

## Impact of Internet Usage on the Student Attitude and Academic Achievement at two Faculties in BeniSuif University

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### Abstract:

**Background:** Internet is one of the beneficial tools in the area of IT not only for business but for academic point of view and enhances the skills and capabilities of students which assist them in studies and in professional life. **Aim:** The aim of this study was to assess the impact of internet usage on the Student Attitude and Academic Achievement at two Faculties in BeniSuif University. **Setting & Sample:** a representative sample of 450 students (261 from faculty of nursing and 189 from the faculty of veterinary medicine) were recruited for this study. **Tools** used for data collection were a socio-demographic data questionnaire, Psychological measurement of Internet addiction, internet attitude scale and Academic achievement scale. **Results:** revealed that the majority of students were female, less than 21 years old. The majority of students used the internet for scientific information and accessed the internet from their homes. There was a positive correlation between total internet addiction and total academic achievement. There was a negative correlation between total internet addiction and total internet attitude. **Conclusion:** It can be concluded that, most of the studied sample had a positive attitude toward the internet and had not internet addiction. **Recommendations:** Early diagnosis of internet addiction, raise awareness about positive usage of the internet and identify the reasons of internet addiction and its management. **Keywords:** internet addiction, internet usage, attitude toward internet, academic achievement

### Introduction:

The use of information technologies has shown a very rapid growth during the last decade in almost every country in the world. Increasing computer ownership and access to the Internet have changed the lives of people who get online on a daily basis at home, at school, and at work<sup>(1)</sup>. With the ever increasing use of the internet in daily life, individuals have begun to use the internet for various reasons such as “seeking information”, “using email” and “downloading music and video”, “chatting” and “playing games”<sup>(2)</sup>

The Internet College students use the Internet more than any other group. Consequently, much of the research on Internet use has focused on the college student population. A majority of students benefit from their use of the Internet for research and

communication purposes.<sup>(3)</sup> Studies also indicate that a relatively small number of students from colleges and universities across the nation and abroad struggle with Internet related problems, including academic difficulties due to excessive time spent online.<sup>(4)</sup>

### Significance of study:

Internet is the most powerful invention and if used in the positive direction, it can prove to be very productive. But these days, due to the social networking sites such as face book taking over, internet is producing adverse effects on the students, especially those students studying in college. As it is rightly said, something that has some positive effects also has some of the negative effects on the other hand. Therefore this study was conducted to assess if the internet

usage effects on the students attitudes and academic achievement positively or negatively at practical faculties in BeniSuif University.

A recent study revealed a significant increase in the usage of the Internet in Egypt following the January 25 revolution. The report prepared by the Egyptian company Techno Wireless<sup>(5)</sup> revealed that the number of Internet users in Egypt before 25 January was only 21.2 million people, but they came to 23.1 million after this date, an increase of 8.9 percent, or the equivalent of 1.9 million users.

#### **Aim of the study:**

The aim of the current study was to: Assess the impact of internet usage on the student attitude and academic achievement at two Faculties in BeniSuif University.

#### **Research questions:**

- What are the effects of internet usage on the student's attitude at faculty of nursing and faculty of veterinary medicine in Beni Suif University?
- What are the effects of internet usage on the student's academic achievement at faculty of nursing and faculty of veterinary medicine in Beni Suif University?

#### **Subjects and Methods:**

##### **Research Design:**

A correlation descriptive study design was used to assess the impact of internet usage on the student attitude and academic achievement at two Faculties in Beni Suif University.

##### **Setting:**

The study was conducted at Faculty of Nursing and Faculty of Veterinary Medicine in Beni Suif University. These colleges were selected because the both are practical and the study in them is five years.

##### **Sampling technique:**

Simple random sampling procedure was used by selecting every other student from the list of each year at the two faculties.

##### **Inclusion criteria:**

- All students except the student who refused to participate.
- Both sexes.
- All ages

##### **Sample size:**

50%of the students were selected from all years of studies at both faculties (Faculty of Nursing and Faculty of Veterinary Medicine) randomly. Total sample size was 450 students (261 students from the Faculty of Nursing) and (189 students from Faculty of Veterinary Medicine). Simple random sampling procedure was used by selecting every other student from the list of each year at the two faculties.

