted to examine the time spent by students accessing Internet. For example, Yu (2001) found that, on average, university students spent 164 minutes per day on the Internet. Robinson (2005) found that 47% of African-American college students spent an average of two hours per day online while a small percentage of the students spent 5 – 6 hours. In a research involving students from nine different faculties in a Turkish university, Toprackci (2007) found that 15.4% accessed the Internet more than 3 hours per day, while 62.9% accessed the Internet between 1 to 3 hours per day. A study by Guan, Mohammed Isa, Hashim, Kumar Pilai and Harbajan Singh (2012), based on a sample of 162 medical students in Malaysia, revealed that the average duration of time spent by these students on the Internet was 13.31 hours. In Nigeria, the findings of Awolleye and Siyanbola (2006) indicated that, on average, university students would acces the Internet one hour per week. Tella (2007) reported that a majority of students from a Botswana university accessed the Internet 1-5 hours per week.

There are also comparative studies on the time spent online by students from different fields of study at the university. An earlier study by Odell, Korgen, Schumacher and Delucchi (2000) showed that science students accessed the Internet on an average of 8.5 hours per week, as compared with 4.6 hour per week for social science students. Anderson (2001) divided students according to various groups, such as physical science students (majoring in chemistry, computer science and engineering), students taking a combination of arts and life sciences (majoring in biology, criminal law and psychology) or liberal arts students (majoring in business, English and history). On average, the students accessed the Internet 100 minutes per day, but physical science students spent more time on the Internet as compared with students from the other two groups. A similar study conducted by Sam, Othman and Nordin (2005) on Universiti Malaysia Sarawak undergraduate students found that they used the Internet 9.2 hours per week on average. Students from the Faculty of Computer Science and Information Technology and the Faculty of Applied and Creative Arts were found to be online longer than those from the other faculties (Faculty of Resource Sciences and Technology, Faculty of Engineering, Faculty of Social Sciences, Faculty of Economic and Business, Centre for Language Studies, Faculty of Cognitive Sciences and Human Development). This shows that science students, including those taking engineering and computer science, were online for a longer period compared to students in social sciences and other fields.

Advances in computer technology have enabled the Internet to serve as a platform not merely to seek information, but also to exchange ideas and knowledge with other users, and obtain expert opinions via email, teleconferencing, chatting and other avenues. Nevertheless, the advent of social network sites such as Facebook, Twitter, Linkedin and others that include chatting and online games have changed the perception on Internet use from one that is associated with learning to that of a socializing facility. Such website applications have resulted in the Internet being used for both academic and non-academic activities.

Several studies have been conducted to identify the use of Internet among youth and students in institutions of higher education. For example, a study by Chan and Fang (2007) on young people in Hong Kong found that the Internet was used for different purposes such as for making friends, shopping, listening to music, having fun, completing homework, and searching for information on further education. Aslanidou and Menexes (2008) who collected samples from 418 high school students in four Greek cities found that Internet access remained at a very low level and was insufficiently used for academic purposes. In a research conducted on 883 school students in Lebanon (Hawi, 2012), 84.2% students used the Internet for communication and email, 65.7% for information search and for research, and 51.8% for entertainment such as online games and music.

Tadasad, Maheswarappa and Alur (2003), who carried out studies at the PDA College of Engineering, Gulbarga, observed that Internet use among students in several engineering fields was confined to general or recreational purposes such as receiving and sending emails, games and entertainment. Rüzgar (2005) surveyed 744 students at Marmara University in Istanbul and found 52% of the respondents spent 6 to 20 hours a week surfing the Internet. The majority of them used the Internet for e-mail services. A research conducted by Omotayo (2006) among 664 undergraduate students at the Obafemi Awolowo University, Nigeria, indicated that 97.1% of the respondents used the Internet for e-mail and 53.9% for academic information. Toprackci's (2007) finding showed that 32% of the higher education students went online for various reasons such as chatting, reading news (41.7%), courses related activities (49.1%), e-mail (59.2%) and playing games (29.5%). Findings from Shen and Shakir (2009) in one public and one private university in United Arab Emirates showed that 86% of the respondents accessed on the Internet daily for the following purposes: to seek information (24%), e-mail (15%), chatting (13.6%), entertainment (13.4%) and online discussions (6.84%). Only 4.95% stated that they used Internet for academic purposes. Findings from Ritter and Lemke (2000) indicated that 89% of the students utilized the various media and facilities available on the Internet for study purposes.

