

POSTGRADUATE STUDENTS' AWARENESS OF ACADEMIC SOCIAL-NETWORKING SITES FOR RESEARCH; ITS INFLUENCE ON GENDER AND ACADEMIC DISCIPLINES

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Abstract

Academic social-networking sites are platforms created to promote interactions, collaborations and enhance access to research publications and other academic activities online. However, in spite of the research benefits these platforms offer, there is a relatively low rate of postgraduate students' awareness of academic social-networking sites for research. This study, therefore, focused on postgraduate students' awareness of academic social-networking sites for research in Oyo State.

The descriptive research design of the survey type was used for the study. Two research questions and two hypotheses were answered and tested respectively in the study. A total of 290 postgraduate students were proportionally selected from the target populations for the study. A researcher-designed questionnaire was used to determine the respondents' awareness of academic social-networking sites. Cronbach Alpha was used to determine the reliability value of 0.70. Frequency counts and simple percentages were used to answer research questions, while t-test was used to test the study's hypotheses at 0.05 level of significance. Findings of the study revealed that:

Most postgraduate students were not aware of academic social-networking sites for research; Most postgraduate students' found out about academic social-networking sites through online research; There was no significant difference between male and female postgraduate students' awareness of academic social-networking sites for research; and

There was a significant difference between sciences and humanities postgraduate students' awareness of academic social-networking sites for research.

Conclusively, most postgraduate students examined were unaware of academic social-networking sites. The implication, therefore, could make postgraduate students' to be uninformed keeping up with the latest research trends and activities aimed at improving their research know-how and exposure. It was therefore recommended amongst others that, postgraduate students should be encouraged to engage in more online researches and sensitization at seminars aimed at increasing their awareness and knowledge of the use of academic social-networking sites for research.

Keywords: Academic Social-Networking Sites, Postgraduate Students', Awareness, Gender, Academic Disciplines.

Introduction

It is undeniable that social-networking sites have become an un-detachable part of human daily activities ever since its emergence, which is evident in its popularity amongst students, considering how much they have somewhat become deeply obsessed with the use of social-networking sites. However, the advent of academic social-networking sites (ASNSs) in the last decade has ensured that students and academics no longer have to worry about social vices and other non-academic distractions usually occasioned on popular social-networking sites like Facebook, Instagram, and Twitter, in using social networks to support academic activities and interact with academics and researchers of shared interest. This is because, the emergence of academic social-networking sites in the last decade, continues to influence scholarly publications and research activities online, which has since attracted the interest of individuals, groups, and stakeholders in the field of education.

Academic social-networking sites can simply be described as academic platforms specifically created to cater for various research and academic related activities such as upload and download of research publications, interactions, and collaborations among users, as well as follow-up of latest research trends and discussions among researchers, academics, students, and institutions of higher learning globally. Leeder, (2008) described academic social-networking sites as an entirely online academic community specifically created to serve the needs of academics in terms of research, professional collaboration, a listing of citations, file sharing, and interaction among scholars globally. El-Berry (2015) also defined academic social-networking sites as a virtual platform where researchers can create a personal profile, collaborate, and interact with other researchers and academics with shared research interest from around the world. A considerable number of these academic social-networking sites like ResearchGate.net, Academia.edu, Mendeley.com, Zotero.org, and a host of others have been launched, as platforms that provide students, lecturers, researchers and educators the enabling environment to interact, collaborate, follow research trend, share ideas and research materials within an online academic social community.

However, given the emergence of academic social-networking sites in the past decade, Hoffmann, Lutz, and Meckel (2015) noted that it is not surprising that little research has been conducted to investigate the structure, mechanisms, and use of these sites. Thelwall and Kousha (2014) equally support that despite the research and academic significance of academic social-networking sites, there is surprisingly little research about academic social-networking sites and how these sites could be used to support scholarly publication, collaboration, research, and academic activities online, hence, the lack of awareness of academic social-networking sites among postgraduate students. Therefore, considering the awareness of academic social-networking sites as germane to this study, previous studies have attributed the lack of awareness of academic social-networking sites among stakeholders to the extensive popularity of social platforms like Facebook, Twitter, YouTube, and Instagram which students are more familiar with and use more frequently.

Jordan (2014) in a study observed that even lecturers were found to be more familiar with popular social-networking sites like Facebook, and Twitter than academic social-networking sites like researchgate, academia, and Mendeley. El-Berry (2015) revealed in a study that most academic staffs were aware and like to use some of the notable academic social-networking sites such as researchgate, academia, and LinkedIn. Jordan (2014) observed on the contrary that though researchgate and google scholar are the most recognized of academic social-networking sites, yet the awareness of most academic social-networking sites within the academic community on a general scale is relatively low.

