

## INFLUENCE OF WEB SURFING ON UNDERGRADUATES' STUDYING IN TERTIARY INSTITUTIONS

Odule T. J., Adesina A. O., Ogunwobi Z. O., Abdullah K-K. A..

Department of Mathematical Sciences  
Olabisi Onabanjo University, Ago-Iwoye  
tola.odule@oouagoiwoye.edu.ng

### ABSTRACT

*Undergraduates are now bereft of the ability to read; rather they devote more time to social networking. Studying literatures and documents in an unobtrusive, quiet place of a reading room or house is becoming the most outdated notion to many university students. However, as studying is essential, an obvious minor alteration may produce severe consequences. The study, therefore, examined works from several fields on the technical, communal, developmental, and neuro-scientific influences of web surfing on the reading culture of evolving undergraduates, particularly in the Nigerian context.*

*A descriptive quantitative method was used to study the influence of the web surfing on the educational well-being of the students of the University of Ibadan. In total, 154 participants from three faculties of the institution took part in the study.*

*Results indicated that only academic-oriented Internet utilization contributes to better academic performance with the significance value of 0.001 while the social and recreational function of the internet would hinder the achievement of a better academic result. Also, there were significant differences between Internet use and gender, the web use and age groups, and the Internet use and institutions in Nigeria.*

*The application of the web for leisure and common purpose may hamper the reading culture of students, especially those in tertiary institutions. Therefore, the government, teachers, parents and concerned parties should cooperate and collaborate to minimize using the web for unproductive social and recreational purposes.*

*Keywords: Academic-oriented internet, reading culture, recreational-oriented internet, social-oriented internet web surfing*

### Introduction

Online exploration aptitudes have regularly not been well-created among individuals on the web (Hargittai, 2002), as the sociology of digital divisions indicated. As for students of higher education, particularly beginners, they generally rely on the simplistic 'good-energy' search approaches— easy access to information is often still more critical than accuracy (Currie et al., 2010; De Rosa, et al., 2006; Nicholas et al., 2009; Weiler, 2005). A low level of knowledge literacy and academic performance correlates; low-level students usually have high-level literacy skills. This conduct in research on the road of the lesser-resistance is not peculiar to the students. In the university, everyone— from first-year undergraduates to professionals, to professors— exhibits an analogous propensity to scan "horizontally" rather than "vertically," scanning data and quickly jumping here and there: in fact, bloggers are quite aware that people typically do not read a lot online. The users of websites prefer to access pages quickly and read only about 20% (Nielsen 2008; Weinreich et al. 2008) of text on average.

The way the brain adapts to meet the new digital text medium is only starting to be understood. Even though it is not restricted to online reading to

jumping around and moving from place to place, this form of reading seems to be the most common type of online reading. Local researchers, including Nicholas Carr (2010), remain concerned about its possible neurological effects.

Substantial discrepancies in online and print readings were highlighted, and educators were seeking further understanding of the intellectual disparity between the two forms of lecture (Rowell and Burke, 2008; Leu et al., 2008; Mokhtari et al., 2009). Although scientific research has not yet been adequately published to draw some concrete conclusions as to the effects of digital readings on learning and mind, it is understood that on-screen reading appears to be mental in terms of stimulation of the brain, meaning, attention, comprehension and speed reading.

The greater part of the reasons computerized perusing gives an impression of being intellectually not the same as print perusing have to do with time. The time it takes to read and scan texts in print, particularly online, compared with the time it takes to skip and scan text. In comparison to the advantages of time in the sense of traditional print literacy, Wolf (2009) reflected on the potential outcome of shallow digital literacy as a catalyst for students to learn: he expressed concern about the generations immersed in

digital culture. The time it takes to read and scan texts in print, particularly online, compared with the time it takes to skip and scan text.

Reading is simply a mental and neurological task. It is, therefore, reasonable to conclude that reading electronic texts will possibly have some cognitive consequences. Although the human brain is still unknown, it is a neuro-scientific fact that internal and external stimulation changes human brain structure and function (Doidege, 2007). fMRI (frequency magnetic resonance imaging) can show a picture of the brain which changes in the developing reader

Students now cannot read and spend more time on electronic media. Browsing the internet, playing with funky toys and going non-stop text messages seems the order of the day, rendering it an abstract concept for the majority of University students and adults to read a book or other writing material in a quiet or peaceful corner of a library or building (The Hindu, 2004). Therefore, the challenge is to integrate student behaviours so that they are relevant, like sports and all other hobbies. Maybe it will then directly reduce the impacts of negative media. It is crucial to determine the impact on the reading culture of students in our universities and other tertiary institutions that a nation is not able to rise above its literacy level.

