Master students' perception on plagiarism during research writing in faculty of education

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Abstract

The study was on master students' perception on plagiarism during research writing in the Faculty of Education. This study answered and tested four research questions and six hypotheses at a 0.05 significant level. The study used Imo State University (IMSU) and the University of Port Harcourt (UPH), a descriptive survey design, 276 master students' population, and a sample size of 95 students drawn through a stratified random sampling technique. The instrument was a 37-item Questionnaire on Ethical Issues and Plagiarism in the Faculty of Education (QETPFE) with a 0.85 reliability index. Data analyses were done through the Statistical Package for Social Sciences using mean, standard deviation, percentage, and t-tests. The findings showed that the master's students in the Faculty of Education at IMSU and UPH have positive perceptions of the ethical rules governing people's work usage during thesis writing; the perception differed significantly based on gender but was insignificant on an institutional basis. Their plagiarism consequences awareness level was high, irrespective of gender and institution. The male and female students in the Faculty of Education of both universities can paraphrase referenced materials themselves without paying someone for it and use online paraphrasing tools to re-write referenced materials in their theses. The findings implied that female students are more prone to plagiarism than male students. The recommendation, among others, was that postgraduate lecturers emphasize the need for male and female students to adhere strictly to the ethical standards governing other authors' intellectual property usage.

INTRODUCTION

Ethical use of Information and Communication Technology (ICT) has become an issue of concern in the modern-day education system. The Association of Educational and Communication Technology (AECT) in 2008 defined the field of Educational Technology as follows: "Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing of appropriate technological processes and resources" (AECT Definition and Terminology Committee, 2008:1 cited in Reiser, 2008). The definition of Educational Technology points to what, why, how, and the tools of the field through its essential elements; therefore, being a field that requires constant study with empirical evidence to facilitate students' learning and improve their performance,

the AECT highlighted and described the ethical principles that should guide the practices of Educational Technology professionals and students.

As stated in the different sections of the AECT Ethical Code, Educational Technologists have certain obligations to fulfill to each learner, society, and profession to maintain standards and carry out their responsibilities through best practices. Thus, in section 3 number 5 of the AECT Code of Professional Ethics, it has been stipulated that members "shall represent personal professional qualifications and the professional qualifications and evaluations of colleagues accurately, including giving accurate credit to those whose works and ideas are associated with publishing in any form" (AECT, 2018); this brought to the limelight the need for both educators and students to respect and acknowledge the intellectual properties of others when used in research and academic publications.

Writings and publications should be people's original ideas or expressions that emanate from daily experiences, research, and studies; however, for an author to authenticate any issue of discourse or to provide proven evidence (that may agree or disagree) to findings, there is always a need to search for and use the works/ideas of other authors who have previously written or researched on similar areas. The University of New South Wales (UNSW) Sydney (2019) remarked that every research builds on previous ones to some extent.

The ICT era has also simplified the accessibility of information, such that authors can always get materials from the Internet, in addition to the textbooks, journals, and other materials from the physical libraries for their writings; these, therefore, leave authors with undoubted choice of citing their information sources. Various associations like the American Psychological Association (APA) and the Chicago and Modern Language Association (MLA) have provided authors with guidelines on how to cite their information sources in the body of the work and the reference section. Some authors, however, have resolved to copy and paste syndrome without properly comprehending, interpreting, and paraphrasing the copied ideas of other authors and citing them, thus facing the problem of plagiarism.

Plagiarism remains one of the most unethical issues that render scholars' publications and certifications worthless in the academic world. According to IEEE (2020), plagiarism refers to reusing another person's previous words, results, or processes and refusing to acknowledge the owner or source. IEEE also noted that some aspects of paraphrasing could be plagiarism when an author changes some words or reorganizes the sentence arrangement in someone else's work without crediting the original author. Therefore, apart from plagiarizing another person's work, there are cases of self-plagiarism (Visser, Heidegger &

Papanikolopoulos, 2012). Self-plagiarism is when an author reuses his ideas from a previous publication(s) subsequently without adequate referencing. Visser, Haidegger and Papanikolopoulos stressed that self-plagiarism negatively affects publication quality and copyrights.