In Malaysia, Noor Ismawati (2003) reported that students in Universiti Malaya used the Internet for communication, online purchasing, assignments, personal activities and searching academic resources. She also found that students used the Internet more for social and entertainment purposes than for academic activities. A similar study by Sam, Othman and Nordin (2005) reported that the Internet was used for e-mail (98.6%), research (95.9%), entertainment (85.1%) and for gathering product and service information (82.4%). Other non-academic Internet use included the downloading of software and games (66.2%), assessing newsgroups (56.8%) and chatting (50%). On average, the students spent 9.2 hours per week on the Internet. Balakrishnan (2010), in a study of 92 undergraduate students in a Malaysia university revealed that even though the majority of the students used the Internet to find books in the library, 32.6% reported that they never used the Internet to search for books. Students preferred to use search engines such as Yahoo, Google and others to supplement materials provided by the University library, such as Proquest, university E-Learning resources, university web resources and university library publications.

Previous studies have also shown that students (especially those in institutions of higher learning) used the Internet for different purposes, *viz.* academic research, online socializing and entertainment. The time spent using the Internet also differed in each study. In this connection, studies on the time spent by students browsing the Internet should be conducted frequently since the technology is continually changing. More and more applications via the Internet have been developed. The latest trend shows social and entertainment websites to be gaining popularity, with the number of users subscribing to such websites increasing every day. Websites could influence how students use the Internet in future, and how learning styles change.

RESEARCH OBJECTIVES
The purposes of this study were to identify:
a. The time spent on the Internet among students in institutions of higher education
b. The differences in the time spent on the Internet among students from different fields of study in institutions of higher education
c. The time spent on the Internet for academic purposes among students in institutions of higher education
d. The differences in Internet use for academic purposes among students from different fields of study in institutions of higher education
e. The relationship between the time spent on the Internet and the extent of Internet use for academic purposes among students in institutions of higher education

RESEARCH METHODOLOGY
This survey study was conducted in a Malaysian university. The study population comprised students from five fields of study in a Malaysian university, namely social sciences, sciences, engineering, agriculture and computer science. A stratified random sampling was implemented with the aim of identifying differences that might exist between the different fields of study. This approach also ensured that the samples selected were representative of each subject field (Salkind, 2005). From a total of 1675 respondents, 388 respondents were from the social sciences, 393 from the sciences, 331 from engineering, 325 from agriculture and 237 from computer science. Respondents was those who volunteered and confidential. The questionnaires were distributed during week nine to twelve in the university calendar. First of all, the researchers will look into the academic time table to identify which class consists of targeting participants to make sure we get the minimum number of respondents. The second steps is to seek permission form the lecturer to distribute questionnaires to the respondents at the end of the lecture.

For the purpose of the study, a questionnaire was prepared for a survey to obtain information on the use of the Internet for academic purposes as well as the overall time spent on the Internet by students in institutions of higher education. This questionnaire was administered to participants using print-based survey. The instrument for the study was a questionnaire consisting of two parts. Part A gathered demographic information of the respondent. To measure the use of the Internet for academic purposes, we developed 11 items.This instrument was based on a 5-point Likert scale, with the highest score (5) representing a positive attitude (strongly agree) and the lowest score (1) denoting a negative attitude (strongly disagree). Items used for this part will measure how the respondents use Internet to seek information for their academic activities. Besides that, respondent also will give their opinion how they use emails, forum and library website when log in to Internet.

