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Adoption and use of plagiarism software by postgraduate students in universities in South-west, Nigeria

Keywords: Plagiarism, plagiarism software, awareness, use, Nigeria

Introduction

Originality is an issue of serious concern in academic writing, research outputs are expected to be creative products of the writer's ingenuity. Post-graduate students carry out a lot of research, it could be for assignments, theses and dissertations, or to publish. Due to the information explosion, post-graduate students have too much information to use and it is expected that they use information ethically because deviation from this could result in plagiarism, copyright violation or intellectual property theft.

Plagiarism as a term emerged as a result of the advent of copyright laws in the 18th Century. In recent times, there has been a rise in the rate of plagiarism in tertiary institutions, this is attributed to advancement in Information and Communication Technology (ICT), information explosion and the Internet. (Adamu and Dan-Iya, 2020; Naik, Landge, and Mahender, 2015; Onuoha and Ikonne (2013). While some students plagiarise as a

result of laziness, others do due to poor research and writing skills, and the zeal to earn higher grades. (Syahid, 2019). In order to check the level of originality of research outputs, universities and publishing bodies make use of plagiarism software.

Plagiarism software are digital mechanisms that matches an author's intellectual work with the intellectual works of other scholars available on different databases on the Internet to check their level of similarities. Abduldayan, Yusuf and Olatunde (2019) define plagiarism software as computer programs that are used by academic institutions to check students' research outputs and to ensure that they are plagiarism-free. Fazilatfar, Elhambakhsh and Allami (2018) assert that plagiarism software should be used frequently by writers to check for the level of the similarity index of their works and guide against committing plagiarism. Plagiarism software makes it easy to detect plagiarism. Unlike when detection was done manually,

the process is now fast and automated and not labour intensive.

They are two main types of plagiarism software; open source and commercial. The open source plagiarism software are available for use free of charge, while the commercial plagiarism software are only used upon payment of a specific sum. Turnitin, Copyscape, iThenticate, PlagAware, Docoloc, Plag Tracker, PlagScan, etc. forms part of commercial plagiarism software available. Skandy, Viper, Plagiarism Checker X (Basic Plan), WriteCheck, etc are open source plagiarism software. Pezuk, Diniz, Pereira, Gonçalves et al (2020) found out that some of the open source software have some limitations such as inability to evaluate complete works due to limited number of word, failure to identify obvious plagiarism, inability of keeping copies of previously consulted texts, etc. These could be some of the reasons post-graduate students may choose to use commercial plagiarism software instead of their open sourced counterparts.

The number of plagiarism software available keeps increasing by the day and some students have learnt to manipulate some of these software through the use artificial intelligence tools. The university can guide the use plagiarism software by adopting specific ones to use, this can be addressed in the academic integrity policy. Choo and Paull, (2013) opine that all interest groups in the institution should be involved while formulating an academic integrity policy. What constitute plagiarism and how it should be curbed should be spelt out explicitly.

Over the years, there has been an increasing awakening on plagiarism and the need to curb it, postgraduate students of today require new abilities to be able to produce academic writings that are of global standards. Good knowledge of plagiarism software, paraphrasing skills, referencing skills, good grammatical and writing skills will play a pivotal role in helping postgraduate students write scholarly works that do not deviate from the ethical line.

When post-graduate students have the right education about plagiarism software, adoption and use becomes easy. This study focuses on the adoption and use of plagiarism software by postgraduate students in universities in South-west, Nigeria.

Objectives

The objectives of the study are to;

- i. determine the level of awareness of plagiarism software by post-graduate students in universities in South-west, Nigeria.
- ii. examine the frequency of use of plagiarism software used by post-graduate students in universities in South-west, Nigeria.
- iii. ascertain the purpose of use of plagiarism software used by post-graduate students in universities in South-west, Nigeria.
- iv. ascertain the challenges of using plagiarism software by post-graduate

students in universities in South-west, Nigeria.

