

The Impact of Internet Usage for Academic Purposes on Nursing Students' AchievementThandar Soe Sumaiyah Jamaludin¹, Nurulhusnaa Awang Kechik², Chong Mei Chan³¹MNSc, BNSc, PGDT, RN. Lecturer, Department of Medical-Surgical Nursing, Kulliyah of Nursing, International Islamic University Malaysia, Jalan Hospital Campus, 25100, Kuantan, Pahang, Malaysia.²Kulliyah of Nursing, International Islamic University Malaysia, Jalan Hospital Campus, 25100 Kuantan, Pahang, Malaysia.³PhD, MSc (Community Nursing), BNSc, SCM, SRN, Senior Lecturer, Department of Nursing Science, Faculty of Medicine, University of Malaya, 50603, Wilayah Persekutuan, Kuala Lumpur, Malaysia.**Original Research Article*****Corresponding author**Thandar Soe Sumaiyah
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Abstract: The growth of the Internet is one of the advancements in technologies that change our life in many ways. Internet can be used as communication tools, entertainment and a medium to increase the knowledge of university students. As nursing students, they must be equipped with the correct knowledge about medicines and care so that they will achieve better marks in their examination as well as able to provide better nursing care to patients. In light of that, this study was carried to analyze the impact of usages of internet for academic purposes on nursing students' academic achievements. This was a cross-sectional survey by applying of purposive sampling method carried out among 127 undergraduate nursing students from year 2 until year 4. The self-administered questionnaire was distributed to the studied participants and it was collected by the researcher. Majority of participants were females and their age were 23 years old. The result showed there was no significant relationship between the students' usage of internet for their academic purposes with their academic achievement in Chi square test. However, there was association between genders and participants' academic performance with p value of less than 0.05. From this finding, it is advisable for the students to use the internet effectively for their studies and future career benefit. The lecturers/educators can use this finding to guide their students so that they use the reliable websites to make their studies more interactive and interesting.

Keywords: Impact, Internet usage, Academic achievement, Nursing students.

INTRODUCTION

In modern day, the internet has become one of the advancement in technology that affects our life in many ways. Furthermore, computer technology advancement have enabled that the internet to serve as a platform not merely to seek information, but also to exchange ideas and knowledge with other users, and to obtain expert opinions via email, teleconferencing, chatting and other avenues [1].

On the other hand, the internet allows students to broaden their academic experience, access important information and communicate with others within their academic community [2]. On the top of this, the evolution of technology also introduced the electronic book known as e-book among people in this modern day. Therefore, students might depend on the e-book by using internet for their studies as the e-book industry is growing over the years.

The usage of internet keeps increasing due to wider coverage and the affordability among students. Although internet usage has become a common thing in university students' life, but there was no study done

about the internet usages for academic purposes among university students particularly in nursing students of Malaysia. On the other hand, nursing students must be equipped with latest knowledge about the treatments and care so that they can serve better to the patients in the future. Thus, this study was aimed to discover the nursing students' usage of internet and its effect on their academic achievement.

MATERIALS AND METHOD

This study was carried out at the Kulliyah of Nursing (KON), International Islamic University of Malaysia (IIUM), Kuantan Campus. A total of 127 undergraduate nursing students were recruited in this

study by applying of purposive sampling method. The researcher has taken students from year 2 till year 4, the first year students were excluded in this study. All the studied participants were give self-administered questionnaire. The questionnaire was adapted from the Pew Research Center’s internet & American Life Project Spring Tracking Survey and approval was obtained prior to actual study [3]. Ethical approval also was obtained from the studied setting’ ethic committee before the actual study started. The studied participants were given 30 minutes to answer the self-administered questionnaires and it was collected by the researcher immediately. There were two parts in the questionnaire consisting of part A and part B. A pilot study was done on 15 participants to test the reliability of the instrument and Cronbach’a alpha value was 0.73. Then, the data

were collected from February to April 2017 after obtaining of ethic approval. The data were analyzed by using IBM SPSS version 20.0.

RESULTS

Demographic characteristics

The ages of the participants ranged from 22 to 26 years old. Majority of them were 23 years with 47 (37%). Most of the participants were female 105 (82.7%). Furthermore, majourity of studied participnats were from year which is 57 (44.9%). One hundred and five (82.7%) of the participants have the minimal household annual income. Regards to internet access, 82 (64.6%) participants were able to access internet at their home as shown in table 1.