Thus, plagiarism occurs when an author claims ownership of another author's ideas or findings or even reclaims his ideas when writing subsequently without proper citations. IEEE (2020) identified several plagiarism levels as stealing someone's full paper, some parts, a page, paragraph, sentence, or phrases without quotations or references. Plagiarism is, therefore, considered a severe academic theft or fraud and a violation of ethical standards that attracts professional and legal punishments. IEEE remarked that plagiarism cases have led to the banning of many authors from IEEE publications. Bailey, cited in Donovan (2019), noted that a plagiarist will be caught in the long run; this renders the issue of plagiarism a very critical one that calls for a high level of sincerity among authors. Therefore, to avoid plagiarism, Hampton (2019) suggested that writers should "take good notes, cite correctly, use quotes effectively, and paraphrase correctly".

With the cases of plagiarism fast gripping the academic world, software developers have built special software, called plagiarism software, for detecting a plagiarised paper. Although many plagiarisms software exist with different names (such as Turnitin, Plagscan, and Smallseotools, among others), based on their developers, they primarily detect plagiarised work by scanning through the online information database and produce reports, which highlight any word or phrase that matches with that in the database and also provide the source of such work with its percentage similarity. Plagiarism software has generally remained effective in detecting plagiarism; however, Visser, Haidegger and Papanikolopoulos (2012) confirmed that it always has the problem of detecting common citations and using previous technical reports as plagiarism. Foltýnek et al. (2020) also revealed that some plagiarism checking tools, which can detect plagiarisms fall short in identifying all cases and often see non-plagiarized content as a problem. Visser, Haidegger and Papanikolopoulos further suggested using a peer-review process as an initial security against plagiarism. The peer-review process helps professionals and editors in every field to identify suspected plagiarism cases and to take necessary action against them.

Owing to the high demands for research and publications, plagiarism has recently become a serious issue, especially among students in higher institutions. Many universities have put different measures in place to curb the menace of plagiarism, especially among master

students, and to ensure the quality of the students' research outputs. For instance, the University of Port Harcourt appointed an ethics committee in the School of Master Studies to handle plagiarism issues. The institution made it compulsory for all master students to subject their thesis reports to plagiarism testing in the School of Master Studies before the Master school defense and set the maximum percentage for plagiarism reports at both Master's and PhD levels at 20 and 15 percent, respectively, to accommodate some reoccurring words or phrases in research, such that any thesis report that exceeds these set criteria will not proceed for the Master school defense. From the plagiarism test results published by the School of Master Studies weekly, observations showed that more than 90 percent of these master students fail their plagiarism test at the first submission. Some students resubmit their work more than five times before scaling through the plagiarism testing. There have been a series of delays in students' expected graduation period since they want to reduce the plagiarism level in their thesis report to the University's plagiarism standard. The University even expelled some students due to a high percentage of plagiarism results. With these over-rising problems among master students in some Nigerian universities due to plagiarism, one could ask, are the master students unaware of the ethical standards that govern the use of people's work while writing their thesis to avoid plagiarism?

There are some studies on plagiarism. Abduldayan, Yusuf and Olatunde (2019) studied how Federal University of Technology, Minna, students perceived using Turnitin and discovered the presence of a moderate level of students' unawareness about plagiarism. Idiegbeyan-ose, Nkiko and Osinulu (2016) examined the rate at which masters in Ogun State universities perceived and were aware of plagiarism. From their findings, the master students knew about plagiarism at an average level. Kokkinakil, Demoliou and Iakovidou (2015) looked into how Cyprus students perceived the plagiarism policies and found that students were positively using plagiarism software to bring down plagiarism. Krokoscz and Ferreira (2019) examined how students in a Brazilian university understand plagiarism theories and practices and ascertained a breach in the students' knowledge of plagiarism theories and practices. Manar and Shameem (2014) investigated how Saudi Arabian university students feel about cheating and plagiarism. They discovered that the students considered plagiarism and cheating unethical but indulged in them. Additionally, Selemani, Chawinga and Dube (2018) investigated how much knowledge students have about plagiarism, the type of plagiarism among students, students' rationale for committing plagiarism, and how Mzuzu University treats the issue of plagiarism among master students. Their findings disclosed that the students had fair

knowledge about plagiarism and did it consciously and unconsciously due to inadequate writing skills, laziness, and others; also, the university sanctions plagiarists by cautioning them and giving them a second chance to re-write their works.