Statement of the Problem

Plagiarism is a serious problem that is prevalent among postgraduate students and postgraduate students in universities in South West, Nigeria are not exempted. Lack of adequate understanding among these students about the consequences of plagiarism and the importance of proper citation importance of citing compounds the problem. The act of presenting other people's work as one's own is a serious offence that does not only undermines academic integrity but also downplays the value of hard work by students who strive for original and high-quality research. Plagiarism also damages the reputation of universities and their programs. There are several reasons why students might want to engage in plagiarism. Among others, it could be as a result of the pressure to deliver quality research in a short period of time. This pressure could tempt students to steal the work of others and present it as theirs.

Similarly, some students may lack the necessary skills or understanding to take sources and communicate them effectively, leading to inadvertent plagiarism. Another possible reason could be the effects of acceptance and use of the plagiarism software made available by universities in South-west, Nigeria. Virtually all universities running postgraduate studies in South-west Nigeria have one plagiarism software or the other that they use to check for originality of students' work based on the similarity index. But, despite the wide availability and use of plagiarism tools, some students plagiarise without realising it. The success of academic integrity of the universities in this region depends on the postgraduate students' adoption and use of the plagiarism software. It has been argued that any system is subject to failure if it is not accepted or used by targeted audience, and plagiarism software are no exception. Therefore, acceptance and use of plagiarism software among postgraduate students in universities in Southwest

Nigeria is a problem that needs to be addressed immediately. In order to empirically validate these positions, this study will examine the adoption and use of plagiarism software by postgraduate students in universities in South-west, Nigeria.

Literature review

Inadequate awareness and knowledge about plagiarism has been found to be one of the major factor why plagiarism is on a steady rise in tertiary institutions (Anney and Mosha 2015; Adiningrum and Kutieleh, 2011; Mbiliny and Msuya; 2018) It is pertinent for institutions of higher learning to create enough awareness and introduce the students to plagiarism software in order to curb plagiarism. Students' awareness of their institution's adoption of plagiarism software tend to make them produce better academic writings. (Shiang, 2019; Heckler, Rice and Bryan (2013) affirms that students who are aware that their write-ups will be subjected to plagiarism checks by their schools had lower plagiarism percentage

than those who are not. This implies that awareness of the use of plagiarism software can be used as a prevention strategy against plagiarism.

In a study conducted by Awasthi, Zain and Sukala (2022), it was found out that the faculty created more awareness of plagiarism software to the student (32.43%), the library (18.91%), social media (14.41%), the Internet (18.91%) and orientation and refresher programmes (15.31%). Rama (2019) state that the library and faculty have crucial role to play in educating the students about plagiarism and plagiarism software. Sensitisation can be achieved through the use of information literacy curricula which will educate students on how to paraphrase and reference properly. It is not enough to assume that postgraduate students are aware of different plagiarism software and how to use them. The university and the library should make conscious efforts to teach postgraduate students how to use plagiarism software.

Post-graduate students use plagiarism software for different reasons, it could be to refine their writing skills, fine tune publications, meet deadlines, to avoid academic dishonesty, to conform to research ethics, to meet the standard of supervisors' and the university (Sarwar, Moin and Jabeen; 2017). Some postgraduate students use plagiarism software to learn how to paraphrase effectively. Dodigovic (2013) opine that plagiarism software also serves as learning tools where students learn to paraphrase and make necessary adjustments to their works. Students who want to improve on their paraphrasing skills use plagiarism software to achieve that by ensuring that the meaning of the message is not lost in the process of paraphrasing.

Not all acts of plagiarism are committed intentionally, some students plagiarize unknowingly. Plagiarism software does not only help student to improve on their academic writing, it also helps them to master the skill of paraphrasing and

summarizing Waigand (2019). Plagiarism software enable students to use the intellectual contents of other researchers ethically. Plagiarism software like the Turnitin are easy to use, has an amazing speed in turning in results, can access and evaluate a wide variety of information sources, marks and grade assignments using rubrics, etc,

While plagiarism software are veritable tools used in improving the quality of academic writing, some students still have some reservations about them. Halgamuge (2016) studied some of the limitations of the plagiarism software, Turnitin and stated that; features such as matching everything including formulas and quoted text, restriction in the size and format of file that could be uploaded, dull interface, ability to manipulate the software by uploading images thereby having as low as 0% similarity index, etc. could be some of the reasons for non-adoption. (Sarwar, Moin

and Jabeen (2017) identified some of the limitations of plagiarism software that could pose as a challenge to post-graduate students utilising them to include; inability to check the validity of citations, inaccessibility to unpublished materials, inadequate number of trained professionals that can handle the software efficiently.