This study sought to determine if:

- i. There are any differences in gender and Internet usage;
- ii. There are any differences in age groups and Internet usage and;
- iii. Impact of academic-oriented Internet use on reading the culture of students of tertiary institutions.

Three research questions were formulated to guide this study as follows:

- i. What do students use the Internet for? How much time do students spend on the Internet for academic, social, and recreational purposes?
- ii. Is there any significant relationship between time spent on the academic-oriented Internet and academic performance of the students?
- iii. Is there any difference between gender and Internet usage?

The remainder of this paper is organised as follows. Section 2 is a review of related works. Section 3 focused on the materials and methods used for the study. Section 4 presents the results and findings from the study, while section 5 gives appropriate conclusions.

## **Related Work Internet Usage Trends**

The assessment of prosperity scientists continues showing a negative association between the Internet and social capital, while social specialists have suggested a positive association between the two (Richards et al., 2010; Shah et al., 2001; Wellman et al., 2001). While research discoveries are partitioned concerning the social advantages of Web use, individuals around the world have broadly received online correspondence. Overall access to the Web arrived at 26% in 2009, while utilization of PDAs (personal digital assistants) arrived at 67% of the total populace (Universal Media transmission Association, 2010).

More youthful individuals will, in general, be overwhelming Web and PDA clients. The case of Canadian youth gives a fascinating contextual investigation. In 2008, 98% of Canadian secondary school understudies matured 15 to 19 were utilizing PCs one hour daily or more (Bibby et al., 2009). Around one bit of those young people were using their PCs, in any occasion, two hours out of every day, while another 20% were on their PCs for three to four hours, and 20% used their PCs five hours or even more consistently. Even more, starting late, it has been represented that 18–multi-year old Canadians are spending a typical of 20 hours out of each week on the web (Ipsos, 2010). With regards to telephones, 71% of Canadian family units have announced having a PDA for individual use. For 95% of those family units, 13–multi-year-olds are the principle family unit telephone client.

In 2008 the NEA (National Endowment for the Arts) finished up a comparable thing, proposing that 84% of grown-ups who read writing (characterized as fiction, verse, or show) either straightforwardly on the web or downloaded from the Web, likewise read books. A Canadian report utilizing the Insights Canada 2005 General Social Overview found that both substantial and moderate Web clients invest more energy perusing books than individuals who do not utilize the Web, despite the fact that individuals in each of the three classifications of Web use read comparable quantities of magazines and papers.

## **Scholars' Inclinations for Perusing Print Versus Computerized Content**

Whereas undergraduates work in a world inundated in advanced content, they have not all the while relinquished print. It is not valid, as Steve Occupations expressed and, as Nicholas Carr inferred, that they like the iPad in light of the fact that they do not peruse. Truth be told, for their college thinks about, understudies like to peruse on paper, in spite of the fact that they additionally need the comfort of online computerized content. Liu (2006) has discovered that

graduate scholastic library clients like the entrance given by online electronic assets, yet want to print the electronic reports to understand them. In an investigation of understudies at the Universidad Nacional Autónoma de México (UNAM), most of the undergraduates favoured print, and 63% detailed that they could bear perusing a report on a PC screen for close to 60 minutes (Ramírez, 2003). With regards to course reading material, a stamped understudy inclination for paper over digital books has, as of late, been discovered (Woody, 2010).

In the meantime, in an overview of understudies at a college in China, fascinating sexual orientation awkwardness was found in the paper/electronic inclination: 73% of the female understudies favour print, while just 51% of male understudies lean toward print (Liu and Huang, 2008). Additional investigations are required around there as developing individuals from the "Google age" — understudies conceived since 1993 when graphical Web perusing initially showed up — experience the post-optional training framework.

### **The Role of the Internet**

The Web is transforming into the dominating force in the information world, changing the habits by which information is amassed, taken care of, looked, and recouped. Also, Campbell, Martin, and Fabos (2009) saw that the Internet is empowering the blending of media shapes, the methodology whereby old and new media are open through the joining of PCs, and fast satellite-based phone or connection joins. The new media, for instance, the Internet can be used for the two to mass exchanges similarly as to point message movement. They are moreover incredibly de-fused, require low adventure, give increasingly conspicuous knowledge, and open collaboration and are essentially progressively difficult to control (Banerjee, 2008).

In regard to this circumstance, it is thus not bewildering for the new media to get reputation and affirmation in like manner society. People are as of now free and get the opportunity to make their very own news similarly as to get the contrary side of the story by getting news from the Internet, which is seen as free from control (Rosenstiel, 2005). In practically every point, the Internet has become the most capable hotspot for information, similarly as the best and generous procedure to bestow information to the lion's share in a speedy, basic, humble, and trustworthy way (Rosenstiel, 2005). Simultaneously, the web sharpens an individual's ability to look and scatter information.