A pilot study was conducted on 66 students in the same university to measure the reliabilty of the instrument in section B. The reliability of the instrument to measure the Internet usage for academic purposes are 0.860, was deemed acceptable for the actual study.

FINDINGS
In institutions of higher learning, time management is very important since the duration of study per semester is short (14 weeks). Students need to attend lectures and to participate in other academic activities. Besides that, they are also involved in college activities and other pursuits. Accordingly, students who access Internet excessively could face problems such as absenteeism due to tiredness, non-participation in sports, failure to complete assignments and other shortcomings that could affect their academic performance.

The first objective of the study was to determine the time spent on the Internet by students in institutions of higher learning. In this study, the Internet access time was measured based on the number of hours students spent online daily (Table 2).

Table 2: Demographic Information

		N	%
Gender	Male	782	46.7
	Female	893	53.3
Respondents	Computer Science	237	14.1
	Social Sciences	388	23.2
	Sciences	394	23.5
	Engineering	331	19.8
	Agriculture	325	19.4
		Mean (hours)	SD
Internet Access	Computer Science	5.61	3.38
	Social Sciences	4.54	2.83
	Sciences	3.87	2.73
	Engineering	4.92	3.31
	Agriculture	3.85	3.10

The overall mean for time spent using the Internet was 4.48 hours per day (SD= 3.11). Comparing the fields of study, computer science students spent the most time browsing the Internet, spending 5.61 hours per day. This was followed by engineering students (4.92 hours per day) and social science students (4.54 hours per day). Respondents studying agriculture spent the least time on the Internet time (3.85 hours per day). An analysis of variance (ANOVA) was conducted to evaluate these differences statistically (Table 3).

Table 3 : Analysis of variance (ANOVA) on the time spent using the Internet

	Sum of Squares	df	Mean Square	F	Significance
Between groups	641.12	4	160.28	17.257	.000
within groups	15501.65	1669	9.29		
Total	16142.77	1673			

Table 3 shows a significant difference among the overall means for the duration on the Internet for students from different subject fields [$F(4,1669) = 17.26$, p= .000]. The Tukey Post-Hoc Test was used to identify significant differences between pairs of means (Table 4).

Table 4: Tukey Post-Hoc Test on the time spent using the Internet

field (i)	field (J)	Significance
Social Science (M=4.54)	Sciences (M=3.87)	0.020
	Agriculture (M=3.85)	0.024
	Computer Sciences (M=5.61)	0.001
Science (M=3.87)	Engineering (M=4.92)	0.000
	Computer Sciences (M=5.61)	0.000
Engineering (M=4.92)	Agriculture (M=3.85)	0.000
Agriculture (M=3.85)	Computer Sciences (M=5.61)	0.000

Table 4 indicates that there were significant differences in the time spent on the Internet between students of computer science (M=5.61) and students of the social sciences (M = 4.54), science (M = 3.87) and agriculture (M=3.85). Besides that, engineering students were also online signifcantly longer than students in the sciences (M=3.87) and agriculture (M= 3.85). Finally, social science students also accessed the Internet signifcantly longer than students in the science (M=3.87) and agriculture (M= 3.85). This analysis showed that in terms of the time spent browsing the Internet by students, there was significant variations accoding to the area of study the students were registered in.

This study was also examined whether the time spent on the Internet had been for the purpose of academic research. Eleven items created by the researcher were used to determine this.

Overall mean duration in Internet use for academic purposes was 3.64 hours (SD = .645). Students in social sciences, agriculture and computer science attained the highest means, while those in the sciences used the Internet least for academic purposes (Table 5).