Cost has been identified as another reason that causes non-adoption and use of plagiarism software because most of the top rated plagiarism software are commercial based. Gasparyan, Nurmashev, Seksenbayev, Trukhachev et'al. (2017) stated that carrying out similarity checks on plagiarism software is relatively expensive thereby informing the decision to carry out selective testing. The ability of getting plagiarism software fooled was another challenge as it does not convey one hundred percent confidence on the software. Universities can help out by acquiring institutional licenses from specific

plagiarism software and making the software available for use by post-graduate students in the course of studying.

Methodology

This study adopted a survey design to examine the adoption and use of plagiarism software by postgraduate students in universities in South-west, Nigeria. The population of the study comprised 102 postgraduate students of Library and Information Studies in three universities in South-west, Nigeria. (See Fig. 1). Thirty-four post-graduate students from the department of library and information

science from each of the universities were randomly selected for the study. A set of structured questionnaires was used for data collection. The questionnaire contained four sub-scales on level of awareness of plagiarism software, frequency of use of plagiarism software, purpose of use of plagiarism software and challenges of using plagiarism software by post-graduate students. 102 copies of the questionnaire were administered to postgraduate students of selected Universities and same were retrieved. The collected data was analysed using the Statistical Package for the Social Sciences.

4.0 Results and Discussion of Finding

The section presents the analyses, results and discussions about the dataset obtained for the study.

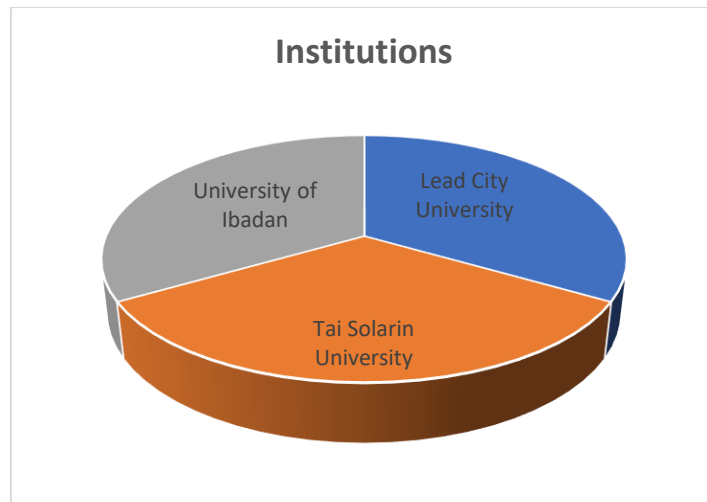


Figure 1: Respondents' Institutions

The demographic information about the respondents' institution as shown in Figure 1 reveals that all the three institutions used in the study (University of Ibadan, Tai Solarin university and Lead City university) all have equal proportion of respondents; 34(33.3%) respectively.

