





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

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ABSTRACT

This study was on master's students' perception of plagiarism during research writing in the faculty of education. This study answered and tested four research questions and six hypotheses at a 0.05 significance level. The study used Imo State University (IMSU) and the University of Port Harcourt (UPH). A descriptive survey design, a population of 276 master students, and a sample size of 95 students were selected with a stratified random sampling technique. The instrument was a 37-item questionnaire on ethical issues and plagiarism in the faculty of education with a reliability index of 0.85. Data was analyzed using mean, standard deviation, percentage, and t-tests in the statistical package for social sciences. The findings showed that 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 the institutional basis. The awareness level of plagiarism consequences 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 rewrite referenced materials in their theses. The findings mean that female students are 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 authors' intellectual property usage.

Keywords: plagiarism, ethical issues, intellectual property, plagiarism checking tools, and research writing

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INTRODUCTION

The ethical use of information and communication technology (ICT) is a great concern in the modern-day education system. The Association of Educational and Communication Technology (AECT, 2023) defined the field of educational technology as follows: "Educational technology is the ethical study and application of theory, research, and practices to advance knowledge, improve learning and performance, and empower learners through strategic design, management, implementation, and evaluation of learning experiences and environments using appropriate processes and resources." 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 (2023) highlighted and described the ethical principles that should guide the practices of educational technology professionals and students.

As stated in the sections of the AECT (2023) ethical code, educational technologists have certain obligations to fulfil 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 (2018) 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"; 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, Sydney (2019) remarks that every research builds on previous research to some extent.

The ICT era has also simplified the accessibility of information; authors easily access materials from the Internet, in addition to

textbooks, journals, and other resources from physical libraries for their writings. These, therefore, leave authors with an undoubted choice of citing their information sources. Various associations, such as the American Psychological Association (APA) and the Modern Language Association, 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 resorted to copying and pasting syndrome without properly comprehending, interpreting, and paraphrasing the ideas of other authors and referencing 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 (2020a), plagiarism refers to the utilization of another person's words, results, or processes without acknowledging the owner or source. IEEE (2020a) 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 et al., 2012). Self-plagiarism is when an author reuses their ideas from a previous publication(s) without adequate referencing. Visser et al. (2012) stressed that self-plagiarism negatively affects the quality of publication.

Thus, plagiarism occurs when an author claims ownership of another author's ideas or findings or even reclaims their ideas when writing without proper citations. IEEE (2020b) identified several instances of plagiarism, including stealing someone's entire paper, part, 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 (2020b) 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 cases of plagiarism gripping the academic world, software developers built plagiarism software that can identify plagiarized papers. Although many plagiarism software exist with different names (such as Turnitin, Plagscan, and Smallseotools, among others), based on their developers, they primarily detect plagiarized work by scanning through the online information database and produce reports, which highlight any word or phrase that matches 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 et al. (2012) confirmed that it 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 detect plagiarism, often fall short in identifying all cases and identify non-plagiarized content as a problem. Visser et al. (2012) 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.

There are some studies on plagiarism. Abduldayan et al. (2019) investigated how students perceived using Turnitin and discovered a

moderate level of students' unawareness about plagiarism. Idiegbeyan-Ose et al. (2016) examined the rate at which students in Ogun State universities perceived and were aware of plagiarism. They found that the master's students seldom understood plagiarism. Kokkinaki et al. (2015) examined how Cyprus students perceived the plagiarism policies and found that students were positively using plagiarism software to reduce plagiarism. Krokosz 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 students considered plagiarism and cheating unethical but still indulge in them. Selemani et al. (2018) investigated the level of knowledge students have about plagiarism, the forms of plagiarism that students commit, the reasons for committing plagiarism, and how Mzuzu University deals with the issue of plagiarism among master's students. They found that the students had limited understanding of plagiarism and plagiarized due to inadequate writing skills, laziness, and other reasons. Mzuzu University sanctions plagiarists by warning them and giving them a second chance to rewrite their work.