Table 5: Overall mean Internet usage for academic purposes

	No of respondents	Mean (hours)	Standard Deviation
Social sciences	388	3.68	0.62
Sciences	393	3.52	0.66
Engineering	331	3.64	0.65
Agriculture	325	3.68	0.64
Computer Science	237	3.68	0.64
Overall mean	1675	3.64	0.65

The mean and standard deviation for the 11 items to measure the use of the Internet for academic purposes are as shown in Table 6. The highest mean is related to the use of the Internet to seek information for learning activities (Mean = 4.18, SD = .85). Students in agriculture (Mean =4.34, SD = .73) scored the highest for this item, followed by social science students (Mean = 4.23, SP= .75) and science students (Mean = 4.20, SD = .88). The second highest mean for Internet use for searching for materials to complete assignments (Mean = 4.17, SP = .83). Students in agriculture (Mean = 4.31; SD = .76) achieved higher mean scores as compared to the social science students (Mean = 4.23; SD= .78) and science students (Mean = 4.22, SD = .82). The item relating to the usage of e-mail to communicate with the lecturers received the lowest score (Mean = 3.27, SD = 1.16). Analysis by field of study showed that students in computer sciences used e-mail to communicate with their lecturers more often (Mean =3.53, SD =1.05), followed by engineering students (Mean = 3.55, SD = 1.12). Science students did not seem to use the e-mail so much for this purpose (Mean = 2.93, SD = 1.22).

Table 6: Internet use for academic purposes based on fields of study

	Social Science		Science		Engineering		Agriculture		Computer science		Overall mean	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
I seek information from the Internet for learning activities	4.23	.75	4.20	.88	4.02	1.01	4.34	.73	4.08	.79	4.18	.85
I search for materials from the Internet to complete my assignment	4.23	.78	4.22	.82	3.98	.97	4.31	.76	4.05	.78	4.17	.83
I inform my friends concerning useful websites related with the courses taken.	3.71	1.03	3.55	1.01	3.60	1.00	3.67	1.01	3.62	.90	3.63	1.00
I put bookmarks to websites related to my course of study so that I could access them easily in future.	3.59	1.13	3.14	1.16	3.62	1.08	3.51	1.14	3.70	1.00	3.49	1.13
I use email to communicate with my lecturers.	3.28	1.11	2.93	1.22	3.55	1.12	3.21	1.13	3.53	1.05	3.27	1.16
I exchange e-mails with my colleagues to discuss matters related with my academic work.	3.35	1.07	3.16	1.17	3.43	1.04	3.29	1.09	3.57	.97	3.34	1.09
I use the Internet as the main source of information for my studies.	4.11	.78	4.09	.84	3.94	.91	4.18	.78	3.87	.88	4.05	.84
I frequently use the Learning Management System portal (Putera LMS) as part of my learning activity.	3.47	1.08	3.59	1.10	3.58	1.16	3.52	1.06	3.41	1.21	3.52	1.12
I seek the latest information online to enhance my knowledge related to the courses taken in the university.	3.73	.97	3.60	1.03	3.69	1.01	3.77	.96	3.75	.97	3.70	.99
I use forums to exchange opinions on academic matters with my friends.	3.35	1.11	3.12	1.12	3.31	1.03	3.27	1.06	3.40	1.07	3.28	1.08
I access the library website to search for academic books.	3.41	1.11	3.15	1.24	3.41	1.10	3.46	1.21	3.50	1.11	3.37	1.17

M=mean; SD= standard deviation

A one-way ANOVA was used to analyze the differences on the use of Internet for academic purposes based on the field of study (Table 7). The results showed significant differences among students in the different fields of study [F(4,1674) = 4.29, p = .002].

Table 7: One-Way ANOVA on Internet use for academic purposes among students in different fields of study

	Sum of Squares	Df	Mean Square	F	Sig
Between groups	7.08	4	1.769	4.291	.002
within groups	688.60	1670	.412		
Total	695.68	1674			

The Tukey Post-Hoc Test was conducted to identify student groups which differed significantly in their use of Internet for academic purposes (Table 8)

Table 8: Tukey Post-Hoc Test on Internet use for academic purposes among students in different fields of study

Field (i)	Field (i)	Significance
Science (Mean =3.52)	Social science (Mean =3.68)	0.006
	Agriculture (Mean=3.68)	0.007
	Computer science (Mean = 3.68)	0.025