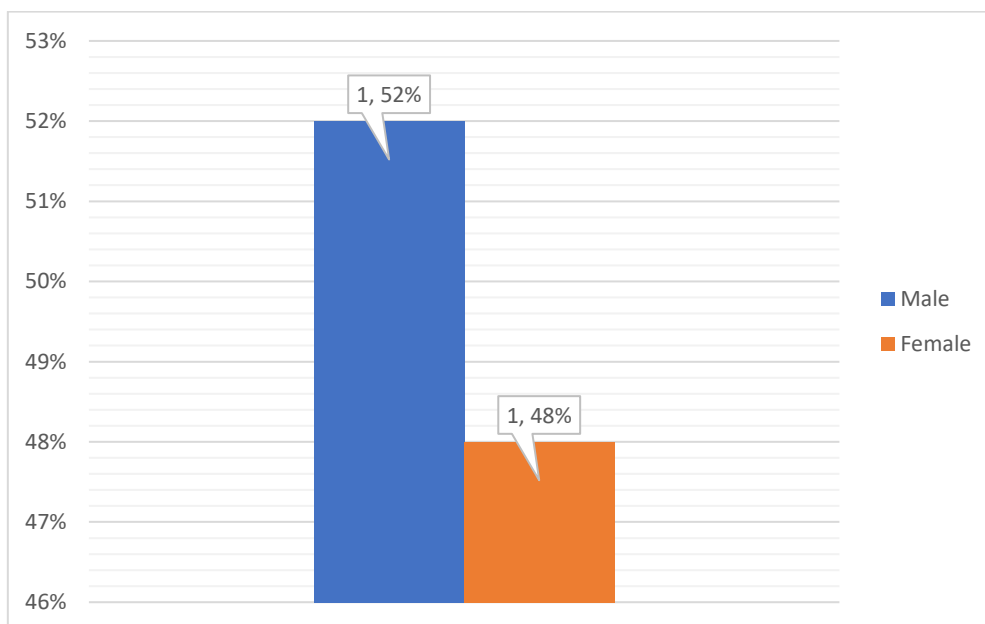


Figure 2: Gender of the Respondents

In terms of the gender of the respondents, Figure 2 shows that the study is largely dominated by the male respondents with 53(52.0%) respondents while the remaining 49(48.0%) are females.

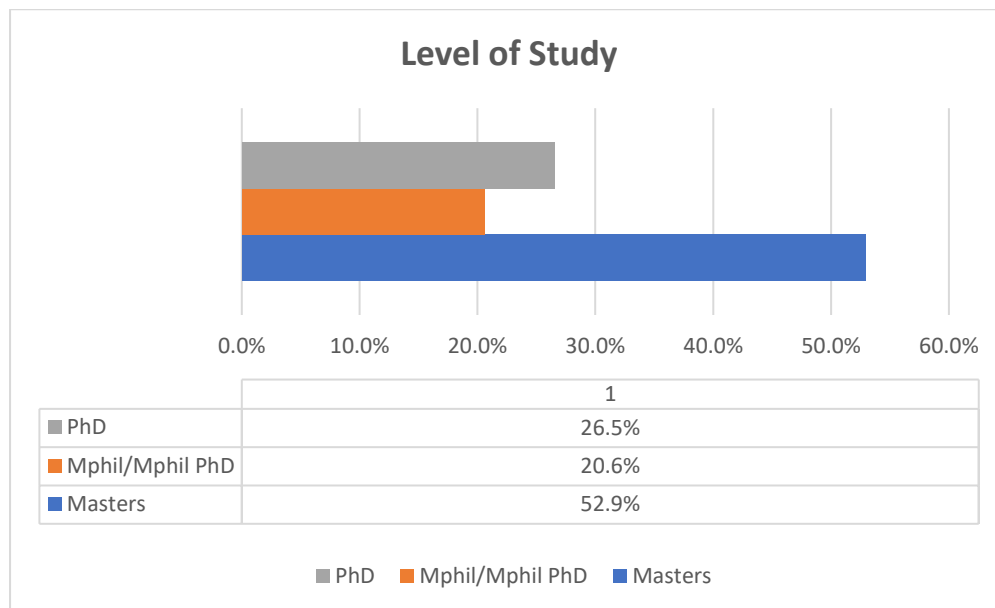


Figure 3: Respondents’ Level of study

The demographic information about the respondents level of study reveals in Figure 3 that majority of the respondents; 54(52.9%) possessed master’s certificates, followed by 27(26.5%) who are Ph.D holders while the remaining 21(20.6%) possessed M.Phil./M.Phil./Ph.D. certificates.

Research question one: What is the level of awareness of plagiarism software by post-graduate students in universities in South-west, Nigeria?

Table 1 presents the result of the degree of awareness of plagiarism software by the post-graduate students in universities in South-west, Nigeria.

