Attitude of Postgraduate Students towards Plagiarism in University of Port Harcourt

G. W. Orluwene¹ and A. E. Magnus-Arewa¹

¹Department of Educational Psychology, Guidance and Counseling, Faculty of Education, University of Port Harcourt, Port Harcourt, Rivers State, Nigeria.

Authors’ contributions

This work was carried out in collaboration between both authors. Author GWO designed the study, performed the statistical analysis, while author AEM wrote the protocol and the first draft of the manuscript. Both authors GWM and AEM managed the literature searches. Both authors read and approved the final manuscript.

ABSTRACT

Plagiarism remains a threat to scientific integrity and development of knowledge. This study examined postgraduate students’ attitude towards plagiarism at the University of Port Harcourt, Nigeria. Three research questions and corresponding hypotheses guided the study. The descriptive research design was used for the study with a sample size of 200 postgraduate students was drawn using the purposive non-random sampling technique, from a population size of 1762 postgraduate students of the University of Port Harcourt. A questionnaire titled “Attitude of Post-Graduate Students towards Plagiarism Questionnaire” (APSPQ) was used as an instrument for data collection. The instrument was validated by experts and the reliability of the instrument was determined using Cronbach alpha. Data was analyzed using mean, standard deviation, independent t-test and Two-way ANOVA at 0.05 level of significances. Findings revealed that most postgraduate students of the University of Port Harcourt had a positive attitude towards plagiarism, the male postgraduate student had a negative attitude towards plagiarism while the Master students had negative attitude towards plagiarism. Part of the recommendations was that the University of Port Harcourt from time to time should organize orientation programmes for all postgraduate students based on the concept as well as implications for plagiarism.

*Corresponding author: Email: goodness.orluwene@uniport.edu.ng;
Keywords: Plagiarism attitude; postgraduate students; Port Harcourt.

1. INTRODUCTION

The act of plagiarism is as old as time, the word “plagiarism” actually dates back to the first century AD and involves a Roman poet and his literary “kidnappers” who became the subject of a literary beating. While no one knows the name of the first person to be called a “plagiarist”, his case has lived in infamy and helped solidify the name and reputation of Marcus Valerius Martialis, known as Martial. The Roman poet Martial lived from 40 AD to somewhere between 102 and 104 AD. Martial was born in Bilbilis, Spain, Martial was one of the best-known Roman poets of his time. Though he wasn’t an immediate star, saying that he didn’t care for many of his earlier works, by about 80 AD he started to enjoy success, which continued until much later in his life.

However, Martial, like many poets in the era, found that his work was being copied and recited wholesale by other poets without attribution. This was a very common act during the time as poets, generally, were more expected to be able to recite and relay earlier works than create original ones. Martial wasn’t content to stand by and let others take his work, without copyright law or any legal recourse; he used the tool he had available to him, his words. He wrote several verses aimed at copycats, including this quip from an alleged plagiarist, Fidentinus. “Fame has it that you, Fidentinus, recite my books to the crowd as if none other than your own. If you’re willing that they are called mine, I’ll send you the poems for free. If you want them to be called yours, buy this one, so that they won’t be mine.

However, it was in one of those poems that he used the Latin word “plagiarus” to describe a seemingly unnamed literary thief. The term previously had meant “kidnap” and it specifically related to either the kidnapping of one’s slaves or to take a free person and make them into a slave. In short, martial was saying that what the plagiarist was doing was akin to “stealing his slaves”. That makes sense considering that Martial, as per the quote above, was less concerned with the originality of his work and more concerned with paying for them, something the plagiarists were denying him. But while it was likely an off-the-cuff insult and comparison, the expression lingered. However, it would take nearly 15 centuries for it to make its way into the English language [1].

Plagiarism is the act of obtaining other people’s words or ideas and pretending that they are your own words or ideas. This can be seen as the act of deliberately to submit content which is not your work. Plagiarism is to make use of someone else’s ideas, work, information etc. without giving proper attribution to the author. This issue is known for many years and it has always been a challenge to the teachers, students, administrators and others in all level of education mostly at the higher institution which University is one. In the past before the internet era, plagiarizing something was tiresome because students would most likely copy text by hand from a book, an encyclopedia, newspaper etc. With the development of the internet, this hard work is now simplified and replaced by two simple commands "Ctrl+C" and "Ctrl+V", the famous "copy and paste". On one hand, the internet has provided easy access to a huge amount of information and therefore facilitating the whole "copy and paste" tendency. On the other hand, it has also contributed to creation of software tools for detecting plagiarism [2].