Plagiarism abounds in the world of academics; however, there is little or no attention to understanding how master students, especially in the Faculty of Education at Imo State University and the University of Port Harcourt, perceive and are aware of the ethical issues guiding plagiarism when writing their theses; this, therefore, mandated this study. The objectives of this research are: 1. to find out the perception of the master students of the Faculty of Education at Imo State University and the University of Port Harcourt on the ethical rules that govern the use of people's work during thesis writing. 2. to ascertain how aware the master students in the Faculty of Education at Imo State University and the University of Port Harcourt are about the consequences of plagiarism. 3. to understand how master students in the Faculty of Education in Imo State University and the University of Port Harcourt paraphrase reference materials in their theses. 4. to discover the plagiarism tools master students in the Faculty of Education at Imo State University and the University of Port Harcourt mostly use for plagiarism checking.

The null hypotheses (tested at 0.05 significant level) were: 1. Male and female master students' perceptions of the ethical rules governing people's work utilization during thesis writing do not differ significantly in the Faculty of Education at Imo State University and the University of Port Harcourt. 2. There is no significant difference in the male and female master students' awareness of the consequences of plagiarism in the Faculty of Education at Imo State University and the University of Port Harcourt. 3. There is no significant difference in how male and female master students in the Faculty of Education at Imo State University and the University of Port Harcourt paraphrase reference materials in their theses. 4. Master students' perception of the ethical rules that govern the use of people's work during thesis writing does not differ significantly based on the institutions. 5. Master students' awareness of plagiarism consequences does not differ significantly based on the institutions. 6. How master students paraphrase reference materials in their theses does not differ significantly based on the institutions.

This study will benefit educational stakeholders in different ways. Students will understand what academic integrity entails, the importance of adhering to ethical standards in research, plagiarism consequences, and the need to develop strong paraphrasing skills. This study will guide educators in emphasizing ethical research practices in their curricula and

teachings and conduct seminars on proper citation methods and how to avoid plagiarism. The university administrators will understand the need to make policies relating to academic honesty and plagiarism-detection tools utilization. This study will guide accreditation bodies and policymakers in evaluating the state of academic integrity within institutions, which will influence accreditation decisions and policy development. Future researchers will build upon the findings to identify innovative and sustainable solutions to plagiarism and academic dishonesty. The study, therefore, promotes an attitude of honesty and respect for intellectual property among students, which is a key to knowledge advancement in education.

METHOD

A descriptive survey design guided this study. The study's population was two hundred and seventy-six (276) master students in the Faculty of Education at Imo State University (123 – Source: Dean, Faculty of Education, Imo State University) and the University of Port Harcourt (153 – Source: School of Master Studies, University of Port Harcourt) in the 2022/2023 academic session. The researchers used a Stratified random sampling technique to select 95 students as the sample size (N). The researchers developed an instrument, Questionnaire on Ethical Issues and Plagiarism in the Faculty of Education (QETPFE), for data collection. QETPFE had five sessions (sessions A to E). Section A focused on gathering information on the students' demography and sections B to E elicited responses that corresponded to each research question using rating scales of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD), and Much Aware (MA), Aware (A), Less Aware (LA) and Not Aware (NA) with 4 points for SA and MA, 3 points for A, 2 points for D and LA, and 1 point for SD and NA. The 2.50 midpoint was the criterion point. The instrument was face and content validated and tested for reliability using the Cronbach alpha method to get a 0.85 alpha coefficient. The researchers distributed the instrument to the master students via Google form and analyzed the collected data in SPSS using mean, standard deviation (StdDev), and percentage and tested the null hypotheses with an independent t-test at 0.05 alpha level.