Meyer (2009) contended that a paper could beat the Web in conveyability. However, PCs are getting littler and increasingly versatile and are never again needing being hard-wired to the Web. They can

even cover up in cell phones, transforming it into a numerous utilization gadget for email, Web perusing, and GPS route.

Anaeto and Anaeto (2010), discussed about the exceptional accomplishment of the Web in many parts of human undertaking, especially web-based business, has accelerated the consolidation of the equivalent into the correspondence procedure. Additionally, clarifying the convenience of the Web in correspondence, the creators express that the way that the Web can cut crosswise over social and geographic separation and help find better approaches for encouraging the progression of data and information makes it a particularly appealing vehicle for correspondence.

The improvement of the new propelled condition has gotten the energy of various researchers. With the creating proportion of cutting edge information open, people, particularly young adults, are found contributing more vitality scrutinizing electronic materials (Liu, 2005; Ramirez, 2003). A couple of examiners fought that the advancement of electronic media may give cynical repercussions to how people are less busy with wide scrutinizing and miss the mark on the ability to examine significantly and to help a deferred duty in examining (Liu, 2005). Others would fight that people still grade toward printed reports with respect to scrutinizing. Both Liu (2005) and Ramirez (2003) give confirmation that people would print from the Internet to associate further scrutinizing. Liu similarly gives the verification that the age factor includes to examining conduct on the Internet.

Writings explored demonstrated that computerized media appear to be the most significant components that influence understanding today, particularly among more youthful populaces (Salomon, 1979). An ongoing report by the National Enrichment for Human expressions (2009) proposed a decrease in proficiency perusing in the US and carried much consideration regarding renewing the job of perusing in America (Organization of Gallery and Library Administrations. The NEA questioned if individuals read any book in the previous year in any organization, including e-designs, and found a drop from 60.9% in 1992 to 56.6% in 2002 (Bauerlein,2004).

Cull (2011) opined that while the Web is a content-soaked world, perusing on the web screens will, in general, be altogether not the same as perusing printed content. In his investigation, he looked into writing from an assortment of orders on the innovative, social, conduct, and neurological effects that the Web is having on the act of perusing.

The idea of Web use is favoured as it thinks about the real utilization of the Web when contrasted

with the accessibility of assets. Usage of the Web may rely upon the ability to utilize the accessible assets. The effect of the Web can be comprehended as estimating the degree of Web use.

**Materials and Methods**

**Research Design**

This research is quantitatively descriptive. The research examined the impact of the academic-oriented internet on the reading culture of the University of Ibadan students. Moreover, the project studied the internet usage across General category of students, Management students, and Science students. Gender differences and internet usage in the case study context were also examined. The term Internet is further classified into three; Academic-oriented Internet, Social-oriented Internet, and Recreational-oriented Internet. The dependent variable is Reading Culture.

**Sample and Sampling Technique**

The sample population size is 154 students from three faculties in the University of Ibadan, namely: Social Science, Science and Arts. The students of varying backgrounds, as outlined above, were surveyed with structured questionnaires. In the interest of time, limited resources, and convenience, a sampling technique was used.

**Research Instruments**

Survey questionnaires were used as a tool to accumulate the data to examine the impact of the Internet on the student’s reading culture. Reading culture was measured by Likert scale of 5 point interval ranging from strongly disagree (1) to strongly agree (5). Respondents were asked a question-whether the Internet helped them improve in their reading culture and their responses were structured on 5 points interval scale. Based on their responses, reading culture was measured.

**Results and Discussion**

**Statistical Attributes of Respondents**

Table 1 and Figures 1-3 show the statistical attributes of respondents according to responses from the questionnaire.

**Table 1: Statistical Attributes of Respondents**

Faculties	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Arts	54	35.0	35.0	35.0
Social Science	50	32.5	32.5	67.5
Science	50	32.5	32.5	100.0
Total	154	100.0	100.0	

Three questions measured Academic-oriented Internet utilization with several sub-questions: (1) Time spent on academic-oriented Internet daily measured by a five-point interval scale. (2) Four questions on 'to what extent they agree' measured by five-point interval scale; and (3) Ranking the reasons for using the academic-oriented Internet on a five-point interval scale, for instance- Searching extra information relevant to the course/subject. (For details refer the questionnaire in appendix).