##### **Tools of data collection:**

Four tools were used to collect the necessary data about the study subjects as the following:

**Tool (1): Socio-demographic data questionnaire:** a specialized designed structured demographic data questionnaire was used to collect data about the subjects. It included age, sex, marital status, daily hours of using net, reason of internet usage , first exposure to the internet, watching TV or not, hobbies, activity which student participate in, degree in last year, total marks in secondary school, weight loss and any other health problems.

**Tool (2): Psychological measurement of Internet addiction:** This scale was developed by Yusuf<sup>(6)</sup> in order to measure the addictive behavior of the internet .It contains of 15 questions such as sitting in front of the Internet for periods per day up to 10 hours or more, I feel that my relationships with

my friends and social contact become weak, Key answer: yes (2), no (0) and sometime (1)

**Scoring system:**

Internet addiction was determined through three levels:

- $0 < 15$  = no internet addiction
- $15 > 22$  = moderate level of internet addiction
- $22 - 30$  = high level of internet addiction

**Tool (3): Attitude toward internet use scale:**

The Internet Attitude Scale is adapted from the Computer Attitude Scale, developed and validated by Nickell and Pinto <sup>(7)</sup> In order to measure attitudes towards the Internet, the word 'computer' was replaced with 'the Internet' throughout the scale. The IAS consists of 20 statements, balanced for direction of response, rated on a five point Likert type scale such as The Internet will never replace human life, The Internet makes me uncomfortable because I don't understand it, and People are becoming slaves to the Internet. **Key answer:** strongly disagree (1), disagree (2), neutral (3), strongly agree (4) and agree (5).

**Scoring system on the IAS**

- $1 > 25$  = extremely negative attitude
- $25 > 50$  = negative attitude
- $50 > 75$  = positive attitude
- $75 - 100$  extremely positive attitude

**Tool (4): Academic achievement scale:**

This scale modified from college academic self-efficacy scale and developed by researcher to evaluate academic achievement for students. The **scale** is a 45-item self-report to measure academic self-efficacy by asking students to rate how confident they feel regarding their abilities to perform common academic-related behaviors in college. It is

subdivided into five categories one is Academic, Extracurricular activities, Student interaction, Student behavior and Student attendance. In the current study the scoring is categorized as zero = very little efficacy, 1 = little, 2=moderate, 3=a lot and 4=quite a lot.

**Scoring system:**

- $0 - > 60$  = lower academic achievement
- $60 - > 120$  = moderate academic achievement
- $120 - 180$  = higher academic achievement

**Content validity and reliability:**

Content validity was checked before the pilot study and the actual data collection, through distribution of the first tool to five experts in the field of the study, with a covering letter and explanation sheet that explains study, purpose and other related information to ensure appropriateness, relevancy, clarity and completeness of the tool. Modifications and changes were introduced as required. Reliability was measured by using Alpha Chronbach's coefficient which was equal to (.6695) for Psychological measurement of Internet addiction, (.6473) for attitude toward internet use scale and (.7147) for Academic achievement scale.

**Pilot Study:**

A pilot study was carried out on 10% of students who were excluded from the sample to evaluate the tool clarity and estimate time required to fill the questionnaires. There were no unclear questions, or statements. No further modifications were required at this stage of tools development.

**Field work:**

The researcher started data collection by introducing herself to students and explained the procedure of selecting student, the title and the

research purpose and its importance to students. All questions were answered and detailed explanation was given to obtain their acceptance and cooperation during filling the tools of the study. The investigator entered to students with the list and explained the procedure of selecting student, the title and the research purpose and its importance to students then, select students from list randomly every each other to participate in study and take their acceptance or permission to participate verbally while, went out the rest of students then distribute the four tools of the study to each student and take his time to fill them and collected them from students. The four tools of the study took about 30 minutes to be filled by student. The researcher repeated this procedure with all students in every year at the two faculties. Data collection period continued for 3 months, starting at the beginning of October 2012, till the end of December 2012.

#### ***Administrative and ethical considerations:***

An official permission was obtained using proper channels of communication. Prior to pilot study, an informed consent was obtained from the vice dean for students affairs and education at Faculty of Nursing and from the vice dean for students affairs and education at Faculty of Veterinary Medicine in BeniSuif University at which the study was conducted. The investigator took an oral consent from students to participate in the study. The participant has the right to withdraw at any time. Explanation of the procedure and assurance of confidentiality were done.