RESULTS

Research Question 1: What is the perception of the master students in the Faculty of Education at Imo State University and the University of Port Harcourt on the ethical rules that govern the use of people's work during thesis writing?

Table 1. Mean analysis of master students' perception of the ethical rules that govern the use of people's work during thesis writing

Items	SA	A	D	SD	N	Mean	StDev	Decision
1. I must cite all the authors I used their works in my thesis	72	23			95	3.76	0.43	Agreed

Items	MA	A	LA	NA	N	Mean	StdDev	Decision
2. I must not claim another author's idea or work as my own	74	21			95	3.78	0.42	Agreed
3. I must not use any part of my previous publications in my thesis without citing it	54	27	11	3	95	3.39	0.82	Agreed
4. I must read and understand an author's idea before paraphrasing them in my own words	63	32			95	3.66	0.48	Agreed
5. I must cite the author whose ideas I paraphrased in my thesis.	52	36	4	3	95	3.44	0.73	Agreed
6. I understand that the total number of citations in the body of my thesis must correspond to that in the reference section.	73	19	3		95	3.74	0.51	Agreed
7. I must put quotation marks when stating an author's idea that is less than 40 words verbatim.	57	25	7	6	95	3.40	0.88	Agreed
8. I must indent an author's idea that is above 40 words in my thesis	48	37	3	7	95	3.33	0.86	Agreed
9. I must use the University-recommended referencing style (the American Psychology Association, APA, the sixth or seventh edition) in my references	77	18			95	3.81	0.39	Agreed
10. I understand the importance of writing my thesis by myself.	69	26			95	3.73	0.45	Agreed
11. I must avoid the use of special characters, (like 0 and @ in place of o and at, respectively) in my thesis	34	36	13	12	95	2.97	1.01	Agreed
12. I must ensure that the title of my thesis matches the content.	67	22	3	3	95	3.61	0.70	Agreed
13. I must avoid the use of too many abbreviations in my thesis	37	43	12	3	95	3.20	0.80	Agreed
14. I should ensure that the authors cited were referenced accordingly	69	26			95	3.73	0.45	Agreed
15. I should avoid copying and pasting from the Internet	63	32			95	3.66	0.48	Agreed
Grand Mean						3.56		Positive

Table 1 shows that the master students in the Faculty of Education at IMSU and UPH agreed to all the item statements since their mean scores are above the 2.50 criterion mean. Also, the 3.56 grand mean is above the 2.50 criterion mean and reveals that the master students in the Faculty of Education at IMSU and UPH have positive perceptions concerning the ethical rules governing people's work utilization during thesis writing.

Research Question 2: How aware are the master students in the Faculty of Education in Imo State University and the University of Port Harcourt on the consequences of plagiarism?

Table 2. Mean analysis of the master students' awareness level of the consequences of plagiarism

Items	MA	A	LA	NA	N	Mean	StdDev	Decision
1. Plagiarism can lead to my expulsion from the University	40	43	12		95	3.29	0.68	Agreed
2. Plagiarism can delay my graduation period from the University	64	28	3		95	3.64	0.54	Agreed

	SA	A	D	SD	N	Mean	StdDev	Decision
3. Plagiarism can render my certificates worthless	46	31	12	6	95	3.23	0.91	Agreed
4. Plagiarism can tarnish my image as a student	57	22	13	3	95	3.40	0.84	Agreed
5. Plagiarism can hinder me from publishing	64	18	3		95	3.64	0.54	Agreed
6. Plagiarism can disqualify my membership in professional bodies	41	36	18		95	3.24	0.75	Agreed
7. Plagiarism can lead to my imprisonment	24	37	19	15	95	2.74	1.01	Agreed
Grand mean						3.32		High

Table 2 displays that the master students in the Faculty of Education at IMSU and UPH agreed to all the item statements since their mean scores are above the 2.50 criterion mean. The 3.32 grand mean is above the 2.50 criterion mean and reveals that the master students in the Faculty of Education at IMSU and UPH are highly aware of the consequences of plagiarism.

Research Question 3: How do master students in the Faculty of Education at Imo State University and the University of Port Harcourt paraphrase reference materials in their theses?