Social-oriented Internet utilization was measured by three questions: (1) Time spent on social-oriented internet daily measured by a five-point interval scale. (2) Five questions on 'to what extent they agree' measured by five-point interval scale and; (3) Reasons for using the social-oriented Internet measured on a five-point interval scale.

Recreational-oriented Internet utilization was measured by four question: (1) Two rhetorical questions, (2) Time spent on recreational-oriented Internet daily measured by five-point interval scale; (3) Eight questions on 'to what extent they agree' measured by five-point interval scale and; (4) Reasons for using the academic-oriented Internet measured on five-point interval scale.

**Collation and Treatment of Data**

The data accumulated from the field were analysed using SPSS software. To examine the primary purpose of this study,-the impact of the academic-oriented internet on students' reading culture, a multiple linear regression was conducted in SPSS. To determine differences in age group and Internet usage, a One Way Analysis of Variance test (ANOVA) was run. To examine the Internet problems in the three faculties of the institutions, a Chi-square test was run, and to determine gender difference and Internet usage, an independents-samples T-Test was run.

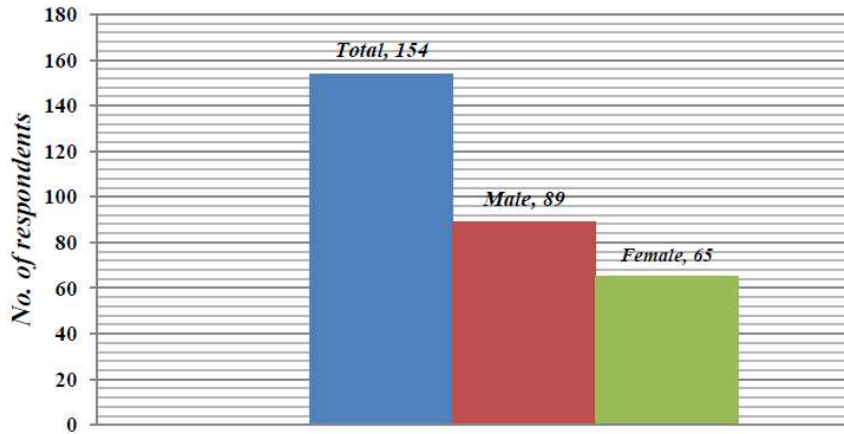


Figure 1: Number of male and female respondents

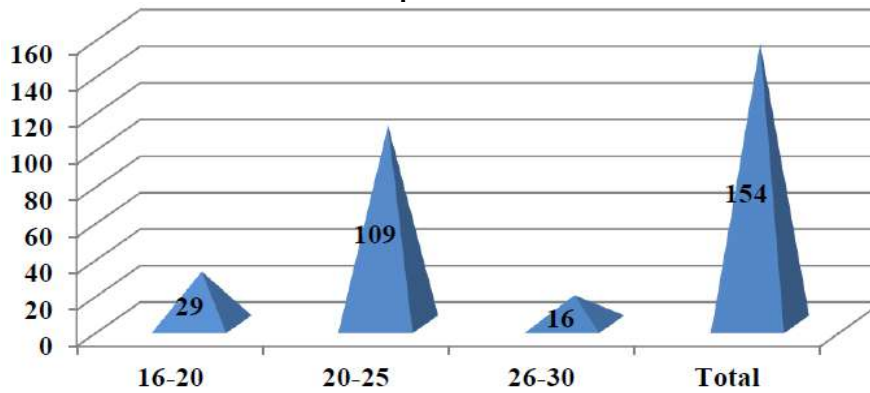


Figure 2: Age group of respondents

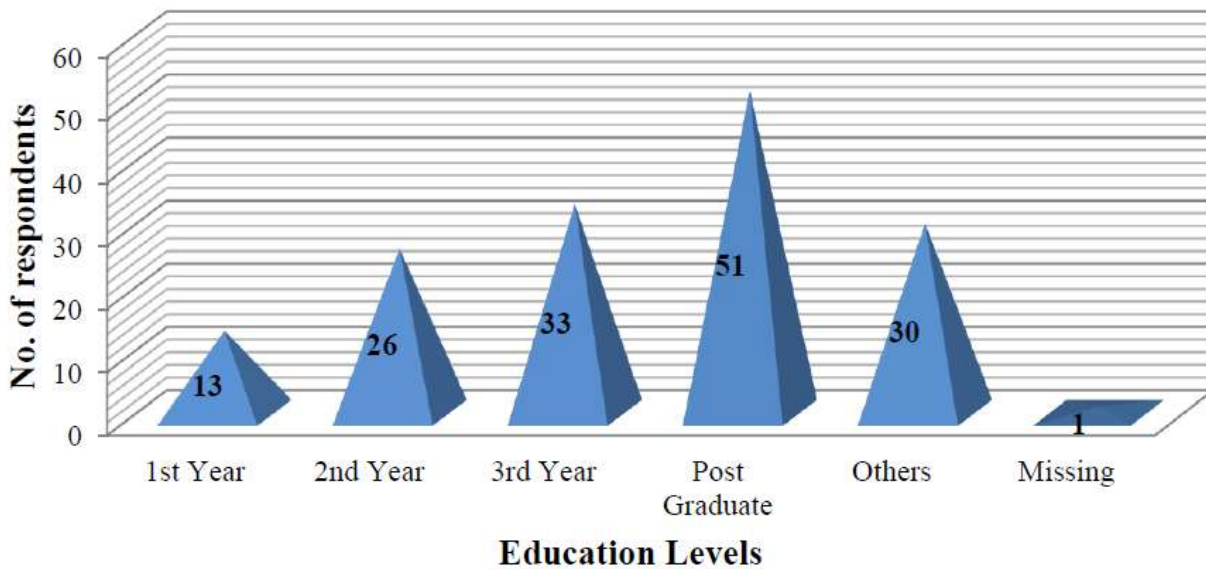
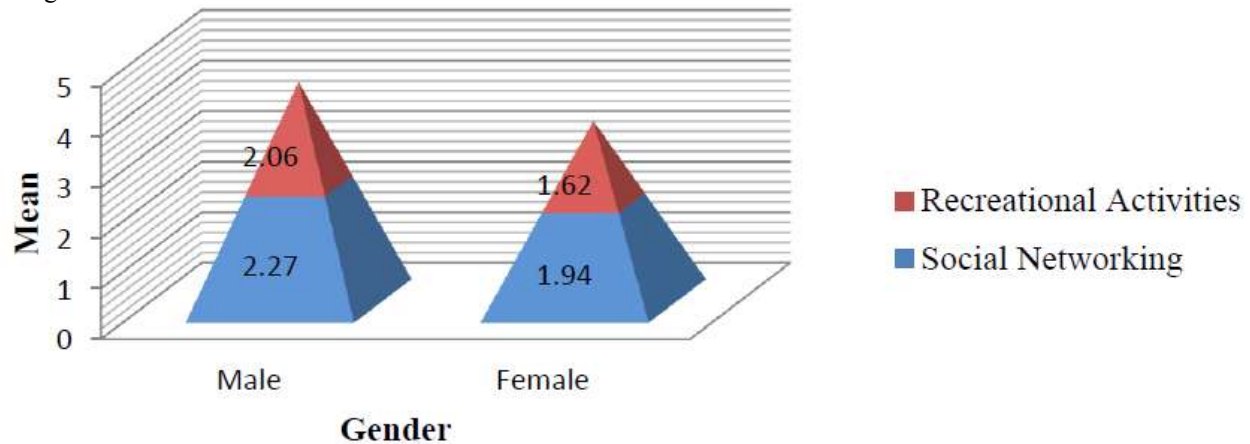


Figure 3: Education level of the respondents

*Objective 1: To determine if there are any differences in gender and internet usage.*

An Autonomous trial T-Test led demonstrated a critical contrast among guys and females as far as web utilization for person to person communication and recreational exercises at  $p=0.039$  and  $p=0.014$  individually. The mean estimation of 2.27 for guys shows that guys invest more energy in long range interpersonal communication destinations and get postponed for classes than females with a mean estimation of 1.94. Besides, the mean estimation of 2.06 for guys

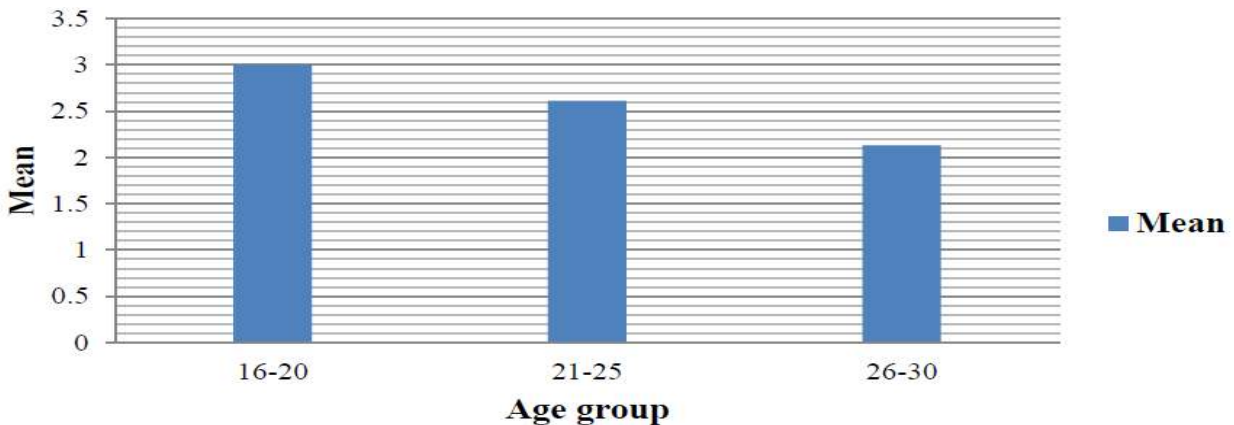
shows that they invested more energy playing internet games than females with a mean estimation of 1.62, as appeared in figure 4.