#### ***Statistical Design:***

The data collected were computerized, revised, categorized, tabulated, analyzed, and presented in descriptive and associated statistical

form using Statistical Package for Social Science (SPSS windows) version 20. Numerical data were expressed as mean and  $\pm$  SD. Qualitative data were expressed as frequency and percentage. Difference between qualitative variables was tested by using chi square. Relations between different numerical variables were tested using Pearson correlation. Probability (p-value) less than 0.05 was considered significant and less than 0.01 was considered as highly significant.

#### **Results:**

**Table (1):** Illustrates that both of (first & second) nursing and (first, second & third veterinary) all of the studied samples were less than 21 years old compared to third & fourth nursing and fourth veterinary the minority were above 21 years old. Also, this table shows that both of (first & second)

nursing and (first, second & third veterinary) all of the studied samples were single compared to third & fourth nursing and fourth veterinary the minority were married. The majority of studied sample were female in four years in two faculties (nursing and veterinary). as regards ranking the highest number of student samples of four years in nursing were the third between his brothers or more, this in line with or the same in three years of veterinary (first, second & fourth) except the third year of veterinary the highest number of the studied samples were second.

The same table shows that the majority of the studied sample was living in rural areas (four years in nursing and first & second veterinary) compared to (third & fourth years of veterinary were living in urban.

**Table (2):** Illustrates that highest number of student samples in four years in two faculties (nursing and

veterinary) were used net from years. The highest number of the studied samples in two faculties (nursing and veterinary) had access to the net from their homes except third year of nursing had access to the net from the faculty lab .As regards to the reasons for using net the majority of the studied sample in four years in two faculties (nursing and veterinary) used net in gain scientific and general information. The highest number of the studied samples in the two faculties (nursing and veterinary) used the net daily less than or two hours except the third year of veterinary used the net more than two hours.

**Table (3):** Demonstrates that the majority of the studied sample hadn't internet addiction in four years of both faculties (nursing and veterinary) while the minority had a severe level of internet addiction in (second & fourth nursing and first, second & third veterinary) compared to (first & third nursing and fourth veterinary) hadn't severe level of internet addiction.

**Table (4):** Demonstrates that the majority of the studied sample had a positive attitude toward internet in four years of both faculties (nursing and veterinary) while the minority had a negative attitude toward internet in four years of both faculties (nursing and veterinary) except second year of veterinary didn't have negative attitude toward the internet.

**Table (5):** Shows that there is a highly positive correlation between total academic achievement and total internet addiction ( $r=.375^{**}$ ). There is also a negative correlation between total internet attitudes and total internet addiction ( $r=-.336^*$ ).

### Discussion:

Regarding the internet usage the majority of students using the internet and minority didn't use the internet.

Ogedebe <sup>(8)</sup> supported these results. This may because of the majority who using net were had net and computers in their homes, while the minority who wasn't using net weren't having computer and net in their home.

Regarding the experience of using the internet, majority of the students are using the internet for years and the minority are using the internet for days. More than half of the respondents were users of the internet for six to 10 years.<sup>(9)</sup> This could be due to that most of the students are using net when they were in secondary school and they become more satisfied and able to manage their time according to their priorities. The most common source among students for accessing the internet was from their homes, the next source was the mobile .So internet becomes easy to access at any time; in addition there may be some supervision from their parents in using the net. This finding was agreed with Dorup <sup>(10)</sup> which study shows that the majority of students had access to a computer at home.

The most common cause for using the internet was to gain scientific information, followed by gaining general information. This means that most of the students use net for searching information related to their studying or academic purposes other than for entertainments so that there wasn't internet addiction among most of the students. Young <sup>(11)</sup> supported this finding that more than half of the survey respondents considered the Internet as the most important information source for common knowledge, learning, and entertainment.

Link and Marz <sup>(12)</sup> also supported this finding that students are very familiar with e-mail and the use of the Internet for information research. Besides that, Ferguson and Perse <sup>(13)</sup> has also found that, entertainment was

the most salient motive for internet use, followed by passing time, acquiring social information and relaxation. However, Lin and Yu <sup>(14)</sup> stated that, information seeking and entertainment were equally important motives for using the internet.

Regarding the daily hours of using the internet, majority of the students are spending about two hours or less per day and the minority was using the internet more than two hours per day. Some students used net for half hour daily and some used it for one hour daily and this amount of time isn't enough to cause internet addiction Young <sup>(11)</sup> supported this finding that, the majority of students are spending about two hours per day using the Internet.