Table 1: The awareness level of plagiarism software by postgraduate students

S/N	Items	VA	A	FA	NA	\bar{x}	Std Dev
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1.	iThenticate	26 25.50%	22 21.60%	17 16.70%	37 36.30%	2.36	1.217
2.	Turnitin	77 75.50%	8 7.80%	17 16.70%	0 0.00%	3.59	.762
3.	Copyscape	7 6.90%	32 31.40%	22 21.60%	41 40.20%	2.05	.999
4	Docoloc	3 2.90%	9 8.80%	28 27.50%	62 60.80%	1.54	.779
5.	Plag Tracker	10 9.80%	24 23.50%	25 24.50%	43 42.20%	2.01	1.029
6.	PlagScan	7 6.90%	21 20.60%	27 26.50%	47 46.10%	1.88	.968
7.	Skandy	8 7.80%	11 10.80%	24 23.50%	59 57.80%	1.69	.954
8.	Viper	5 4.90%	18 17.60%	28 27.50%	51 50.00%	1.77	.911
9.	Plagiarism Checker X	42 41.20%	22 21.60%	18 17.60%	20 19.60%	2.84	1.167
10.	WriteCheck	20 19.60%	21 20.60%	19 18.60%	42 41.20%	2.19	1.175
11.	PlagAware	2 2.00%	22 21.60%	29 28.40%	49 48.00%	1.77	.855
12.	Quetext	8 7.80%	21 20.60%	25 24.50%	48 47.10%	1.89	.994
13.	Dupli checker	15 14.70%	17 16.70%	20 19.60%	50 49.00%	1.97	1.121

14.	Copy Leak	7 6.90%	17 16.70%	31 30.40%	47 46.10%	1.84	.941
15.	Plagiarisma	21 20.60%	18 17.60%	24 23.50%	39 38.20%	2.21	1.163
16.	Plagium	6 5.90%	18 17.60%	24 23.50%	54 52.90%	1.76	.946
17.	ProWritingAid	5 4.90%	20 19.60%	22 21.60%	55 53.90%	1.75	.938
18.	PaperRater	6 5.90%	17 16.70%	28 27.50%	51 50.00%	1.78	.929
19.	Noplug	1 1.00%	8 7.80%	27 26.50%	66 64.70%	1.45	.684
20.	Unicheck	4 3.90%	22 21.60%	24 23.50%	52 51.00%	1.78	.919
Weighted mean =2.01; Std. dev=0.97							

Table 1 examines the prevalence of awareness of plagiarism software by post-graduate students in universities in South-west, Nigeria. The result shows that the respondents indicated that some areas of plagiarism they are most aware of include: Turnitin (\bar{x} =3.59; std dev. = .762); Plagiarism Checker X (\bar{x} =2.84; std dev. = 1.167); iThenticate (\bar{x} =2.36; std dev. 1.217) and Plagiarisma (\bar{x} =2.21; std dev. = 1.163) while the least plagiarism awareness was Noplug (=1.45; std dev. = .684), followed by docoloc (\bar{x} =1.54; std dev. = .779). To be able to determine the level of awareness of plagiarism software by post-graduate students in universities in South-west, Nigeria, a test of norm was conducted and the result is presented in Table 2.

Table 2: Test of norm showing the level of awareness of plagiarism software by post-graduate students

Interval	Level of Hedonic motivation	Mean
0-1.67	Low	
1.68-3.33	Moderate	2.01
3.34-5.00	High	

Results in Table 2 shows that scale between 0-1.67 is low, 1.68-3.33 is moderate while 3.34-5.00 is high. The overall mean for the awareness of plagiarism software by post-graduate students in universities in South-west, Nigeria is “2.01” which falls between the scales “1.68-3.33”. It can therefore be concluded that the level of awareness of the different plagiarism software by post-graduate students in universities in South-west, Nigeria is moderate/average.

Research question two: What is the frequency of use of plagiarism software used by post-graduate students in universities in South-west, Nigeria?

The result of the frequency of use of plagiarism software used by post-graduate students in universities in South-west, Nigeria is presented in Table 3.