Table 9 indicates that students in the social sciences [Mean =3.68, SD = 0.62], agriculture [Mean = 3.68, SD = 0.64] and computer sciences [Mean = 3.68, SD = 0.64] spent significantly more time using the Internet for academic purposes as compared to science students [Mean = 3.52, SD = 0.66]

To explore the relationship between the duration of time spent and the use of Internet for academic activities, the Pearson correlation was performed using data from each field of study (Table 9). Overall, the analysis showed that there was a significant difference in the overall duration spent on the Internet and the use of Internet for academic purposes (r= .056, p = 0.05). A comparison by each field of study indicated that there was a significant difference between these two variables for social science students (r = .194**, p = 0.01). For science students, the analysis showed a negative significant correlation between the variables (r = -0.105*, p = 0.05). However, for students in agriculture, engineering and computer science, there was no correlation between time spent using Internet and the use of Internet for academic purposes.

Table 9: Relationships between the time spent using the Internet and the use of the Internet for academic purposes

	Social Sciences	Sciences	Agriculture	Engineering	Computer Science	Overall
Internet time	.194**	-.105*	.001	.043	.124	.056*
Strength of relationship according to Connolly and Sluckin (1971)	Low Positive Correlation	Low negative Correlation	No correlation	No correlation	No correlation	Low Positive Correlation

* significant at 0.05;
** significant at 0.01

DISCUSSION
The Internet is widely used by students in institutions of higher education to seek relevant information and materials to complete their assignments or projects. Besides that, most libraries in universities and colleges also subscribe to online journal databases, online books and other academic resources for their students' usage. Clearly, the Internet plays a vital role in the lives of students. Nevertheless, the amount time spent online should be utilized productively. The results of this study showed that students accessed the Internet for 4.48 hours per day on average. Students in the fields of computer science, engineering and social sciences spent the longest time on Internet, as compared with students in the sciences and agriculture. These durations were not far from the results of the Nielsen survey that found Malaysian Internet users spending nearly 20 hours online per week. 4.48 hours per day = 31.4 hours per week, which is one and a half times the Nielsen figure of 20 h. However,

previous studies have shown students spending much less time on the Internet. For example, the study by Yu (2001) found that students spent an average of 2 hour 44 minutes per day on the Internet. Perhaps this is because the study was done in 2001, more than a decade ago when Internet access was not so readily available. Nowadays even smart phones allow Internet access. The same argument may also hold for the following studies. The time spent online from other studies were: Robinson (2005) (2 hours per day), Tropackci (2007) (1 – 3 hours per day), Guan et al. (2012) (13.3 hours per week), Sam, Othman and Nordin [2005] (9.2 hours per week), Ruzgar (2005) (6 – 20 hours per week) and Awolleye and Siyanbola (2006) (1 hour per week). This indicates that students in this study spent considerably more time browsing the Internet as compared with the time spent by students in a number of previous studies.

A previous investigation by Odell et al. (2000) and Anderson (2001) also showed that Internet access time by students also differed according to the field of study. This finding indicated that students in computer science seemed to browse the Internet longer as compared with other students possibly because of the nature of their course which required frequent use of the computer. (For example, they might need to search for computer source codes for their programming work.) Meanwhile, engineering students spent more time on the Internet compared with science and agriculture students. These findings are in line with the results of Sam, Othman and Nordin [2005] who also noted that Malaysian computer science students tended to f longer compared with students of other academic disciplines.