Looking at gender and academic disciplines differences as of considerable importance to this study and its influences, previous studies have indicated male dominance while others showed female dominance in the awareness of academic social-networking sites. Thelwall and Kousha (2014) in a study, revealed that no gender difference influenced users' awareness of academic social-networking sites, specifically Academia.edu. The researchers further revealed that female users did not attract more profile views than male users. The researchers thus concluded that gender has no influence on academic social-networking sites compared to popular social-networking sites like Facebook, Instagram, and Snapchat, where female users' often attract more profile views and friend requests than male users.

In another development, Jeng, He, and Jiang (2015) agreed that academic disciplines influence the awareness and use of certain academic social-networking sites, due to the large presence of some academic disciplines on some academic social-networking sites compared to low figures recorded by other academic disciplines on the same site. In essence, the researchers further noted that, academic disciplines like computer and information sciences, social sciences, education, psychology, and biomedicine presence in a particular academic social-networking site would make it more popular to researchers and academics in such academic disciplines, while on the other hand, it may seem unpopular to researchers from other academic disciplines that are not well represented on the sites. The researchers concluded that this community preference is one possible explanation for the disparity in the awareness and population distribution of most academic social-networking sites. Ortega (2015) however noted that most academic social-networking sites have imbalances in their population distribution, basically due to the large presence of users from certain academic disciplines on a particular academic social-networking site compared to other academic disciplines with a relatively low presence on the same platform.

Statement of the Problem

Academic research before the advent of the Internet was conducted through frequent visitations to the library for book consultations; with researchers, Lecturers and students spend long hours of research in the library in order to gather information and materials on related literature to specific research been conducted. That system of exclusive library-based research has drastically reduced since the emergence and wide use of the Internet, virtual library, E-library, search engines such as Google.com, Ask.com, and more importantly academic social-networking sites like researchgate, academia, Zotero, and Mendeley amongst others; all of which has greatly enhanced easy access to information and resources on a research been conducted, as well as the convenience in carrying out research and other academic activities online.

However, the lack of researchers at all levels awareness on the use of academic social-networking sites to further enhance research activities online is very worrisome. Considering how vital and important the use of academic social-networking sites could be to researchers research work online. Jordan (2014) in a study, identified the low rate of Lecturers awareness on the use of academic social-networking sites, which the researcher attributed to the familiarity of Lecturers to more popular social-networking sites like Facebook and Twitter, largely due to the unprecedented popularity of Facebook, Twitter, and other popular social-networking sites than academic social-networking sites. This study, therefore, investigated the prevailing problem of postgraduate students' awareness of the use of academic social-networking sites for research activities online. This was to determine the inherent reasons behind the identified problems. As a result, this study did enough to orient the respondents to enhance their awareness as a major problem established for this study, by using this study to create more awareness to some of the unaware respondents, on the use of academic social-networking sites for research.

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Purpose of the Study

The main purpose of this study was to investigate postgraduate students' awareness of academic social-networking sites for research; its influence on gender and academic disciplines for research in Oyo State. Specifically the study:

1. investigated Postgraduate Students' awareness of academic social-networking sites for research; and
2. determined where postgraduate students' found out about academic social-networking sites for research

Research Questions

Answers were sought for the following research questions:

1. Are postgraduate students aware of academic social-networking sites for research?
2. Where do postgraduate students' found out about academic social-networking sites for research?

Research Hypothesis

The hypotheses tested in the study states that:

- Ho₁: There is no significant difference between male and female postgraduate students' awareness of academic social-networking sites for research.
- Ho₂: There is no significant difference between sciences and humanities postgraduate students' awareness of academic social-networking sites for research.

Methodology

The study used a quantitative method of descriptive research design of the survey type to collect data from the respondents. The entire population for this study included all postgraduate students of Universities in Oyo State. The target population for the study was purposively determined to include postgraduate students of two Universities from the study population. Research advisors model (2006) was used to select the sample size of 378 postgraduate students at 95% confidence level and a significant level of 0.05. Therefore, a total of 290 postgraduate students were proportionally selected from the target population to actively participate in the study, while the researchers randomly distributed the copies of the questionnaire to the respondents. A researcher-designed questionnaire with the acronym (PSAAS-NSR; IGAD) was used to collect data for the study.

Cronbach Alpha was used to determine the reliability coefficient of 0.70 at a significant level of 0.05. The researchers ensured strict adherence to respondents' voluntary participation, confidentiality, anonymity, amongst other ethical considerations and procedure for data collection. Data collected was coded on an Excel spreadsheet. Statistical Products and Services Solutions (SPSS) version 20.0 software was used to perform descriptive and inferential statistical analysis of all data collected. Frequency, percentage, and mean were used to analyze demographic characteristics of the respondents and to answer research questions, while *t*-test was used to test the study hypotheses at a significant level of 0.05.