Kampa et al. (2025) explored the factors that lead to plagiarism among academics and students. They found that laziness, excessive workload, demanding schedules, limited knowledge of academic writing principles, and unlimited access to online databases contribute to plagiarism in educational settings. Sozon et al. (2024) conducted a review to identify the common forms of plagiarism and its contributing factors. Their findings revealed that limited awareness of academic honesty, outdated academic standards, unethical use of artificial intelligence, and excess student workload contributed to plagiarism and cheating among academics and students. Awasthi et al. (2024) explored whether Indian students were aware of anti-plagiarism rules across genders and found that they lacked an understanding of different plagiarism practices, with no significant gender-based difference. Rumanovská et al. (2024) investigated the effect of students' training on citation and referencing, and its impact on academic dishonesty, discovering a positive influence of training on the eradication of plagiarism.

Adeeb et al. (2025) explored the attitudes of health professionals towards plagiarism and found that health professionals showed positive attitudes, with significant differences based on gender and age. Guba and Tsivinskaya (2024) reviewed the rate of academic dishonesty across research institutions and discovered that research-oriented institutions have a lower plagiarism rate than non-research-oriented ones. Firdaus et al. (2025) analyzed how educators perceive and are aware of anti-plagiarism. Firdaus et al. (2025) found that their understanding and acceptance of anti-plagiarism vary based on academic standards, institutional support, and behavior. Leão et al. (2025) investigated how students perceive academic misconduct and found that they were aware of different types of academic misconduct and understood the benefits of referencing tools. Alsaedi and Alhums (2024) investigated how students perceived plagiarism during project writing and the influence of gender, grade point average, and year of study on the perceptions. Their findings revealed that the students' awareness of different types of plagiarism in project writing was high, with no significant influence based on gender and grade point average. Subedi et al. (2024) assessed journal editors' awareness of plagiarism and its practices. They

discovered that the awareness level was high, with significant knowledge of Turnitin.

Plagiarism abounds in the world of academics; however, there is little or no attention to understanding how master's students, especially in the faculty of education at Imo State University (IMSU) and the University of Port Harcourt (UPH), perceive and are aware of the ethical issues guiding plagiarism when writing their theses; this, therefore, mandated this study.

Statement of the Problem

Due to the high demands for research and publications, plagiarism has recently become a serious issue, especially among students in higher institutions. Many universities have diverse measures to curb the menace of plagiarism, especially among master's students, and to ensure the quality of the students' research outputs. For instance, the UPH appointed an ethics committee in the school of master's 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 every week, observations show that more than 90 percent of these master's students fail their plagiarism test on their first submission. Some students resubmit their work more than five times before passing the plagiarism testing. There have been a series of delays in students' expected graduation, as they strive to reduce the plagiarism level in their thesis reports to the university's standard of plagiarism. The university even expelled some students due to a high percentage of plagiarism. With the increasing cases of plagiarism among master's students in some Nigerian universities, one may wonder whether the master's students are unaware of the ethical standards that govern the use of other people's work during thesis writing to avoid plagiarism.

This study examines master's students' perception of plagiarism during research writing in the faculty of education at IMSU and the UPH.

Aim and Objectives of the Study

Generally, the study investigated master's students' perception of plagiarism during research writing in the faculty of education at IMSU and the UPH. The specific objectives of this research were:

1. To find out the perception of the master's students of the faculty of education at IMSU and the UPH on the ethical rules that govern the use of people's work during thesis writing.
2. To ascertain how aware master's students in the faculty of education at IMSU and the UPH are of the consequences of plagiarism.
3. To understand how master's students in the faculty of education at IMSU and the UPH paraphrase reference materials in their theses.
4. To discover the plagiarism tools that master students in the faculty of education at IMSU and the UPH mostly use for plagiarism checking.

Hypotheses

The null hypotheses (tested at a 0.05 significant level) were:

1. Male and female master's students' perceptions of the ethical rules governing people's work utilization during thesis writing do not differ significantly in the faculty of education at IMSU and the UPH.
2. There is no significant difference in the male and female master's students' awareness of the consequences of plagiarism in the faculty of education at IMSU and the UPH.
3. There is no significant difference in how male and female master's students in the faculty of education at IMSU and the UPH 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 institutions.
6. How master students paraphrase reference materials in their theses does not differ significantly based on the institutions.

The Study's Significance

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, the consequences of plagiarism, and the need to develop strong paraphrasing skills. The study, therefore, promotes an attitude of honesty and respect for intellectual property among students, which is a key to knowledge advancement in education.