Table 3. Mean analysis of how master students paraphrase reference materials in their theses

Items	SA	A	D	SD	N	Mean	StdDev	Decision
1. I can paraphrase referenced materials in my thesis by myself	41	48	6		95	3.37	0.60	Agreed
2. I use online paraphrasing tools to paraphrase referenced materials in my thesis	10	45	31	9	95	2.59	0.81	Agreed
3. I usually pay someone to do the paraphrasing job for me when writing my thesis	3	12	53	27	95	1.91	0.73	Disagreed
4. I do not see the need to paraphrase referenced materials in my thesis	3	7	48	37	95	1.75	0.73	Disagreed

Table 3 indicates that the master students in the Faculty of Education in IMSU and UPH agreed with the item statements numbers 1 and 2, whose mean scores of 3.37 and 2.59, respectively, are above the 2.50 criterion mean, but disagreed with the statement numbers 3 and 4 whose mean scores of 1.91 and 1.75 respectively, are below the 2.50 criterion mean.

Research Question 4: Which plagiarism tools do master students in the Faculty of Education at Imo State University and the University of Port Harcourt mostly use for plagiarism checking?

Table 4. Percentage analysis of the plagiarism tools master students use mostly to check for plagiarism

No	Items	Responses	N	% Response
1.	Turnitin	68	95	71.58
2.	Plagscan	19	95	20
3.	Copyleaks	3	95	3.16

4.	Logo plagiarism checker	6	95	6.32
5.	PaperRater	0	95	0
6.	Quetext	11	95	11.58
7.	Viper plagiarism scanner	11	95	11.58
8.	Duplichecker	7	95	7.37
9.	Grammarly plagiarism	35	95	36.84
10.	SmallSeoTools Plagiarism checker	9	95	9.47
11.	Others, please specify: ………………...	Autochecker, Dubli Checker, Plagiarism checker, Quillboat, Xchecker, Plagiarism text, Unicheck, Line and sentence check, content and context check			

Table 4 discloses that item number 1 had the highest (71.58%) percentage response on the plagiarism tools that master students in the Faculty of Education in IMSU and UPH use for plagiarism checking, followed by items numbers 9, 2, 6, 7, 10, 8, 4 and 3 with the respective 36.84, 20, 11.58, 11.58, 9.47, 7.37, 6.32 and 3.16 percent responses but item number 5 had 0% response. Also, other plagiarism tools that the master students specified include Autochecker, Dubli Checker, Plagiarism Checker, Quillboat, Xchecker, Plagiarism Text, Unicheck, Line and Sentence Check, and Content and Context Check.

Hypothesis 1: Male and female master students' perceptions of the ethical rules that govern using people's work during thesis writing do not differ significantly in the Faculty of Education at Imo State University and the University of Port Harcourt.

Table 5. Independent t-test on the master students' perception of the ethical rules based on gender

Gender	n	mean	Std. Deviation	Mean difference	df	t	p-value	Decision
Male	30	55.70	2.23		93	3.96	**0.00**	Rejected
Female	65	52.06	4.79	3.64				

Table 5 reveals that the independent t-test on the master students' perception of the ethical rules based on gender gave a 0.00 p-value, which is below the 0.05 alpha level; this led the researchers to reject the hypothesis that male and female master students' perception on the ethical rules that govern the use of people's work during thesis writing does not differ significantly in Faculty of Education in IMSU and UPH. Male master students in the Faculty of Education at IMSU and UPH had more positive perceptions of the ethical rules that govern using people's work during thesis writing than their female counterparts.

Hypothesis 2: There is no significant difference in the male and female master students' awareness of plagiarism consequences in the Faculty of Education at IMSU and UPH.

