

## **ORIGINAL ARTICLE**

# **Internet Usage and Academic Performance of Undergraduate Students in University of Ilorin, Nigeria**

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### **Abstract**

*The study examined the influence of internet usage on academic performance of undergraduate students of the University of Ilorin, Nigeria. This study adopted descriptive survey method. Six faculties were randomly selected from the 13 faculties in the University while 200 undergraduate students were sampled across these selected faculties using simple random sampling technique. Researchers' designed questionnaire was used for data collection while mean rating, t-test and ANOVA were used for data analysis. The findings of this study revealed that internet usage among undergraduate students of University of Ilorin had positively influenced their academic performance in their various disciplines though; it distracts students' attentions and prevents them from attending lectures regularly. It was also found that students have not been able to use internet to develop networking website that could help them in their academic activities. Insignificant difference was found to exist in the influence of internet usage on the academic performance of undergraduate students of University of Ilorin on the basis of gender and age. However, a significant difference was found on the basis of their faculty and educational level. As such it was recommended that school administrators and counselors should provide proper guidance to students on appropriate ways of using the internet to positively enhance academic performance of undergraduates of University of Ilorin.*

**Key words:** Internet, Academic performance, Undergraduate Student

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**INTRODUCTION**

Internet is a clustering of network on the computer, these networks are independent of one another but are based on the same interface and system of interactions (Adeyemi, 2001). The internet is the largest computer network. The internet offers various services, but the two most popular services are E-mail and World Wide Web. Chanlin (2009) pointed out that World Wide Web has introduced "Web 2.0" technologies and in particular "Social Software" where users are connected and can interact. The internet can also be called the "Information Super highway" or the "Net" which is basically a global computer network. The use of internet has helped in facilitating library services, administrative process, distance learning and instructional structures (Bear, 1999). The internet has transformed education into students centered learning rather than institution and faculty-centered instruction. It has also encouraged collaboration and collaborative arrangement between academic institutions (Hayes and Robinson, 2002). The internet can be used as source of information for students in the knowledge of interest. The process of learning has gone beyond consultation of text books and other library resources as such with the use of internet which helps students update their knowledge. Thus, E-mail, instant messages and posting of messages on websites are also source of information.

Kubey, Lavin and Bamous (2001) reported that internet addiction is a basic problem which affects the academic performance of students. Hamilton (2009) revealed that the use of internet has both positive and negative impacts on academic performance of students. Kachala and Bialo (2000) explained that the research studies carried out on the effectiveness of technology on student achievement their findings revealed that the use of technology like the internet promotes learning among students.

The internet has become a stable means of student's interaction and information dissemination in the Universities. Success in academic fields is now strongly attached to computer/internet utilization and this is influenced by computer self-efficacy of students on surfing the net for academic information. The use of the internet to enhance the academic performance of students is an uphill task because of the way students negatively use the internet. Lipsmoin (2007) opined that spending a lot of time watching pornographic sites and checking of mails can negatively influence the academic performance of students. Lenhart (2005) explained that more than 21 million adolescents between the ages of 12 and 17 had access to and routinely used the Internet. Barks (2006) carried out a survey among the undergraduates to examine internet usage patterns. They reported that female students mainly use the internet for e-mail messages while male students search for information which is not related to academics. Jeong (2005) examined the differences in academic performance of students on the use of internet. The study revealed that internet addictions have negatively influenced the student's academic performance. Honey (2005) worked on the use of internet in improving student achievement. The researcher discovered that students can benefit from internet-enhanced collaborative learning methods and the interactive learning process can enhance academic performance of students. Oliver (2002) noted that the use of the internet enhances high academic performance. None of these studies was carried out in University of Ilorin.

**Purpose of the Study**

This study aimed at investigating internet usage and academic performance of undergraduate students in University of Ilorin, Kwara State Nigeria. Specifically, It also examined the influence of variables

like gender, age, facilities and educational level.

**Research Questions**

The following research questions were drawn for this study.

- 1 What is the influence of internet usage on the academic performance of the University of Ilorin undergraduate students?
- 2 Does difference exist in the influence of internet usage on the academic performance of University of Ilorin undergraduate students based on gender?
- 3 Does difference exist in the influence of internet usage on the academic performance of University of Ilorin undergraduate students based on Faculty?
- 4 Does difference exist in the influence of internet usage on the academic performance of University of Ilorin undergraduate students based on age?
- 5 Does difference exist in the influence of internet usage on the academic performance of University undergraduate students based on educational level?

**Research Hypotheses**

- H01:** There is no significant difference in the influence of internet usage on academic performance of University of Ilorin undergraduates students based on gender
- H02:** There is no significant difference in the influence of internet usage on academic performance of University of Ilorin undergraduate students based on faculties
- H03:** There is no significant difference in the influence of internet usage on academic performance of University of Ilorin undergraduate students based on age

**H03:** There is no significant difference in the influence of internet usage on academic performance of University of Ilorin undergraduate students based on their educational levels.