This study will guide educators in integrating ethical research practices into their curricula and teaching proper citation methods and ways to avoid plagiarism.

University administrators will understand the need to enforce policies relating to academic honesty and the utilization of plagiarism-detection tools.

Future researchers will identify innovative and sustainable solutions to plagiarism and academic dishonesty from the findings.

METHODOLOGY

A descriptive survey design guided this study. The study's population was two hundred and seventy-six master students in the faculty of education at IMSU (123–Source: Dean, faculty of education, IMSU) and the UPH (153–Source: School of master studies, UPH) 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

Table 1. Mean analysis of master students' perception of the ethical rules that govern the use of people's work during thesis writing (N = 95)

Items	SA	A	D	SD	M	STD	Decision
I must cite all the authors whose works I used in my thesis.	72	23			3.76	0.43	Agreed
I must not claim another author's idea or work as my own.	74	21			3.78	0.42	Agreed
I must not use any part of my previous publications in my thesis without citing them.	54	27	11	3	3.39	0.82	Agreed
I must read and understand an author's idea before paraphrasing it in my own words.	63	32			3.66	0.48	Agreed
I must cite the author whose ideas I paraphrased in my thesis.	52	36	4	3	3.44	0.73	Agreed
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		3.74	0.51	Agreed
I must put quotation marks when stating an author's idea that is less than 40 word verbatim.	57	25	7	6	3.40	0.88	Agreed
I must indent an author's idea that is above 40 words in my thesis.	48	37	3	7	3.33	0.86	Agreed
I must use the University's recommended referencing style, such as the APA seventh edition, in my references.	77	18			3.81	0.39	Agreed
I understand the importance of writing my thesis by myself.	69	26			3.73	0.45	Agreed
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	2.97	1.01	Agreed
I must ensure that the title of my thesis accurately reflects its content.	67	22	3	3	3.61	0.70	Agreed
I must avoid the use of too many abbreviations in my thesis.	37	43	12	3	3.20	0.80	Agreed
I should ensure that the authors cited were referenced accordingly.	69	26			3.73	0.45	Agreed
I should avoid copying and pasting from the Internet.	63	32			3.66	0.48	Agreed
Grand mean					3.56		Positive

Table 2. Mean analysis of the master students' awareness level of the consequences of plagiarism (N = 95)

Items	MA	A	LA	NA	M	STD	Decision
Plagiarism can lead to my expulsion from the university.	40	43	12		3.29	0.68	Agreed
Plagiarism can delay my graduation from the university.	64	28	3		3.64	0.54	Agreed
Plagiarism can render my certificates worthless.	46	31	12	6	3.23	0.91	Agreed
Plagiarism can tarnish my image as a student.	57	22	13	3	3.40	0.84	Agreed
Plagiarism can hinder me from publishing.	64	18	3		3.64	0.54	Agreed
Plagiarism can disqualify me from membership in professional bodies.	41	36	18		3.24	0.75	Agreed
Plagiarism can lead to my imprisonment.	24	37	19	15	2.74	1.01	Agreed
Grand mean	40	43	12		3.32		High

Table 3. Mean analysis of how master students paraphrase reference materials in their theses (N = 95)

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

face and content validated. The researchers tested reliability using the Cronbach's alpha method and got an alpha coefficient of 0.85. The researchers distributed the instrument to the master students via a Google form link and analyzed the collected data in SPSS using mean (M), standard deviation (STD), and percentage, and tested the null hypotheses with an independent t-test at a 0.05 alpha level.

RESULTS

Objective 1. To find out the perception of the master's students of the faculty of education at IMSU and the UPH on the ethical rules that govern the use of people's work during thesis writing.

Table 1 shows that the master's students in the faculty of education at IMSU and UPH agreed to all the item statements, as their mean scores are above the 2.50 criterion mean. Additionally, the 3.56 grand mean is above the 2.50 criterion mean, indicating that master's students in the faculty of education at IMSU and UPH hold positive perceptions regarding the ethical rules governing people's work utilization during thesis writing.

Objective 2: To ascertain how aware the master's students in the faculty of education at IMSU and the UPH are about the consequences of plagiarism.

Table 2 shows that the master's students in the faculty of education at IMSU and UPH agreed to all the item statements, as 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's students in the faculty of education at IMSU and UPH are highly aware of the consequences of plagiarism.