Table-1: Demographic characterists

Demographic characteristics	n= 127	Percentage (%)
Age		
22	32	25.2
23	47	37.0
24	40	31.5
25	7	5.5
26	1	0.8
Gender		
Male	22	17.3
Female	105	82.7
Year of study		
Year 2	30	23.6
Year 3	57	44.9
Year 4	40	31.5
Household annual income		
RM 0 - RM15,000	105	82.7
RM 15, 001 – RM 30, 000	11	8.7
RM 30, 001 – RM 45, 000	5	3.9
RM 45, 001 – RM 60,000	4	3.1
> RM 60,000	2	1.6
Access to internet at home		
Yes	82	64.6
No	45	35.4

All studied participants 127 (100%) were using internet for their academic purposes in this study although some of them didn’t have internet access at home. The number of hours spent at online by participants during their last research for academic purpose or nursing information has shown in table 2.

Majority of participants 86 (67.7%) spend between 30 minutes to 1 hour for their academic search on nursing information. Followed by, 19 (15%) participants spent more than 15 minutes but less than 30 minutes for academic search, and 11 (8.7%) participants spent less than 15 minutes.

Table-2: Hours of nursing students spend online for academic search

Hours spent online for academic purposes	Frequency (n)	Percentage (%)
Less than 15 minutes	11	8.7
More than 15 minutes but less than 30 minutes	19	15
Between 30 minutes and 1 hour	86	67.7

On the other hand, the researcher also found that there were 22 commonly used websites resources

by participants for their academic and clinical search. The most common websites used by participants were

WebMD 33 (26%), followed by EMedicine, Scribd.com, Proquest, NHS, Nursing Crib, Merck Manual Website, Online Database-Elsevier, and

Centers for Disease Control (CDC), CINAHL, and RN Central. Therefore, WebMD is the most common websites used by participants for their academic search.

Table-3: Websites resources

Websites	Frequency (n)	Percentage (%)
WebMD	33	26.0
NANDA	6	4.7
NCLEX	4	3.1
Nuselab	12	9.4
UpToDate	3	2.4
Mosby	3	2.4
Mayoclinic	32	25.2
EMedicine	1	0.8
Medscape	9	7.1
Scribd.com	1	0.8
Proquest	1	0.8
Google Scholar	8	6.3
Medline	3	2.4
NHS	1	0.8
PubMed	2	1.6
Nursing Crib	1	0.8
Merck Manuals.com	1	0.8
Online Database- Elsevier	1	0.8
Drugs.com	2	1.6
Centers for Disease Control	1	0.8
CINAHL	1	0.8
RN Central	1	0.8

The association between usages of internet with nursing students’ academic achievement

The usages of internet among students were divided into three (3) domains. The first part was the nursing students’ knowledge of internet resources available to them as nursing student, part two was on how the nursing students evaluate internet health information, and the last one was the use of internet

health information specifically during clinical placements. To find the association between usages of internet with nursing students’ academic achievement, Chi-Square test was used and the result was demonstrated in Table 4. However, there was no association between usages of internet with their academic achievement since p value is > 0.05.

Table-4: Knowledge of internet resources which available to nursing students and CGPA

	n = 127	df	Df
PART 2* CGPA	127	27	0.12

From the result of the second domain, the p value is 0.38 which was higher than 0.05. Thus, it concludes that there was no association also between

the students’ evaluation on the internet health information before using it with their academic performance.

Table-5: How students evaluate health information before use it as nursing students and CGPA

	n = 127	df	p value
PART 3* CGPA	127	39	0.38

Lastly, for the third domain, the p value is 0.62 which is higher than p = 0.05. This concludes that there is no association between the usages of internet health

information specifically during clinical placements with their academic performance.

Table-6: Use of internet health information specifically during clinical placements and CGPA

	n = 127	df	p value
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PART 4* CGPA	116	22	0.62
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The association between the nursing students' demographic characteristic with their academic achievement

The demographic characteristics of the students were analyzed one-by-one to find the association with the nursing students' academic performance.