Research Instrument

Section A: Demographic Information (Postgraduate Students')

Name of Institution:

Academic Discipline/Faculty: Sciences () Humanities ()

Gender: Male () Female ()

Table 1:

Section B: Postgraduate Students' Awareness of Academic Social-Networking Sites for Research

Response mode: Aware (A), Not Aware (NA). And one option under "through", in-line with the corresponding academic social-networking sites.

S/ N	Items	Aware (A)	Not Aware (NA)	Through:					
				Fri ends	Online	Lectur ers	Colleagu es	Conferen ce	Parent s
1	researchgate.net								
2	academia.edu								
3	zotero.org								
4	mendeley.com								
5	googlescholar.com								
6	Hypothes.is.com								
7	lore.com								
8	luloot.com								
9	epernicus.com								
10	iamscientist.com								

Data Analysis and Results

A total of 290 copies of the questionnaire were distributed to the respondents. 271 copies were returned, from which 9 copies were invalid, remaining a valid total of 262 that was used for the study data analysis. The valid total, therefore, represents a 93% response rate.

Demographic Information of the Respondents

Table 2:

Distribution of Respondents by Institution

Universities	Postgraduate Students	%
Lead City University	26	9
University of Ibadan	264	91
Total	290	100

Table 2 reveals the distribution of Postgraduate Students in the target institutions for the study. The table shows that 26 (9%) of the respondents were Postgraduate Students of Lead City University, while 264 (91%) of the respondents were Postgraduate Students of the University of Ibadan, which amounts to the total of 290 copies of the questionnaire that was distributed to the respondents.

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Table 3:
Distribution of Respondents by Gender

Gender	Postgraduate Students	%
Male	124	47
Female	138	53
Total	262	100

Table 3 reveals the distribution of Postgraduate Students by gender. From the total of 262 valid copies of the questionnaire, it can be deduced that 124 (47%) of the respondents were male, while, 138 (53%) of the respondents were female.

Table 4:
Distribution of Respondents by Academic Disciplines

Academic Disciplines	Postgraduate Students	%
Sciences	149	57
Humanities	113	43
Total	262	100

Table 4 shows the distribution of Postgraduate Students by academic disciplines. It can be deduced from the table that, 149 (57%) of the respondents were Postgraduate Students selected from sciences academic disciplines, while 113 (43%) were Postgraduate Students selected from Humanities academic disciplines.

Results

Research Question One: Are postgraduate students aware of academic social-networking sites for research?

Table 5:
Awareness of Postgraduate Students on Academic Social-Networking Sites (ASNSs) for Research

S/N	Items	Aware %	Not Aware %
1	Researchgate.net	42	58
2	Academia.edu	53	47
3	Zotero.org	9	91
4	Mendeley.com	20	80
5	Googlescholar.com	59	41
6	Hypothes_is.com	22	78
7	Lore.com	10	90
8	Luloot.com	12	88
9	Epernicus.com	13	87
10	Iamscientist.com	29	71
	GrandTotal	26.9	73.1

Table 5 revealed postgraduate students awareness based on each of the academic social-networking sites examined in the study. It can be deduced that 42% of the respondents were aware of Researchgate,

while 58% were not aware of Researchgate. Academia showed a considerable rate of awareness, as 53% of the respondents, and 47% were not aware. Zotero showed the least awareness of the respondents, as only 9% were aware of Zotero, while, 91% of the respondents were not aware of Zotero, this means that postgraduate students were mostly unaware of Zotero. On the other and, 20% were aware of Mendeley, and 80% were not aware of the Mendeley site. Google scholar represents the highest percentage of the respondents' awareness; with 59% said to be aware of Google Scholar, while 41% of the respondents were not aware, which makes Google scholar the academic social-networking sites that the respondents were mostly aware of.

Furthermore, 22% of the respondents were aware of the Hypothesis, while 78% were not aware. 10% of the respondents were aware of Lore, which represents the second least percentage of the respondents' awareness of particular academic social-networking sites, while 90% were not aware of Lore. 12% were aware of Luloot, and 88% of the respondents were not aware of Luloot. Epernicus attracted 13% of the respondents' awareness, while 87% were not aware of Epernicus. 29% of the respondents were aware of Iamscientist, while 71% were not aware of Iamscientist. The grand total percentage of 73% showed that postgraduate students' were not aware of academic social-networking sites, while only 27% were aware of academic social-networking sites for research. This means that; postgraduate students' were mostly unaware of academic social-networking sites for research.

Research Question Two: Where do postgraduate students' found out about academic social-networking sites for research?