Table 6. Independent t-test on master students' awareness of plagiarism consequences based on gender

Gender	n	mean	Std. Deviation	Mean difference	df	t	p-value	Decision
Male	30	23.60	2.24		93	0.77	**0.44**	Accepted
Female	65	23.00	3.96	0.60				

Table 6 discloses that the independent t-test on master students' awareness of plagiarism consequences based on gender gave a 0.44 p-value, which is higher than the 0.05 alpha level; this led the researchers to accept the hypothesis that there is no significant difference in the male and female master students' awareness on the plagiarism consequences in Faculty of Education in Imo State University and University of Port Harcourt. Gender did not affect the master students' awareness levels of plagiarism consequences in the Faculty of Education at Imo State University and the University of Port Harcourt.

Hypothesis 3: There is no significant difference in how male and female master students in the Faculty of Education at Imo State University and the University of Port Harcourt paraphrase reference materials in their theses.

Table 7. Independent t-test on how master students paraphrase reference materials based on gender

Gender	n	mean	Std. Deviation	Mean difference	df	t	p-value	Decision
Male	30	10.00	1.31		93	0.89	**0.06**	Accepted
Female	65	9.43	1.39	0.57				

Table 7 unveils that the independent t-test on how master students paraphrase reference materials based on gender gave a 0.06 p-value, which is higher than the 0.05 alpha level; this led the researchers to accept the hypothesis that there is no significant difference in how male and female Master students in Faculty of Education in IMSU and UPH paraphrase reference materials in their theses. Gender did not influence how master students in the Faculty of Education at IMSU and UPH paraphrased reference materials in their research.

Hypothesis 4: Master students' perception of the ethical rules that govern the use of people's work during thesis writing does not differ significantly based on the institutions.

Table 8. Independent t-test on master students' perception of the ethical rules based on institutions

Institution	n	mean	Std. Deviation	Mean difference	df	t	p-value	Decision
IMSU	33	53.42	4.51		93	0.34	**0.74**	Accepted
UPH	62	53.10	4.49	0.32				

Table 8 reveals that the independent t-test on master students' perception of the ethical rules based on institution gave a 0.74 p-value, which is above the 0.05 alpha level; this led the researchers to accept the hypothesis that the Master students' perception of the ethical rules that govern the use of people's work during thesis writing does not differ significantly based on institution. Master students in the Faculty of Education at IMSU and UPH have the same positive perception of the ethical rules that govern using people's work during thesis writing.

Hypothesis 5: Master students' awareness of the plagiarism consequences does not differ significantly based on the institution.

Table 9: Independent t-test on master students' awareness of plagiarism consequences based on institution

Institution	n	mean	Std. Deviation	Mean difference	df	t	p-value	Decision
IMSU	33	22.36	3.99		93	-1.69	**0.09**	Accepted
UPH	62	23.63	3.16	-1.27				

Table 9 discloses that the independent t-test on master students' awareness of plagiarism consequences based on institution gave a 0.09 p-value, which is higher than the 0.05 alpha level; this led the researchers to accept the hypothesis that Master students' awareness of plagiarism consequences does not differ significantly based on the institutions. Master students in the Faculty of Education at IMSU and UPH have the same high awareness about plagiarism consequences.

Hypothesis 6: How master students paraphrase reference materials in their theses does not differ significantly based on institutions.

Table 10: Independent t-test on how master students re-write reference materials based on institution

Institution	n	mean	Std. Deviation	Mean difference	df	t	p-value	Decision
IMSU	33	9.45	1.60		58	-.79	**0.43**	Accepted
UPH	62	9.69	1.26	-0.24				

Table 10 shows that the independent t-test on how master students re-write reference materials based on institution gave a 0.43 p-value, which is higher than the 0.05 alpha level; this led the researchers to accept the hypothesis that how Master students paraphrase reference materials in their

theses does not differ significantly based on the institutions. Master students in the Faculty of Education at IMSU and UPH paraphrase reference materials in their research similarly.