**Figure 4** The mean difference between Social Networking and Recreational Activities by Gender

*Objective 2: To determine if there are any differences in age groups and internet usage.*

A one way ANOVA also showed a significant difference between age groups and Internet usage, specifically on the factors of social networking at  $p=0.030$ . A Post Hoc test using the Scheffer test showed evident significant differences between the age group of 16-20 and 26-30. The mean value of 3 and 2.13 for the age group 16-20 and 26-30 respectively showed that students between the age group of 16-20 spent more numbers of hours on social networking than the age group of 26-30. Figure 5 is a representation of these data.



**Figure 5:** The mean differences in internet usage by age group.

*Objective 3: To study the impact of academic-oriented internet use on academic performance.*

A multiple linear regression conducted showed a significant relationship between dependent variable- *students' reading culture* and independent variable- *academically-oriented internet utilization* with  $p=0.00$  and adjusted  $R^2 = 0.473$  indicates that 47.3% of the Students' Reading Culture can be explained by sub-variables of academically oriented internet utilization such as searching extra course information, Internet as a reliable academic source, Depend on internet for most academic task, Internet provides relevant course information and To do Assignments.

**Table 2:**Regression model summary

Model	Sum of Squares	Df	Mean Square	F	Significance
Regression	68.996	5	13.799	27.225	.000 <sup>b</sup>
Residual	71.466	141	.507		
Total	140.463	146			

a. Dependent variable: Students' Reading Culture

b. Predictors: (Constant), searching extra course information, the Internet as a reliable academic source, Depend on the internet for the most academic task, the Internet provides relevant course information.

Mode	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	0.701 <sup>a</sup>	0.491	0.473	0.712

For depending on the internet to do most of the academic tasks- $p=0.000$ , the internet helped students providing relevant course information-  $p=0.000$  and the internet as a reliable academic source-  $p=0.001$ . These values are lower than 0.005, indicating that these three sub-variables of independent variable- academically-oriented internet utilization have a significant relationship with students' reading culture. Therefore, depending on the internet to do academic tasks, the internet providing the relevant course information and the internet as a reliable academic source contribute to the reading culture of the students.

Academic oriented internet	Unstandardized Coefficients		Standardized Coefficients	Sig.
	B	Std. Error	Beta	
(Constant)	.526	.355		.140
Depend on internet for most academic task.	.316	.071	.324	.000
Internet provides relevant course information	.294	.074	.297	.000
Internet as a reliable academic source	.260	.076	.259	.001
To do Assignments	.097	.095	.084	.310
Searching extra course information	-.170	.094	-.142	.073

*Research question 1:*

97.4% of the respondents were evident to use the internet daily. Specifically, the Internet was perceived as an essential part of academic learning, benefitting them doing assignments, researches, and seeking extra course information. 5.2% of the students use it for the academic purpose for more than 7 hours a day since it was considered a reliable academic source.

In the University of Ibadan context, data revealed that social-oriented Internet utilization is one of the primary usages of the Internet. This finding

corresponds with the findings of Akhter, 2013, saying college students are at high risk of developing web obsession since they engage more on the web for common and leisure purposes. Almost 99% of the students use the internet for a social and recreational purpose, which is very much consistent with the findings from past research (Coyn et al., 2013).

*Research Question 2*

Linear regression test showed a significant relationship between the academic-oriented Internet utilization and reading culture of the students at the University of Ibadan. Moreover, the result indicated

that the Internet was a very reliable academic source for college-level students in the University. Through this finding, it can be concluded that the Internet is one of the best academic tools to improve the reading culture of university students.