Table 3: The frequency of use of plagiarism software by postgraduate students

S/N	Items	W	M	O	N	\bar{x}	Std Dev
1.	iThenticate	5 4.90%	0 0.00%	29 28.40%	68 66.70%	1.43	.738
2.	Turnitin	19 18.60%	17 16.70%	48 47.10%	18 17.60%	2.36	.983
3.	Copyscape	4	6	22	70	1.45	.779

		3.90%	5.90%	21.60%	68.60%		
4	Docoloc	2	5	12	83	1.27	.647
		2.00%	4.90%	11.80%	81.40%		
5.	Plag Tracker	5	4	24	69	1.46	.792
		4.90%	3.90%	23.50%	67.60%		
6.	PlagScan	4	6	22	70	1.45	.779
		3.90%	5.90%	21.60%	68.60%		
7.	Skandy	2	4	15	81	1.28	.635
		2.00%	3.90%	14.70%	79.40%		
8.	Viper	4	1	21	76	1.34	.696
		3.90%	1.00%	20.60%	74.50%		
9.	Plagiarism Checker X	14	8	36	44	1.92	1.031
		13.70%	7.80%	35.30%	43.10%		
10.	WriteCheck	8	7	24	63	1.61	.924
		7.80%	6.90%	23.50%	61.80%		
11.	PlagAware	4	6	16	76	1.39	.773
		3.90%	5.90%	15.70%	74.50%		
12.	Quetext	6	5	17	74	1.44	.839
		5.90%	4.90%	16.70%	72.50%		
13.	Dupli checker	9	4	22	67	1.56	.929
		8.80%	3.90%	21.60%	65.70%		
14.	Copy Leak	5	4	14	79	1.36	.781
		4.90%	3.90%	13.70%	77.50%		
15.	Plagiarisma	8	8	28	58	1.67	.926
		7.80%	7.80%	27.50%	56.90%		
16.	Plagium	8	4	11	79	1.42	.895
		7.80%	3.90%	10.80%	77.50%		
17.	ProWritingAid	10	2	16	74	1.49	.941

		9.80%	2.00%	15.70%	72.50%		
18.	PaperRater	4	4	23	71	1.42	.750
		3.90%	3.90%	22.50%	69.60%		
19.	Noplug	5	3	11	83	1.31	.758
		4.90%	2.90%	10.80%	81.40%		
20.	Unicheck	4	3	21	74	1.38	.732
		3.90%	2.90%	20.60%	72.50%		
Weighted mean =1.50; Std. dev=0.82							

Key: W= Weekly, M=Monthly, O=Occasionally, N=Never

Table 3 discusses the use of plagiarism software by postgraduate students in universities in South-west, Nigeria. The result shows that the respondents indicated that some of the mostly used plagiarism software include: Turnitin (\bar{x} =3.59; std dev. = .983); Plagiarism Checker X (\bar{x} =1.92; std dev. = 1.031); Plagiarisma (\bar{x} =1.67; std dev. = .926) and WriteCheck (\bar{x} =1.61; std dev. = .924) while the least used plagiarism software was Docoloc (=1.27; std dev. = .647), followed by Skandy (\bar{x} =1.28; std dev. = .635). To be able to ascertain the frequency of use of plagiarism software by postgraduate students in universities in Southwest, Nigeria, a threshold of $\bar{x} = \frac{4+1}{2} = 2.50$ is applied. Since the overall weighted mean $\bar{x} = 1.50$, std dev.= 0.82, is lower than the threshold of 2.50. One can, therefore, conclude that the respondents have low/seldom use of plagiarism software. It can therefore be concluded that the frequency of use of plagiarism software by postgraduate students in universities in Southwest, Nigeria is low/seldom.

Research question 3: What is/are the purpose(s) of use of plagiarism software by postgraduate students in universities in South-west, Nigeria?