There are various reasons for using the Internet. For example, findings by Chan and Fang (2007), Hawi (2012), Toprackci (2007) showed that students used the Internet both for academic and non-academic purposes. Findings by Aslanidou and Menexes (2008), Tadsad, Maheswarappa and Alur (2003), Shen and Shakir (2009) suggested that use of the Internet among students was more towards non-academic purposes. However, other findings by Omotayo (2006), Ritter and Lemke (2000), Sam, Othman and Nordin (2005) showed the opposite, i.e. the main use of the Internet among students was related to their studies. In the present investigation, the use of Internet for academic purposes was at a moderate level, although social science and agriculture students used the Internet for academic purposes significantly more than students from other fields. Correlation analyses showed a low but positive significant relationship between the time spent by the students and the use of Internet for academic purposes. When the analyses were broken down according to academic discipline, however, only social science students showed such a significant positive correlation whereas no correlation was observed when data for agriculture, engineering and computer sciences students were used. For science students, a significant but negative low correlation between the two variables was found. The very low correlations encountered above, even though statistically significant, implied that students who spent more time accessing the Internet did not make much greater use of it for academic purposes as compared with students who used the Internet less frequently.

CONCLUSION
Research related to Internet use need to be an ongoing endeavor because computer technology advances rapidly and usage habits change accordingly. A myriad of Internet applications have been developed in recent years for different purposes. Applications that are developed for non-academic purposes are more inclined towards socialization and entertainment. Higher education students in different fields of study need to be aware of this so that the amount time spent browsing Internet can be utilized wisely and profitably. This study indicates that there is a difference between the time a student spends on the Internet and the use of Internet for academic activity according to his or her field of study. For example, computer science and engineering students seemed to spend the longest time spent browsing Internet but the correlation analysis indicated that there is no correlation between the amounts of time spent using the Internet and the use of Internet for academic purposes. Hence, whether university students really utilize the Internet purposefully for academic pursuits, or otherwise, is a matter of some concern. A substantial portion of students' time spent surfing the Internet should be dedicated towards the searching of materials related to their studies. Besides that, the Internet should be a medium for students to communicate with their lecturers and friends. The need to access Internet for academic purposes is important in view of the research findings by Cheung and Huang (2005) that link Internet use in the university to better academic performance. Tella (1997), Comunale, Sexton and Voss (2002), Kuh and Hu (2001), Asdaque, Nasir Khan and Abbas Rizvi (2010) and Ogedebe (2012) have also found evidences showing that that accessing the Internet, especially for academic research, contributes significantly to higher academic performance.