Almost every college students in Europe and America benefit from the Internet while conducting research and doing other academic tasks. A similar trend was also found in the University of Ibadan according to the results and findings of this research. Participants indicated that the Internet provides relevant and extra course ideas and information which is consistent with the past research paper (Jones, Johnson-yale & Perez, 2007)

### *Research Question 3*

An Independent-Samples T-Test was run to examine the gender difference and internet usage. Data showed a significant difference in terms of the time spent on the social and recreational Internet between males and females. Though both genders engage in the social and recreational oriented Internet, males were found to spend more time than their female counterparts.

### **5.0 Conclusion**

Literatures, as well as results from this study, indicate that the Internet is an excellent academic tool which enhances the reading culture of the students only if it is used for academic purpose. This means using the internet for recreational and social purposes, may hamper the reading culture of students, especially those in tertiary institutions. Besides, findings from this study showed that the youth engage more in socially oriented internet utilization. Government, teachers, parents, and concerned parties may cooperate and collaborate to minimize the use of the internet for unproductive social and recreational purposes.

### **References**

Akhtar, N. 2013. "Relationship between Internet Addiction and Academic Performance among University Undergraduates." *Educational Research and Reviews*; 8(9): 1793-1796.

Anaeto, S.G., and Anaeto, M.S. 2010. *Development Communication: Principles and Practice* 1st edn. Stirling-Horden publishers, Lagos Nigeria, pp. 33-38.

Banerjee, I. 2008. "The Impact of New Media on Traditional Mainstream Mass Media –A Critical Assessment." A Series of Lectures on Trends & Future of the Malaysian Mass Media. Presented at Dewan Tunku Canselor, University of Malaya Kuala Lumpur

Bauerlein, M. 2004. Revisiting "Reading at Risk." *American Libraries*, 35(11): p.3.

Bibby, RW, Rusell, S., and Ronald R. 2009. *The emerging millennials: How Canada's newest generation is responding to change & choice*. AB: Project Canada Books, Lethbridge, Canada, pp.68-76.

Campbell, R, Martin, C.R., and Fabos, B. 2009. *Media and culture: An introduction to mass communication*, 6th ed. Bedford/St. Martin's, Boston.

Cull, B. 2011. Reading revolution: Online digital texts and implications for reading in academics. *First Monday* Peer-reviewed Journal on the Internet. 16(6): p.6

Coyne S. M., Padilla-Walker L. M. and Howard E. 2013. "Emerging in a Digital World: A Decade Review of Media Use, Effects, and Gratifications." *Emerging Adulthood* 1(2): 125-137. Doi:[10.1177/2167696813479782](https://doi.org/10.1177/2167696813479782)

Currie L., Devlin F., Emde, J., and Graves, K. 2010. "Undergraduate search strategies and evaluation criteria: Searching for credible sources," *New Library World*, vol. 111, numbers 3–4, pp.113–124. <http://www.emeraldinsight.com/journals.htm?articleid=1847012&show=html>, accessed 12 November 2019.

De Rosa C., Cantrell, J., Hawk, J., and Wilson, A. 2006. *College students' perceptions of libraries and information resources: A report to the OCLC membership*. Dublin, Ohio: OCLC Online Computer Library Centre. Available at <http://www.oclc.org/reports/pdfs/studentperceptions.pdf>, accessed 10 November 2019.

Doidge Norman 2007. *The brain that changes itself: Stories of personal triumph from the frontiers of brain science*. Viking Publishers, New York.

Hargittai E. 2002. "Second-level digital divide: Differences in people's online skills," *First Monday*, 7(4): p.35. <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/942/864>, accessed 06 November 2019.

International Telecommunication Union 2010. *Measuring the information society in 2010*. Geneva: ITU, at <http://www.itu.int/ITU-D/ict/publications/idi/2010/index.html>, accessed 06 November 2019.

Ipsos, M. 2010. "Weekly Internet usage overtakes television watching" (22 March), at <http://www.ipsos-na.com/news->