**METHODOLOGY**

This study adopted descriptive survey method with the population of all undergraduate students of University of Ilorin. Six faculties were randomly selected from the thirteen (13) faculties in the University of Ilorin while 200 undergraduate students were sampled across these selected faculties using simple random sampling technique. Researchers’ designed questionnaire which contained 20 items was used for data collection with section A and B. Section ‘A’ was used to elicit demographic data of the respondents while section ‘B’ was used to extract information on the influence of internet usage on academic performance of University of Ilorin undergraduate students. The face validity of the instrument was ascertained by some experts in the Department of Counselor and Social Sciences Education, University of Ilorin while the reliability of the instrument was determined through the use of test re-test method at an interval of three weeks and a reliability index of 0.73 was obtained using Pearson Product Moment Correlation (PPMC). Therefore, the questionnaire is statistically said to be reliable for the study. Mean rating was used to provide answer to research question one; independent t-test was used to test hypotheses one and three and Analysis of Variance (ANOVA) was used to test the hypotheses two and four.

**Data Analysis and Results**

The respondents were made up of 200 (120 male and 80 female) undergraduate students of University of Ilorin. Majority of the respondents

were 21 and above years of age. The analysis of the data gathered and the

results are presented below.

### Answering Research Question One

**Table 1:** Mean and Rank Order of Responses on the Influence of Internet Usage on Unilorin Undergraduate Students' Academic Performance

Internet usage	Mean	Rank
Improves my academic grades in school	3.36	1 <sup>st</sup>
Promotes my knowledge in my field of study	3.20	2 <sup>nd</sup>
Gives me access to relevant literature that assists in my assignments	3.16	3 <sup>rd</sup>
Enables me to study ahead of the teacher	3.08	4 <sup>th</sup>
Gives me opportunity to acquire special skills	3.08	4 <sup>th</sup>
Enhances my' CGPA scores	3.04	6 <sup>th</sup>
improving their performance during examination	3.04	6 <sup>th</sup>
Improves my academic concept	3.04	6 <sup>th</sup>
Distracts me from academic activities	2.96	9 <sup>th</sup>
Prevents me from attending lectures regularly	2.96	9 <sup>th</sup>
Distracts my attention during lectures	2.88	11 <sup>th</sup>
Helps me to plan my school work effectively	2.88	11 <sup>th</sup>
Improves my reading competence	2.80	13 <sup>th</sup>
Helps me to create study time	2.80	13 <sup>th</sup>
Prevents me from attending lecture promptly	2.80	13 <sup>th</sup>
Helps me to contribute more on academic issue in group discussion	2.76	16 <sup>th</sup>
Enhances my performance in comprehension related topics	2.76	16 <sup>th</sup>
Promotes my computer skills towards my academic activities	2.68	18 <sup>th</sup>
Allows me to interact with other students on-line on academic issues	2.64	19 <sup>th</sup>
Allows me to develop networking website that helps my academic performance in school	2.48	20 <sup>th</sup>

As shown in table2, using a cut-off score of 2.50 as the baseline for determining participants' responses, item 7 is ranked 1<sup>st</sup> with a mean score of 3.36. This implies that internet usage improves students' academic grades in school". Ranked 2<sup>nd</sup> is item 1 with a mean a score of 3.20, which indicates that internet usage amongpromotes students' knowledgeacquisition in their various fields of study.

However, ranked 20<sup>th</sup> is item 11 with a mean score of 2.48. This shows that internet usage does not enablestudents to develop networking website that could help in theiracademic performance". Also, ranked 9<sup>th</sup> are item 4 and 9respectively indicates that internet usage does distract students' attentions and prevent them from attending lectures regularly.

**Testing Hypothesis One**

**Table 2:** t-test Statistics on the Influence of Internet Usage on Unilorin Undergraduate Students' Academic Performance Based on Gender

Gender	N	Mean	SD	df	Cal. T-value	Cri. t-value	Decision
Male	120	58.13	6.04	198	0.52	1.96	Accepted
Female	80	58.70	9.27				

Table 2 shows a calculated t-value of 0.52 and a critical t-value of 1.96. Since the calculated t-value is less than the critical t-value the hypothesis is accepted. Hence, there is no significant difference in the influence of internet usage on the Unilorin undergraduate students' academic performance on the basis of gender.

**Testing Hypothesis Two**

**Table 3:** ANOVA Summary of influence of internet Usage on Unilorin Undergraduate Students' Academic Performance Based on Faculties

Source Square	SS	Mean	df	Cal. F-value	Cri. F-value	Decision
Between Groups	2035.147	407.025	8	8.64*	2.21	Rejected
Within Groups	9130.933	47.06194	194			
Total	11166.080	199				

Table 3 shows the F-value calculated of 8.64 and a Critical value of 2.21. The hypothesis was rejected because the calculated F-value is greater than the critical F-value. Hence, there is no significant difference in the influence of internet usage on the Unilorin undergraduate students' academic performance on the basis of faculty.