Table 4: The purpose of use of plagiarism software by postgraduate students

S/N	Items	SA	A	D	SD	\bar{x}	Std Dev
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1.	I use plagiarism software to refine my writing skills	46 45.10%	47 46.10%	7 6.90%	2 2.00%	3.34	.696
2.	Learning how to paraphrase effectively is one of the reason I make use of plagiarism software	42 41.20%	53 52.00%	6 5.90%	1 1.00%	3.33	.635
3.	Meeting up with submission deadlines is a reason why I use plagiarism software	24 23.50%	43 42.20%	34 33.30%	1 1.00%	2.88	.775
4	I use plagiarism software to check my papers so that they can be accepted for publication by reputable journals	56 54.90%	36 35.30%	10 9.80%	0 0.00%	3.45	.669
5.	I use plagiarism software to avoid committing plagiarism	76 74.50%	25 24.50%	1 1.00%	0 0.00%	3.74	.465
6.	I use plagiarism software to check my theses/dissertations so that they can be accepted for submission by my school.	65 63.70%	32 31.40%	5 4.90%	0 0.00%	3.59	.586
7.	Conforming to research ethics is a reason why I use plagiarism software.	66 64.70%	32 31.40%	4 3.90%	0 0.00%	3.61	.566
8.	I use plagiarism software to meet the standard of my supervisor	43 42.20%	47 46.10%	12 11.80%	0 0.00%	3.30	.672
9.	I use plagiarism software to learn with the intent of teaching others how to use it.	24	47	31	0	2.93	.735

		23.50%	46.10%	30.40%	0.00%		
10.	Helping people check their works for a fee is one of the reason why I use plagiarism software.	27	33	42	0	2.85	.813
		26.50%	32.40%	41.20%	0.00%		
Weighted mean=3.30; Std. dev=0.66							

Key: SA= Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree

Table 4 explains the of use of plagiarism software by post-graduate students in universities in South-west, Nigeria. The result shows that the respondents indicated that some of the germane purpose(s) of using plagiarism software tools include: to avoid committing plagiarism-related frauds (\bar{x} =3.74; std dev. = .4653); conforming to research ethics is a reason why I use plagiarism software (\bar{x} =3.61; std dev. = .566); checking of theses/dissertations so that they can be accepted for submission by my school (\bar{x} =3.59; std dev. = .566); checking for papers so that they can be accepted for publication by reputable journals (\bar{x} =3.45; std dev. = .669) and using of plagiarism software to refine their writing skills (\bar{x} =1.61; std dev. = .924) while the least used plagiarism software was using plagiarism software to help people check their works for a fee is one of the reason of using plagiarism software (=1.27; std dev. = .647), followed by the use of plagiarism software to learn with the intent of teaching others how to use it (\bar{x} =2.93; std dev. = .735). on this basis, it can be concluded that some of the purpose(s) of use of plagiarism software by post-graduate students in universities in South-west, Nigeria, include: to avoid committing plagiarism-related frauds, conforming to research ethics is a reason why I use plagiarism software, checking of theses/dissertations so that they can be accepted for submission by my school, checking for papers so that they can be accepted for publication by reputable journals, using of plagiarism software to refine their writing skills among others.

Research question four: What are the challenges of using plagiarism software by post-graduate students in universities in South-west, Nigeria?

Table 5: Challenges of using plagiarism software by postgraduate students

S/N	Items	SA	A	D	SD	\bar{x}	Std Dev
1.	Lack of knowledge about the availability of plagiarism software	33 32.40%	34 33.30%	35 34.30%	0 0.00%	2.98	.820
2.	Inadequate knowledge about how to use plagiarism software	36 35.30%	41 40.20%	25 24.50%	0 0.00%	3.11	.770
3.	Matching every word, direct quotations and formulas discourages me from using plagiarism software	28 27.50%	36 35.30%	38 37.30%	0 0.00%	2.90	.802
4	The ability to manipulate plagiarism software reduces my confidence in them	20 19.60%	26 25.50%	56 54.90%	0 0.00%	2.65	.792
5.	Poor usability design does not make the use of plagiarism software exciting for me.	21 20.60%	29 28.40%	52 51.00%	0 0.00%	2.70	.793
6.	Access to steady power supply pose as a challenge when using plagiarism software	34 33.30%	44 43.10%	24 23.50%	0 0.00%	3.10	.751
7.	Cost of subscription is reason why I do not make use of plagiarism software.	42 41.20%	38 37.30%	22 21.60%	0 0.00%	3.20	.771
8.	Poor internet connection affects me when using plagiarism software.	27 26.50%	50 49.00%	25 24.50%	0 0.00%	3.02	.717