- [polls/pressrelease.aspx?id=4720](#), accessed 06 November 2019.
- Jones, S., Johnson-yale C., Perez, FS., and Schuler J. 2007. "The Internet Landscape in College." *Year book of the National Society for the Study of Education*: 106(2): 39-51. <https://doi.org/10.1111/j.1744-7984.2007.00114.x>
- Leu, DJ., Coiro, J., Castek, J., Douglas KH., Laurie, AH., and Reinking, D. 2008. "Research on instruction and assessment in the new literacies of online reading comprehension," In Cathy Collins Block and Sheri R. Parris (eds). *Comprehension instruction: Research-based best practices*. Guilford Press, New York pp.321–342.
- Liu, Z. and Huang, X. 2008. "Gender differences in the online reading environment," *Journal of Documentation*, 64(4): 616–626: <http://www.emeraldinsight.com/journals.htm?articleid=1738049&show=html>, accessed 12 November 2019.
- Liu, Z. 2006. "Print vs. electronic resources: A study of user perceptions, preferences, and use," *Information Processing & Management*, 42(2): 583–592 <http://www.sciencedirect.com/science/article/pii/S030645730500004X>, accessed 12 November 2019.
- Liu, Z. 2005. "Reading behavior in the digital environment: changes in reading behavior over the past 10 years", *Journal of Documentation*, 61(6): 700-12.
- Meyer, P. 2009. *The vanishing newspaper: saving journalism in the information age*. University of Missouri Press, Missouri.
- Mokhtari K., Carla AR, and Anne G. 2009. "The impact of the Internet and television use on the reading habits and practices of college students," *Journal of Adolescent & Adult Literacy*, 52(7): 609–619, <http://www.jstor.org/stable/20468414>, accessed 02 November 2019.
- NEA 2009. *Reading on the rise: A new chapter in American literacy*. National Endowment for the Arts, Washington D.C., USA. <http://www.arts.gov/research/Readingonrise.pdf>, accessed 02 November 2019.
- Nicholas C. 2010. *The shallows: What the Internet is doing to our brains*. Norton Press, New York.
- Nicholas, D., Huntington, P., Hamid RJ., Rowlands, I., and Fieldhouse, M. 2009. "Student digital information-seeking behaviour in context," *Journal of Documentation*, 65(1):106–132. <http://www.emeraldinsight.com/journals.htm?articleid=1766885&show=html&>, accessed 02 November 2019.
- Nielsen, J. 2008. "How little do users read?" (6 May), Available at <http://www.useit.com/alertbox/percent-text-read.html>, accessed 12 November 2019.
- Putnam, RD., Feldstein, LM. and Cohen, D. 2004. *Better together: Restoring the American community*. Simon & Schuster, New York.
- Putnam, RD. 2000. *Bowling alone: The collapse and revival of American community*. Simon & Schuster, New York.
- Ramirez, E. 2003. "The impact of the internet on the reading practices of a university community: the case of UNAM," paper presented at the World Library and Information Congress: 69th IFLA General Conference and Council, Berlin, August 1-9, 2003.
- Richards, R., McGee, R., Williams, SM., Welch, D., and Hancox, RJ. 2010. "Adolescent screen time and attachment to parents and peers," *Archives of Pediatrics & Adolescent Medicine*, 164(3): 258–266.
- Rosenstiel, T. 2005. "Political Polling and the New Media Culture: A Case of more being less." *Public Opinion Quarterly*, 6(9): 698-715.
- Rowse, J., and Burke, A. 2008. "Screen pedagogy: Challenging perceptions of digital reading practice," *Changing English: Studies in Culture & Education*, 15(4): 445–456, available at <http://www.informaworld.com/smpp/content~content=a906476851~db=all>, accessed 14 November 2019.
- Salomon, G. 1979. *Interaction of media, cognition, and learning*. Jossey-Bass publishers, San Francisco USA.
- Shah DV., Jack MM., and So–Hyang Y. 2001. "Communication, context, and community: An exploration of print, broadcast, and Internet influences," *Communication Research*, 28(4): 464–506, available at <http://crx.sagepub.com/content/28/4/464.short>, accessed 09 November 2019.
- The Hindu 2004. Thither the reading habit? Online India National Newspaper, Monday, July 12, 2004.

- Weiler, A. 2005. "Information-seeking behavior in generation Y students: Motivation, critical thinking, and learning theory," *Journal of Academic Librarianship*, 31(1): 46–53, available at <http://www.sciencedirect.com/science/article/pii/S0099133304001521>, accessed 09 November 2019.
- Weinreich H., Hartmut O., Eelco H., and Matthias M. 2008. "Not quite the average: An empirical study of Web use," *ACM Transactions on the Web*, 2(1): 51–53, at <http://portal.acm.org/citation.cfm?id=1326566&coll=ACM&dl=ACM&retn=1#Fulltext>, accessed 09 November 2019.
- Wellman B., Anabel QH., James W., and Keith H. 2001. "Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment," *American Behavioural Scientist*, 45(3): 436–455, available at <http://abs.sagepub.com/content/45/3/436.short?rss=1&ssource=mfc> Accessed 09 November, 2019.
- Woody WD, Daniel DB., and Baker AC. 2010. "E-books or textbooks: Students prefer textbooks," *Computers & Education*, 55(3): 945–948, available at <http://www.sciencedirect.com/science/article/B6VCJ-4YWB2B0-2/2/bca2c8bd08cec8ab248f9d3a023b36b9>, 09 November 2019.