DISCUSSION

Table 1 shows that the master students in the Faculty of Education at IMSU and UPH have positive perceptions concerning the ethical rules that govern using people's work during thesis writing. They believed that they must cite all the authors' works used in their theses, not claim another author's idea or work as theirs, not use any part of their previous publications in their research without citing them, read and understand authors' ideas before paraphrasing them in their own words and reference them accordingly, ensure that all cited authors were reference, put quotation marks when stating verbatim, an author's idea that is less than 40 words, indent an author's ideas that are above 40 words and use the University recommended referencing style (the American Psychology Association, APA, the 7th edition) in their references, avoid the use of special characters, (like 0 and @ in place of o and at, respectively), ensure that their research titles match the content, avoid copy and paste from the Internet, and avoid using too many abbreviations in their research. The master students understand the importance of writing their theses by themselves. This finding implies that there are teachings and understanding of the ethics involved when using another author's ideas and publications among the master students in the Faculty of Education at IMSU and UPH. This finding is at variance with Krokoscz and Ferreira (2019), who ascertained a breach in the students' knowledge of plagiarism theories and practices. The finding corresponds with Manar and Shameem (2014), who discovered that the students considered plagiarism and cheating unethical but indulged in them, and Hakim, Belinda, Bintang, Ravi and Nuraviani (2024) work, which disclosed that violating organizational norms, inadequate communication, misusing organizational resources and poor behaviour were the measures of Counter-productive Work Behavior (CWB). Also, the finding matches with Prashar, Gupta and Dwivedi (2023), who revealed that students had ethical judgments in dealing with plagiarism issues.

Table 2 shows that the master students in the Faculty of Education at IMSU and UPH are highly aware of plagiarism consequences. They are aware that plagiarism can lead to their expulsion from school, delay their graduation period, render their certificates worthless, tarnish their image as students, hinder them from publishing, disqualify their membership from professional bodies, and lead to their imprisonment. This finding signifies that master students in the Faculty of Education at IMSU and UPH are conversant with the different plagiarism consequences. It agrees with Idiegbeyan-ose, Nkiko and Osinulu (2016), whose findings revealed an average level of plagiarism awareness among the master students in Ogun State universities and Stone (2022), who found that students remarked that the plagiarism consequences were demoralizing and aggressive, and breached academic integrity unintentionally. The finding tallies with Magubane (2018), who found that students knew that plagiarism is a crime and avoided it since it violates the university policy; Clarke, Chan, Bukuru, Logan

and Wong (2023), Selemani, Chawinga and Dube (2018), Hu and Lei (2016) and Pisa and Goolam-Nabee (n.d), who disclosed that students and faculty members knew about plagiarism. Also, it agrees with de Lima, Sousa, Medeiros, Misturada and Novo (2022) who revealed that students' plagiarism had a significant relationship to their peer plagiarism awareness and hardship experience. The finding disagrees with Abduldayan, Yusuf and Olatunde (2019), who discovered that there was a moderate level of students' unawareness about plagiarism, and Joy, Sinclair, Boyatt, Yau and Cosma (2013), who revealed that students had poor knowledge of some plagiaristic activities.

Table 3 indicates that the master students in the Faculty of Education at IMSU and UPH can paraphrase referenced materials by themselves; they also use online paraphrasing tools, do not usually pay anyone for paraphrasing jobs, and see the need to paraphrase referenced materials in their theses. This finding indicates that the master students in the Faculty of Education at IMSU and UPH have adequate writing skills and understand the importance of paraphrasing as one of the ways to reduce plagiarism when writing their theses. This finding disagrees with Selemani, Chawinga and Dube (2018), who found that master students unconsciously commit plagiarism due to inadequate writing skills, laziness, and others.

Table 4 disclosed that the master students in the Faculty of Education at IMSU and UPH use Turnitin mostly (71.58%) for plagiarism checking, followed by Grammarly plagiarism (36.84%), and others such as Plagscan, Quetext, Viper plagiarism scanner, SmallSeoTools, Duplichecker, Logo plagiarism checker, Copyleaks, Autochecker, Dubli Checker, Plagiarism checker, Quillboat, Xchecker, Plagiarism text, Unicheck, Line and sentence check, and content and context check; but have never used PaperRater. This finding implies that the master students in the Faculty of Education at IMSU and UPH are aware of and use different plagiarism-checking tools to reduce plagiarism in their theses, with the most popular and commonly used being Turnitin. This finding agrees with Kokkinaki, Demoliou and Iakovidou (2015), who revealed that students are positively using plagiarism software to bring down plagiarism, Ramdani et al. (2022) assertion that Turnitin is a widely utilized similarity detection tool among users, and Shang (2019), who found that students who knew about the plagiarism checker utilization exhibited lower plagiarism rates.