Table 6:

Where Postgraduate Students Discovered about Academic Social-Networking Sites (ASNSs)

S/N	Through	%
1	Friends	29
2	Online	45
3	Lecturers	14
4	Colleagues	6
5	Conference	4
6	Parents	2
	Total	100

Table 6 reveals the analysis of where postgraduate students' found out about each of the academic social-networking sites examined in the study. The analysis shows that 29% of the respondents found out about academic social-networking sites from friends. 45% is the highest percentage of the respondents discovered academic social-networking sites through online researches. 14% of the respondents found out through their Lecturers. 6% of the respondents discovered through colleagues. 4% got aware at conferences attended, while only 2% of the respondents were told about academic social-networking sites by their parents; which represents the lowest percentage. The highest percentage of 45% means that most postgraduate students' found out about academic social-networking sites through various online researches.

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Hypothesis One

H₀₁: There is no significant difference between male and female postgraduate students' awareness of academic social-networking sites for research.

Table 7:

t-test analysis of Male and Female Postgraduate Students' Awareness of Academic Social-Networking Sites (ASNSs) for Research.

Gender	N	Mean	SD	Df	T	Sig(2-tailed)	Remark
Male	124	1.73	.24	260	-.07	.95	Accepted
Female	138	1.73	.25				

From table 7, it can be deduced that there was no significant difference between male and female postgraduate students' awareness of academic social-networking sites for research. Thus, means that the hypothesis which states that "there is no significant difference between male and female postgraduate students' awareness of academic social-networking sites for research" is accepted.

Hypothesis Two

H₀₁: There is no significant difference between sciences and humanities postgraduate students' awareness of academic social-networking sites for research.

Table 8:

t-test analysis of Sciences and Humanities Postgraduate Students' Awareness of Academic Social-Networking Sites (ASNSs) for Research.

Academic Disciplines	N	Mean	SD	Df	T	Sig(2-tailed)	Remark
Sciences	149	1.67	.26	260	-4.45	.00	Rejected
Humanities	113	1.80	.20				

Table 8 analysis revealed that there was a significant difference between sciences and humanities postgraduate students' awareness of academic social-networking sites for research. The result of the hypothesis tested; df (260) $t = -4.45$, $p < 0.05$. Thus, means that the hypothesis which states that "there is no significant difference between sciences and humanities postgraduate students' awareness of academic social-networking sites for research" is rejected. The implication is that postgraduate students' from humanities were more aware of academic social-networking sites for research than their counterparts from sciences.

Discussions and Conclusion

This study examined postgraduate students' awareness of academic social-networking sites for research in Oyo State. Findings of this study revealed that postgraduate students' were not aware of academic social-networking sites. In light of this, the researchers resolved based on observations made from this study that the respondents' unawareness of academic social-network sites was largely influenced by the level of awareness and popularity generic social-networking sites like Facebook, Twitter, Instagram and others have generated over the years as a result of their socialization features which users embrace more openly than academically inclined platforms like Academia, Mendeley, and Researchgate, amongst others.

This argument Jordan (2014) in a study on academics' equally agreed that academics were not aware of academic social-networking sites, because they were more familiar with generic social-networking sites like Facebook and Twitter. Hence, academic social-networking sites still have a long way to go in order to be able to generate as much level of awareness or popularity as Facebook and other popular social platforms. Another distinctive finding of this study revealed that most postgraduate students' that were aware of academic social-networking sites actually found out through various online research. Which means that if more encouraged, postgraduate students can find out more about academic social-networking sites and use the platforms more often for research, due to the students' considerable online presence and researches. While on another hand, the least percentage of respondents found out through their parents.

Conclusively, findings of this study, however, revealed that despite the enormous advantages, benefits and opportunities academic social-networking sites provides for research; most postgraduate students were unaware of academic social-networking sites; and thus, were not cognizant of what the platforms are used for, nor aware of the benefits and opportunities these platforms represents research and other academically inclined purposes. That said, considering the essential benefits of academic social-networking sites for research, the findings of this study showed that effort still needs to be made towards creating more awareness for the use of academic social-networking sites for research. Nevertheless, it can be concluded without a doubt that the researchers through this study enhanced postgraduate students' awareness of academic social-networking sites for research purposes.

Recommendations

Based on the findings and conclusions made in this study, the following recommendations were made:

1. Postgraduate students should be sensitized so as to increase their awareness of the use of academic social-networking sites for research purpose.
2. Both male and female postgraduate students should further be sensitized on the awareness of academic social-networking sites for research purposes, so as to avoid gender disparity in the awareness of academic social-networking sites.
3. Postgraduate students from science-related academic disciplines should also be well sensitized, to avoid disparity in terms of popularity and awareness often experienced with certain academic social-networking sites amongst academic disciplines
4. .

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