Regarding internet addiction, the current study the results are categorized as following: no addiction, Moderate level of internet addiction and severe level internet addiction. So, the result will be analyzed based on these three categories. The results showed that most of the sample had no internet addiction.

The results of Chou and Hsiao <sup>(15)</sup> are inconsistent with the current study which indicates that Internet addiction does exist among some of Taiwan's college students. The result of Qin <sup>(16)</sup> suggested that the level of internet addiction among students is moderate and tends to be minimal. This may be related to they were used internet less than two hours daily they were not enough time because the practice and they have a lot of things to do other than using the net, in addition there may be because of increasing the students' awareness about the healthy use of internet for knowledge not for entertainment.

Regarding internet addiction and academic achievement, the current study revealed that there was highly

positive correlation between internet addiction which did not exist between most of students and academic achievement. Walker and Panayides <sup>(17)</sup> did not agree with the current study as he stated that Internet addiction has been reported to be negatively associated with academic performance and grades. The negative correlations found between academic performance and total IAT score indicate that those who are more addicted to the Internet have a relatively poor academic performance. This may be related to that there is no one internet addict prevalence among the students and most of the students were used the internet for academic purposes.

Regarding Internet addiction and attitude toward internet usage, the current study results revealed that there is a negative correlation between internet addiction and attitude toward internet usage. Attitude toward using the Internet is found to be positively related to the IAT score. <sup>(18)</sup> A weak relationship between attitude and internet addiction was detected. <sup>(19)</sup> This may be related to that the experience of the productive usage of internet has changed the negative attitude toward it, where students used it for educational accomplishment not for entertainment or access to unethical sites.

Regarding attitude toward internet usage and academic achievement, the results of the study revealed that there was no significant correlation between attitude toward internet usage and academic achievement. There was a negative correlation between attitude toward internet usage and academic achievement. <sup>(20)</sup> This might be indicated that internet usage is a usual experience that , all students used it as well as the average student can get access to it easily , consequently has not get a direct effect on the academic achievement more than, personal

development and broaden the students general experience and information.

**Conclusion:**

According to the findings of the present study, it can be concluded that: The majority of the students were not internet addiction. Most of the students had a positive attitude toward the internet usage and used the internet from their homes to gain scientific information. Age, sex, secondary marks, residence and marital status aren't indicators of internet addiction, attitude toward internet usage and academic achievement .There was a highly positive correlation between internet addiction that doesn't exist among the majority of the students and academic achievement. There was a negative correlation between internet addiction and attitude toward internet usage.

**Recommendations:**

On the basis of the study findings, the following recommendations are suggested:

- Raise awareness of the students for positive or objective usage of the internet.
- Direction and teaching programs to encourage e-learning, e-book, interactive and proactive between students and teachers.
- Periodical check for the internet addiction and counseling to guide these who suffer from the internet addiction , in addition early diagnosis of internet addiction, raise awareness about positive usage of the internet and identify the reasons of internet addiction and its management.
- Guidance or hand book for the internet usage.

- Further research is recommended in order to do a comparative study between the faculties of theoretical and practical colleges to see if there were differences among them in terms of the use of the Internet and its impact on the attitudes and academic achievement for them.
- A study of attitudes towards the use of the Internet and its relationship to personality traits and social compatibility of different age stages, such as children or teenagers.
- Furthermore this study could be replicated with a larger sample size, different setting and with different modalities of diagnostic and management techniques.

**Table (1): Socio demographic characteristics of the studied sample among four years of nursing and veterinary**

Variable	Nursing								Veterinary							
	First		Second		Third		Fourth		First		Second		Third		Fourth	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
<b>Age:</b>																
▪ <21 years	95	100	70	100	42	97.7	43	81.8	63	100	55	100	18	100	52	98.1
▪ ≥21 years	0	0	0	0	1	2.3	10	18.9	0	0	0	0	0	0	1	1.9
<b>Marital status:</b>																
▪ Single	95	100	70	100	35	81.4	49	92.5	63	100	55	100	18	100	52	98.1
▪ Married	0	0	0	0	8	18.6	4	7.5	0	0	0	0	0	0	1	1.9
<b>Sex:</b>																
▪ Male	16	16.8	14	20	8	18.6	12	22.6	12	19	6	10.9	6	33.3	11	20.8
▪ Female	79	83.2	56	80	38	81.4	41	77.4	51	81	49	89.1	12	66.7	42	79.2
<b>Residence:</b>																
▪ Rural	80	84.2	45	64.3	33	76.7	34	64.2	35	55.6	34	61.8	4	22.2	21	39.6
▪ Urban	15	15.8	25	35.7	10	23.3	19	35.8	28	44.4	21	38.2	14	77.8	32	60.4