Objective 3: To understand how master's students in the faculty of education at IMSU and the UPH paraphrase reference materials in their theses.

Table 3 indicates that the master students in the faculty of education at 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.

Objective 4: To discover the plagiarism tools that master students in the faculty of education at IMSU and the UPH mostly use for plagiarism checking.

Table 4. Percentage analysis of the plagiarism tools master's students use mostly to check for plagiarism (N = 95)

Items	Responses	Percentage response (%)
Turnitin	68	71.58
Plagscan	19	20.00
Copyleaks	3	3.16
Logo Plagiarism Checker	6	6.32
PaperRater	0	0.00
Quetext	11	11.58
Viper Plagiarism Scanner	11	11.58
Duplichecker	7	7.37
Grammarly Plagiarism	35	36.84
SmallSeotools Plagiarism Checker	9	9.47
Others, please specify:	Autochecker, Dubli Checker, Plagiarism Checker, Quillboat, Xchecker, Plagiarism Text, Unicheck, Line and Sentence Check, and Content and Context check	

Table 5. Independent t-test on the master's 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	3.64	93	3.96	0.00	Rejected
Female	65	52.06	4.79					

Table 6. Independent t-test on master's 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	0.60	93	0.77	0.44	Accepted
Female	65	23.00	3.96					

Table 7. Independent t-test on how master's 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	0.57	93	0.89	0.06	Accepted
Female	65	9.43	1.39					

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, 20.00, 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 master's 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 IMSU and the UPH.

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's students in the faculty of education at IMSU and UPH had more positive perceptions of the ethical rules governing the use of people's work during thesis writing than their female counterparts.

Hypothesis 2. There is no significant difference in the male and female master's students' awareness of plagiarism consequences in the faculty of education at IMSU and UPH.

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 IMSU and UPH. Gender did not affect the master's students' awareness levels of plagiarism consequences in the faculty of education at IMSU and the UPH.

Hypothesis 3. There is no significant difference in how male and female master's students in the faculty of education at IMSU and the UPH paraphrase reference materials in their theses.

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's 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 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's students in the faculty of education at IMSU and UPH share a positive perception of the ethical rules that govern the use of people's work during thesis writing.

Table 8. Independent t-test on master's 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	0.32	93	0.34	0.74	Accepted
UPH	62	53.10	4.49					

Table 9. Independent t-test on master's 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	-1.27	93	-1.69	0.09	Accepted
UPH	62	23.63	3.16					

Table 10. Independent t-test on how master's 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	-0.24	58	-0.79	0.43	Accepted
UPH	62	9.69	1.26					

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

Table 9 discloses that the independent t-test on master's students' awareness of plagiarism consequences based on the institution gave a 0.09 p-value, which is higher than the 0.05 alpha level. Thus, the researchers accepted the hypothesis that master's students' awareness of plagiarism consequences does not differ significantly based on the institutions. Master's students in the faculty of education at IMSU and UPH share a high awareness level of the consequences of plagiarism.

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

Table 10 shows that the independent t-test on how master's students rewrite reference materials based on the 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's students paraphrase reference materials in their theses does not differ significantly based on the institutions. Master's students in the faculty of education at IMSU and UPH paraphrase reference materials in their research similarly.

DISCUSSION

Table 1 shows that the master's 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 author's 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 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. Master's students understood the importance of writing their theses themselves. This finding implies that there are teachings on plagiarism, and students understand the ethics involved when using another

author's ideas and publications among the master's students in the faculty of education at IMSU and UPH. This finding is at variance with Krokosz 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 et al. (2024) work, which disclosed that violating organizational norms, inadequate communication, misusing organizational resources, and poor behavior were the measures of counter-productive work behavior. The finding agreed with Prashar et al. (2023), who found that students had ethical judgments in dealing with plagiarism issues.