**Testing Hypothesis Three**

**Table 4:** t-test statistics on the influence of Internet Usage on Unilorin Undergraduate Students Academic Performance based on age

Age	N	Mean	SD	df	Cal. T-value	Cri. t-value	Decision
15 -20 years	80	57.50	4.76	198	1.32	1.96	Accepted
21 years & above	120	58.93	8.82				

Table 4 shows a calculated t-value of 1.32 is less than the critical t-value of 1.96. As such the hypothesis is accepted. Hence, there is no significant difference in the influence of internet usage on Unilorin undergraduate students' academic performance on the basis of age.

**Testing Hypothesis Four****Table 5:** ANOVA Summary of the Difference in the Influence of Internet on Academic Performance of University of Ilorin Undergraduates Students Based on Their Educational Levels

Source	df	SS	Mean Square	Cal. F-value	Crit. F-value Decision
Between Groups	4	747.280	186.82	3.49*	2.37
Within Groups	195	10418.800	53.43		Rejected
<b>Total</b>	<b>199</b>	<b>11166.080</b>			

Table 5 shows that the F-value calculated of 3.49 is greater than Critical F value of 2.37. Hence, the hypothesis is rejected, because a significant was found on the basis of course level.

**Table 6:** Duncan Multiple Range Test (DMRT) showing the difference in the Influence of Internet Usage on Academic Performance of University of Ilorin Undergraduates Students Based on Their Level

Duncan Groupings	N	Means	Group	Level
A	48	60.83	2	200
A	32	59.25	4	400
B	80	57.80	3	300
B	24	57.33	5	500
C	16	53.50	1	100

Table 6 shows the Duncan Multiple Range Test indicating the significant difference noted in the ANOVA. Group 2 with a mean score of 60.83 differed slightly from group 4 with a mean score of 59.25 and differed significantly from group 3, 5, and 1 with mean scores of 57.80, 57.33 and 53.50 respectively. All the groups differed from one another but the significant difference noted was a result of the mean of group 2.

**DISCUSSION**

The study revealed that the use of internet promotes students' academic

performance and acquisition of knowledge; assists students in their assignments; provides opportunity to acquire special skills; improves their performance during examination; enhances students' academic concept; improves students reading competence among others. Roschelle. Pea, Hoadley, Grodon (2002) posited that internet can be used in many ways, some of which may be beneficial to the students and that non-educational sites may be just the opposite. However as revealed from the findings, internet usage does not enable students to develop networking website that could help their academic performance; does distract

students' attentions and prevent them from attending lectures regularly.

In the same vein both male and female students did not differ in their perception on the influence of internet usage on academic performance. On the basis of gender, the influence of internet usage was similar. In a study conducted by Kelsey (2007) among the teenage adolescents, revealed that the respondents agreed that the internet is a popular communication tools which can positively or negatively influence academic performance of students. Here reported how many of the teenagers spend vast amounts of time on the internet, which eventually resulted into low academic grades scores. Wenglinsky (1998) explained that the internet can provide a wealth of educational resource for students which can be beneficial towards increasing academic performance. Internet usage influenced the performance of students across the various facilities investigated. This is line with the submission of Young (2006) that the internet can be used to support and enhance learning among students.

From the findings of this study respondents of different age group viewed the influence of internet usage the same. This corroborates the view of Kubey, Lavin & Barrows (2001) irrespective of age, adolescents who spend a significant amount of time on non-educational online sites instead of engaging in homework and studying tend to have low academic scores. The usage of the internet among students of different educational level did not influence their academic performance. This disagreed with the report of Honey (2005) that about 21 million youth between the ages of 12 to 17 years of different levels of education use the Internet at school. The survey also found that most students believe that the use of Internet helps them to perform better at school. This shows that a lot of students

use the internet irrespective of their educational level.

## **CONCLUSION**

It can be concluded that internet usage among undergraduate students has positively influenced their academic performance in their various fields of study though, internet usage distract students' attentions and prevent them from attending lectures regularly. Students have not also been able to use internet to develop networking website that could help them in their academic activities. Also, the influence of internet usage among undergraduate students on their academic performance does not significantly differ on the basis of gender and age but differs significantly on the basis of their faculty and educational level.

## **Implications for counseling**

Because the counselors are in helping profession, they can organize enlightenment programmes for students on how to use the internet to improve academic performance. The school counselor can provide proper guidance on how student can use internet thus, there is need for counselor to be computer literate in order to meet the present day challenges. As such it is important to expose the counselor on training to computer appreciation. Counseling programmes can be organized for students having challenges in their academics.

## **RECOMMENDATION**

Counseling centers should be established in higher institutions of learning and as well trained counselors should be employed. School administrators and counselor should provide proper guidance on the appropriate ways of using the internet. Student should be encouraged to

use the internet in searching for information that will enhance and improve their academic performance.

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