**Table (2): student's internet usage information among four years of nursing and veterinary**

Variable	Nursing								Veterinary							
	First		Second		Third		Fourth		First		Second		Third		Fourth	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
<b>Experience of using net:</b>																
▪ Not used	20	21.1	9	12.9	6	14	4	7.5	3	4.8	7	12.7	1	5.6	3	5.7
▪ Days	10	10.5	10	14.2	2	4.7	4	7.5	3	4.8	4	7.3	2	11.1	4	7.5
▪ Weeks	19	20	10	14.2	1	2.3	1	1.9	4	6.3	3	5.5	1	5.6	1	1.9
▪ Months	28	29.5	17	24.3	14	32.6	10	18.9	15	23.8	21	38.2	3	16.7	8	15.1
▪ Years	28	29.5	27	38.6	21	48.8	34	64.2	38	60.3	25	45.5	15	83.3	39	73.6
<b>Sources of net:</b>																
▪ Home	43	45.3	42	60	16	37.2	34	64.1	50	79.3	40	72.7	17	94.4	42	79.2
▪ Mobile	35	36.8	17	24.3	15	35	14	26.4	26	41.2	21	38.2	5	27.8	19	35.8
▪ Net café	2	2.1	7	10	8	18.6	13	24.5	5	7.9	4	7.3	1	5.6	11	21
▪ Faculty lab.	6	6.3	10	14.2	21	48.8	22	41.5	0	0	1	1.8	1	5.6	10	19
<b>Causes of net usage:</b>																
▪ Chat	9	9.4	4	5.7	3	7	8	15.5	17	27	5	9.1	7	38.9	22	41.5
▪ Games	11	11.5	6	8.6	5	11.6	16	30.1	16	25.4	8	14.5	7	38.9	15	28.3
▪ Scientific information	20	21	33	47.1	27	62.8	35	66	31	49.2	22	40	11	61.1	22	41.5
▪ General information	34	35.7	27	38.6	15	35	18	34	24	38.1	31	56.4	13	72.2	24	45.5
▪ Face book	23	24.2	21	30	11	25.6	19	35.5	29	46	21	38.2	9	50	23	43.4
<b>Daily hours of using net:</b>																
▪ ≤ hours	45	47.3	39	55.7	31	72.1	44	83	40	63.5	31	56.4	7	38.9	33	62.3
▪ 2 hours	30	31.6	22	31.4	6	14	9	17	20	31.7	17	30.9	10	55.6	16	28.3

**Table (3): Frequency of Total internet addiction levels among four years of nursing and veterinary students**

Total internet addiction levels	Nursing								Veterinary							
	First		Second		Third		Fourth		First		Second		Third		Fourth	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
▪ No Internet addiction	83	87.4	62	88.6	39	90.7	42	79.2	40	63.5	49	89.1	13	72.2	50	94.3
▪ Moderate	12	12.6	5	7.1	4	9.3	9	17.0	18	28.6	4	7.3	4	22.2	3	5.7
▪ Severe	-	-	3	4.3	-	-	2	3.8	5	9	2	3.6	1	5.6	-	-

**Table (4): Frequency of Total internet attitude levels among four years of nursing and veterinary students**

Total internet attitude levels	Nursing								Veterinary							
	First		Second		Third		Fourth		First		Second		Third		Fourth	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
▪ Negative	2	2.1	2	2.9	1	2.3	2	3.8	1	1.6	-	-	1	5.6	5	9.4
▪ Positive	82	86.3	54	77.1	37	86.0	39	73.6	55	87.3	44	80	15	83.3	44	83
▪ Extremely positive	11	11.6	14	20.0	5	11.6	12	22.6	7	11.1	11	20	2	11.1	4	7.5

**Table (5): Correlation between different study variables among four years of nursing and veterinary**

Variable	Total Academic achievement		Total internet Attitudes	
	p	r	p	r
<b>Total Internet addiction</b>	.000	.375**	.012	-.336*

*\*Statistically significant at  $p < 0.05$*

*\*\* Statistically significant at  $p < 0.01$*

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