Tables 5 and 8 revealed that the master students' perception of the ethical rules that govern the use of people's work during thesis writing differed significantly in the Faculty of Education in IMSU and UPH based on gender and not based on institution. Although the master students in the Faculty of Education at IMSU and UPH had the same perception of the ethics governing people's work usage, the male master students had more understanding and saw the need to obey the ethical rules that govern the use of people's work during thesis writing than their female counterparts. The findings corresponded with Nketsiah, Imoro and Barfi (2023), who found that students' plagiarism perception and academic level did not have significant relationship, and Ison (2015), who found that no significant difference

existed in the number of plagiarized dissertations compared to those without good evidence at different times.

Tables 6 and 9 disclosed that no significant difference exists in the master students' awareness of the plagiarism consequences in the Faculty of Education at Imo State University and the University of Port Harcourt based on gender and institution. These results signify that male and female master students in the Faculty of Education of the two institutions are highly aware of different plagiarism consequences that can affect them. The finding corresponded with Ahmad, Abedin, Ahmad, Paramasivam and Mustapha (2022), who revealed that students' genders did not significantly affect the plagiarism attitude and awareness, and Jereb et al. (2022), who found that gender was not a significant factor that determined why Slovene and German students indulged in plagiarism.

Tables 7 and 10 unveiled no significant difference in how master students in the Faculty of Education at IMSU and UPH paraphrase reference materials in their theses based on gender and institution. These results imply that male and female master students in the Faculty of Education of both institutions have similar way of paraphrasing reference materials in their theses.

Some weaknesses based on the findings include: 1. A gap may exist between the master students' ethical rule perception on intellectual property utilization and actual academic integrity practice.2. The master students' high awareness of plagiarism consequences is encouraging but may not be effective in preventing students from plagiarism. 3. The master students' online paraphrasing tools utilization may indicate a potential over-dependence on those tools. 4. The significant difference in the master students' ethical rule perception based on gender may indicate a gap in the students' understanding of ethical rules governing academic integrity.

CONCLUSION

This study investigated the plagiarism perception during research writing among master students in the Faculty of Education at IMSU and UPH. The findings revealed a comprehensive understanding and adherence to ethical standards in thesis writing, as evidenced by the students' positive perceptions towards citing authors, avoiding claims of ownership over others' work, using proper referencing styles, commitment to originality, and proper citation practices. The finding also highlighted the students' high awareness of the plagiarism consequences, which is critical in promoting academic integrity within institutions. Additionally, the students' ability to paraphrase effectively and use different plagiarism-checking tools, particularly Turnitin, demonstrated their competence in academic writing and their proactive measures to ensure the originality of their theses.

The study revealed a significant gender-based difference in the master students' perception of ethical rules, with male students showing a greater understanding and commitment to these ethics. However, no significant differences were found in plagiarism awareness or paraphrasing skills based on gender or institution, indicating a uniform standard of knowledge across the board.

Thus, the master students' high perception and awareness of ethical practices and the plagiarism implications advances the body of knowledge by setting a pattern for academic integrity. This study, therefore, paves the way for future applications and extensions in research ethics and plagiarism prevention. The study recommended that:

1. Future researchers should conduct studies to identify the reasons behind plagiarism among master students.

2. Future researchers can find strategies to close this gap and ensure students understand and consistently apply ethical guidelines during research writing.

3. Future researchers can investigate the effectiveness of these consequences in discouraging plagiarism among students.

4. Future researchers can investigate methods to improve students' paraphrasing skills without online tools.

5. Further study should investigate the reasons behind the ethical rule perception gap among students.

6. Postgraduate lecturers should emphasize the need for all students, irrespective of gender, to adhere strictly to the ethical standards governing other authors' intellectual property usage.

7. Lecturers should start teaching students paraphrasing skills and plagiarism consequences from the undergraduate level.

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