9.	Inaccurate reporting of the originality reports makes me have some reservations about plagiarism software.	18 17.60%	51 50.00%	33 32.40%	0 0.00%	2.85	.695
10.	Inaccessibility to materials that are not published on the internet	27 26.50%	49 48.00%	26 25.50%	0 0.00%	3.01	.724
11.	Restriction in the size and format of files that could be uploaded	29 28.40%	47 46.10%	26 25.50%	0 0.00%	3.03	.737
Weighted mean=2.96; Std. dev=0.76							

Key: SA= Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree

Table 5 describes some of the challenges militating against the use of plagiarism software by post-graduate students in universities in South-west, Nigeria. The result shows that the respondents indicated that some of the impeding the use of plagiarism software tools include: cost of subscription (\bar{x} =3.20; std dev. = .771); inadequate knowledge about how to use plagiarism software (\bar{x} =3. 11; std dev. = .770); lack of access to steady power supply (\bar{x} =3. 10; std dev. = .566); and restriction in the size and format of files that could be uploaded (\bar{x} =3.03; std dev. = .737) while

the least constraint towards the use of plagiarism software was ability to manipulate plagiarism software reduces my confidence in them (=2.65; std dev. = .792), followed by poor usability design (\bar{x} =2.705; std dev. = .793). On this basis, it can be concluded that some of the challenges militating against the use of plagiarism software by post-graduate students in universities in South-west, Nigeria, include: cost of subscription, inadequate knowledge about how to use plagiarism software, lack of access to steady power supply, restriction in the size

and format of files that could be uploaded among others.

Discussion of Findings

Research question one: What is the level of awareness of plagiarism software by post-graduate students in universities in South-west, Nigeria?

Findings of this study showed that the level of awareness of plagiarism software by post-graduate students in universities in South-west, Nigeria is moderate/average.

Research question two: What is the frequency of use of plagiarism software used by post-graduate students in universities in South-west, Nigeria?

It was also discovered through the findings of this study that the frequency of use of use of plagiarism software by postgraduate students in universities in Southwest, Nigeria is low/seldom.

Research question 3: What is/are the purpose(s) of use of plagiarism software by

post-graduate students in universities in South-west, Nigeria?

Some of the purpose(s) of use of plagiarism software by post-graduate students in universities in South-west, Nigeria, according to the findings of this study, include: to avoid committing plagiarism-related frauds, conforming to research ethics is a reason why I use plagiarism software, checking of theses/dissertations so that they can be accepted for submission by my school, checking for papers so that they can be accepted for publication by reputable journals, using of plagiarism software to refine their writing skills among others.

Research question four: What are the challenges of using plagiarism software by post-graduate students in universities in South-west, Nigeria?

Findings of this study revealed that some of the predominant challenges militating against the use of plagiarism software by post-graduate students in universities in South-west, Nigeria, include: cost of

subscription, inadequate knowledge about how to use plagiarism software, lack of access to steady power supply, restriction in the size and format of files that could be uploaded among others.

Conclusion

The study investigated adoption and use of plagiarism software by postgraduate students in universities in South-west, Nigeria. The study concludes that the level of awareness of plagiarism software by postgraduate students in Southwest Nigeria is moderate and the frequency of use of plagiarism software is low. Postgraduate students use plagiarism software to refine their writing, paraphrase effectively, to write good journals, among others. Key challenges facing the use of plagiarism software by postgraduate students are lack of knowledge of plagiarism software, lack of knowledge on how to use plagiarism software, poor usability design of plagiarism software and cost.

Recommendation

Based on the findings of the study, the following recommendations are hereby made:

- The result of the study reveals a moderate level of awareness and low level of use of plagiarism software by postgraduate students. Postgraduate students should take a course on plagiarism and ethical use of information at the beginning of their programs.
- A seminar on plagiarism should be held every semester and spread within the faculties.
- Every postgraduate student should be registered on the school's plagiarism software platform upon enrolment.
- Assignments should be tested for originality and not just thesis and projects. This will increase awareness about plagiarism software, increase the frequency of use of plagiarism software and help

students learn how to use these software.

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