As shown in Table 7, only gender of students show a significant association with their academic performance with p value of 0.03 which is less than 0.05. Thus, there was significant between the genders of participants with their academic performance.

Table-7: Demographic characteristic with their academic achievement

Variables	2.00-3.00 (CGPA) n (%)	3.01-4.00 (CGPA) n (%)	p
Age			0.61
22-24	18 (15.1)	101(84.9)	
25-26	2 (25.0)	6 (75.0)	
Gender			0.03
Male	7 (31.8)	15 (68.2)	
Female	13 (12.4)	92 (87.6)	
Year of study			1.00
Year 2 & Year 4	11 (15.7)	59 (84.3.3)	
Year 3	9 (15.8)	48 (84.2)	
Household annual income			1.00
RM0 – RM 45, 000	19 (15.7)	102 (84.3)	
RM 45,001 – RM >60,000	1 (16.7)	5 (5.1)	
Access to internet at home			0.32
Yes	15(18.3)	67(81.7)	
No	5 (11.1)	40 (88.9)	

DISCUSSION

In this study, researcher found that all 127 (100%) participants used internet for academic purposes like searching information related to assignments and nursing care. This is contrast from previous study, they have different usage of internet related to their study such as their 191 (63%) participants were using Internet for preparing class assignments, 135 (45%) were using it for assistance in their research projects, 100 (33%) pointed out that they were using it to update their knowledge, and the rest used internet for other purposes such as for communication and entertainment [4]. Another study also revealed that 200 students from University of Sindh, Pakistan, only 22% of their participants used internet for research information and articles, and the rest of participants were not using internet for academic purposes [5].

This study also found that 67.7 % of studied participants were spending time between 30 minutes to 1 hour in the internet for their academic search. This was also different from the previous study, the researcher has done study on the frequency analysis among Southeast Asian College students found that half of their studied participants spent 3-5 hours online daily for their academic search [6]. Another study also

showed that majority of their participants used the internet 0- 3 days a week [7].

With regards to websites used by participants, the most common websites used by participants were WebMD and Mayo Clinic, and Goggle Scholar for finding information related to their study. This was contrast from a previous study done on the method of information search; there was a tendency for students to search from search engines such as Yahoo and Google. However, the use of academic databases such as Proquest, university E-learning resources, university web resources (Library), and university library publications was still low [8]. The online databases also a medium for university students to find academic related information, and a previous study done among university students and found that majority of the participants used EBSCO database, Elsevier, Science Direct, JSTOR, Springerlink, Emerald and Cambridge database as compared to other databases [9].

In this study, there was no association between usages of internet with their academic achievement since p value is > 0.05. This was similar with previous study finding which they found that actual daily use of the Internet does not have an impact on the student's actual academic performance [10]. However, this result

was contrast with a study that investigate the impact of using multimedia on students' academic achievement in the "computer & its use in education" curriculum [11]. The experimental group who studied by using a computer presentation program which uses multimedia along with a teacher has more academic achievement compared to the other group who studied by using the traditional way of discussion and dialog, along with a teacher [11]. Another study result also showed that majority of the respondents (90%) indicated that with the help of the internet for the academic pursuit, their GPA has improved [7].

The association between the studied participant' gender with their academic performance showed there was significant relationship with $p= 0.03$. It was supported by many empirical evidences that showed the impact of gender on the students' academic performance [12 & 13]. They said that gender differences exist in academic performance, as female students enrolled at the College Business Studies have academically outperformed male students [12]. A studied done on students' performance in University of Punjab, testing students' gender as a parameter to determine the relationship between gender and students GPA. They revealed that female students secured more Matric marks, Inter marks, and CGPA as compared to the male students [13].

CONCLUSION

The study might left out other important characteristics that could influence performance of nursing students in term of academic achievement such as the other purposes of using internet, the academic material provided by universities or the satisfaction in facilities provided by universities. The significant difference between the number of male students and female students also might affect the result of this study. Out of 127 students, only 22 students are male. We believe that a bigger male sample could have allowed for more reliable findings.

Hence, the internet has become a need in students' life. It has many benefits for students if used effectively for their studies. By hoping that, this study will give an insight for the nursing educators to guide their students to use the internet for them to achieve better in examination and for them to prepare to be a good nurse in the future for healthcare professional.

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