Table 2 shows that master's students in the faculty of education at IMSU and UPH are highly aware of the consequences of plagiarism. They were aware that plagiarism can lead to expulsion from school, imprisonment, delays, their graduation, render their certificates worthless, tarnish their image as students, hinder their publishing, and disqualify them from membership in professional bodies. This finding proved that master's students in the faculty of education at IMSU and UPH are aware of the consequences of plagiarism. The finding agrees with Idiegbeyan-Ose et al. (2016), who found that the average level of plagiarism awareness existed among students in Ogun State universities, and Stone (2022), who found that students perceived plagiarism consequences as demoralizing and aggressive, and unintentionally breached academic integrity. 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 et al. (2023), Selemani et al. (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 et al. (2022), who revealed that students' plagiarism had a significant relationship to their peer plagiarism awareness and hardship experience, and Leão et al. (2025), who found that students were aware of different types of academic misconduct and understood the benefits of referencing tools. The finding disagrees with Abduldayan et al. (2019), who discovered that there was a moderate level of students' unawareness about plagiarism, Joy et al. (2013), who revealed that students had poor knowledge of some plagiaristic activities, and Sozon et al.'s (2024), who found that limited awareness of academic honesty, outdated academic standards, unethical use of artificial intelligence, and excess student workload contributed to plagiarism and cheating among academics and students.

Table 3 indicates that master's students in the faculty of education at IMSU and UPH can paraphrase referenced materials 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 master's students in the faculty of education at IMSU and UPH had adequate writing skills and understood the importance of paraphrasing as a way to reduce plagiarism when writing their theses. This finding disagrees with Selemani et al. (2018), who found that master's students unconsciously commit plagiarism due to inadequate writing skills, laziness, and other reasons. The finding agreed with Rumanovská et al. (2024), who discovered a positive influence of training on the eradication of plagiarism.

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 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 Turnitin as the most popular and commonly used. This finding agrees with Kokkinaki et al. (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, Shang (2019), who found that students who knew about the plagiarism checker utilization exhibited lower plagiarism rates, and Subedi et al. (2024), who discovered that the journal editors' plagiarism awareness level was high, with significant knowledge of Turnitin.

Table 5 and **Table 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's students in the faculty of education at IMSU and UPH have similar perceptions of the ethics governing people's work usage, male students understood the need to obey the ethical rules governing the use of people's work during thesis writing than their female counterparts. The findings corresponded with Nketsiah et al. (2023), who found that students' plagiarism perception and academic level did not have a 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. The findings agreed with those of Adeeb et al. (2025), who found that health professionals have a positive attitude towards academic dishonesty, with significant differences based on gender and age. The finding disagrees with Firdaus et al.'s (2025) discovery that educators' understanding and acceptance of anti-plagiarism vary based on academic standards, institutional support, and behaviors.

Table 6 and **Table 9** disclosed that no significant difference exists in the master students' awareness of the plagiarism consequences in the faculty of education at IMSU and the UPH 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 the different plagiarism consequences that can affect them. The finding

corresponded with Ahmad et al. (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 in why Slovene and German students indulged in plagiarism. The findings agreed with Awasthi et al.'s (2024) finding that students lacked awareness of different plagiarism practices without a significant gender difference. Alsaedi and Alhums (2024) found that students' knowledge of various types of plagiarism in project writing was high, with no significant influence based on gender and grade point average.

Table 7 and **Table 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 a similar paraphrasing style in their theses. This finding differed from that of Guba and Tsivinskaya (2024), who discovered that research-oriented institutions have a lower plagiarism rate than non-research-oriented ones.

CONCLUSION

This study investigated the plagiarism perception during research writing among master's students in the faculty of education at IMSU and UPH. The findings revealed that master's students had positive perceptions of ethical rules in thesis writing, high awareness of plagiarism consequences, ability to paraphrase reference materials, and adoption of diverse plagiarism checking tools, mostly Turnitin, for academic writing. The findings revealed a significant students' perception of ethical rules based on gender, with male students showing a higher commitment to obeying research ethics during thesis writing than their female counterparts. However, no significant gender- and institutional-based differences existed in plagiarism awareness and paraphrasing skills among the master's students. Therefore, master's students in the faculty of education at IMSU and UPH perceived citing other authors without claiming their ideas or works, referencing all cited authors, paraphrasing, indenting, avoiding the use of special characters and too many abbreviations, and using institutions' recommended referencing styles as necessary in academic writing. Aware of the copyright infringement penalty, the students employed adequate measures to promote originality and integrity in their thesis writing.

Thus, the master students' high perception and awareness of ethical practices and the consequences of plagiarism advance 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.

Recommendations

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.

Limitations of the Study

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.

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