REFERENCES
Asdaque, M.M., Nasir Khan, M., & Abbas Rizvi, S.A. (2010). Effect of Internet on The Academic Performance And Social Life Of University Students In Pakistan. *Journal of Education and Sociology*, *December* (2010), 21-27
Anderson, K. J. (2001). Internet use among college students: An exploratory study. *Journal of American College Health*, *50*, 21-26.
Aslanidou, S & Menexes, G. (2008). Youth and the Internet : Uses and practices in the house. *Computers & Education*, *3*(5), 1375 – 1391.
Awoleye, O., & Siyanbola, W. (2006). Examining the level of penetration and impact of internet usage amongst Undergraduates in Nigerian Universities -a case study approach. *Current Developments in Technology-Assisted Education.* 3, 1708-1713
Balakrishnan Muniandy (2010). Academic Use of Internet among Undergraduate Students: A Preliminary Case Study in a Malaysian University. *International Journal of Cyber Society and Education*. *3*(2), 171-178.
Cao, F. & Su, L. (2007). Internet addiction among Chinese adolescents: prevalence and psychological features. *Child Care Health Dev*. *33*, 275–281.
Chan, K., & Fang, W. (2007). Use of internet and traditional media among young people. *Young Consumers.* *8*(4), 244-256.
Chen, Y. F., & Peng, S. S. (2008). University students' Internet use and its relationships with academic performance, interpersonal relationships, psychosocial adjustment, and self-evaluation. *CyberPsychology & Behavior*. *11*, 467-469.
Cheung, W. & Huang, W. (2005) `Proposing a Framework to Assess Internet Usage in University Education', *British Journal of Educational Technology*, *36*(2), 237—53.
Comunale, C.L., Sexton, L.T., & Voss, A. (2002). The effectiveness of course web site in higher education: An exploratory study. *Journal of Educational Technology Systems, 30*(2), 171-190.
Edmunds, R., Thorpe, M., & Conole, G. (2010). Student attitudes towards and use of ICT in course study, work and social activity: A technology acceptance model approach*, British Journal of Educational Technology*. 43(1), 71-84.
Guan, N.G., Mohammed Isa, S, Hashim, A. H., Kumar Pillai, S & Harbajan Singh, M.K .(2012). Validity of the Malay Version of the Internet Addiction Test: A Study on a Group of Medical Students in Malaysia. *Asia Pac J Public Health.* DOI: 10.1177/1010539512447808.
Hawi, N. S. (2012). Internet addiction among adolescents in Lebanon. *Computers in Human Behavior,* 28, 1044-1053.
Kuh, G. D., & Hu, S. (2001). The relationships between computer and information technology use, selected learning and personal development outcomes, and other college experiences. *Journal of College Student Development, 42*, 217-232.
Malaysian Communications and Multimedia Commission . (2010). Household use of the Internet survey 2009. Cyberjaya: Suruhanjaya Komunikasi dan Multimedia Malaysia
Noor Ismawati Jaafar. (2003). Computer usage and perception among accounting students: A survey in a public university, *Jurnal Pendidikan,* 23, 57-69.
Odell, P., Korgan, K., Schumachere, P., & Delucchi, M. (2000). Internet use among female and male college students. *Cyber Psychology & Behavior*. *3*(5), 855-862.
Ogedebe, P.M. (2012) Internet Usage and Students' Academic Performance In Nigeria Tertiary Institutions: A Case Study of University of Maiduguri. *Academic Research International*, *2*(3), 334-343.
Omotayo, B. O. (2006). A survey of internet access and usage among undergraduates in an African University. *The International Information & Library Review*. *38*, 215-224
Ritter, M.E., & Lemke, K.A. (2000). Addressing the 'Seven Principles for Good Practice in Undergraduate Education' with Internet-enhanced Education. *Journal of Geography in Higher Education*, *24*(1), 100-1008
Ruzgar, N.S. (2005). A Research on the Purpose of Internet Usage and Learning via Internet *The Turkish Online Journal of Educational Technology, 4*(1), 1303-6521
Robinson, J. W, (2005). Internet Use among African-American College Students: An Exploratory Study. Unpublished thesis. The George Washington University
Sam, H. K., Othman, A. E. A., & Nordin, Z. S. (2005). Computer Self-Efficacy, Computer Anxiety, and Attitudes toward the Internet: A Study among Undergraduates in UNIMAS. *Educational Technology & Society*, *8*(4), 205-219.
Shen, K. & Shakir, M. (2009). Internet usage among young Arab students: preliminary findings. Paper presented at The European, Mediterranean and Middle Eastern Conference on Information Systems, at Izmir, Turkey.

Tella, A. (2007). University of Botswana Undergraduates Uses of the Internet: Implications on Academic Performance. *Journal of Educational Media and Library Sciences*, *45*(2), 161–185.

Tadasad, P. G., Maheswarappa, B. S & Alur, S. A (2003). Use Of Internet By Undergraduate Students Of P D A College Of Engineering, *Gulbarga*. *50*(1),31-42.

Toprakci, E. (2005). The Profiles Of The Use Of The Internet For Study Purposes Among University Students. *The Turkish Online Journal Of Educational Technology. 6*(3), 129-144

The Malaysian Insider. (2011). Available at. http://www.themalaysianinsider.com/malaysia/article/nielsen-malaysians-spend-20-hours-online-per-week/.

The Nielsen Company. (2011). The digital media habits and attitudes of Southeast Asian Consumers Report 2011.

Yu, S. C. (2001). *Internet using behaviours, Internet addiction, and related factors among university students.* Master thesis, Taiwan.

Young, K. S. (1998). *Caught in the Net: How to recognize the signs of Internet addiction and a winning strategy for recovery*. New York: John Wiley.