Carroll [3] showed that teaching the skills needed to write academic work can help to avoid plagiarism and other academic offences, incidents of plagiarism for students often occur because they do not know how to write correctly. Practicing writing skills and reviewing each other’s work can help the learning process. Checking the students’ understanding of what plagiarism and other academic offences are, will also give a guide on how to write without plagiarizing.

To the researcher the term plagiarism is referred to the theft or stealing of words or ideas, without proper attribution to the author, it is a false claim of other people’s work. To the Association of American Historians in [4], who described plagiarism as the misuse of the writings of another author including the limited borrowing, without attribution of another’s distinctive and significant research findings, hypotheses, theories and interpretations.

Park [5] postulated that plagiarism is doubtlessly common and getting more on the increase, particularly with increased access to digital sources (internet). There are multiple reasons why students plagiarize, rationalize their cheating...
behaviour and downplay the importance of plagiarism by themselves and their peers. It is, therefore, necessary for all institutions to develop cohesive frameworks in dealing with student plagiarism, which should be based on preventing students from plagiarism by teaching and training students on the act of scholarly writing and having a robust detection and penalty systems that are transparent and applied consistently in other to put students in check against plagiarism.

Cleary [6] opined that many students plagiarized for a lot of reason such as laziness, panic, lack of confidence, static knowledge, inability to source materials, the failure to understand why sources are important, sloppiness, and failure to understand how to deal with citations, novelty and familiarity to a collaborative work model. This means that while some students plagiarize in a conscious mode, some, on the other hand, may do that unconsciously and unwillingly. Harris [7] also maintained that a lot of students carry out plagiarism as a shortcut especially when they already feel overloaded with work. Such students, despite knowing that plagiarizing is bad, do it as a result of laziness or poor time management and planning skills. When given an assignment, they immediately run to the internet or library, copy and paste some works and submit. Others will not do the assignment until they have run out of time and cannot do it unless they copy other people's work.

However, Park [5] submitted his view that students plagiarize due to genuine reasons such as the academic tradition, poor coaching/training and the absence of policies. It should be noted according to Kpolovie [8] said that research is man's most rational effort at solving an identified problem in order to meet his needs and as such the act of scholarly writing of research should be thought to avoid plagiarism, this should not be taken for granted. In the University of Port Harcourt, a lot of factors could be responsible for plagiarism among Post Graduate (PG) students. These could range from poor provision of academic facilities, poor supervision during projects, theses or dissertations, laziness, personality orientation etc. for whatever reason this may come, the act of plagiarism in the University of Port Harcourt of recent has not been handled with kid gloves.

It was also stressed by Maina et al. [9] that the alarming increase in plagiarism and the need to fight it has been due to technology. The advancement of technology in recent times enhances plagiarism among students. It is also noted that many students do see plagiarism as an act that is involved by all and sundry. Hence, a majority of them find little essence in stressing themselves to avoid it. They also noted that indeed, students from even secondary school go to the extent of justifying the act of cheating by stating that it will be unfair to themselves if they avoided cheating since those that do cheat get higher grades while on the other hand those that do not get something less.

Furthermore, Bailey [10] pointed out that all academic institutions should create plagiarism policies to regulate the students’ involvement in copying other sources. With the considering that plagiarism could be intentional or not, severe or less, Bailey suggested that plagiarism policies that have already been set by academic institutions should be made flexible to ensure justice and equity, as the abundance of information opens a wealth of knowledge for university students, from where they could either learn or stealing the ideas of others, which is known as plagiarism.

There are different forms of plagiarism which may be direct plagiarism and is the most obvious form of plagiarism, it’s easy to identify the writing is not your own. If you copy word for word and do not use quotation marks. Mosaic plagiarism, this is when the writer takes passages from a source and doesn’t use quotation marks. It can also be replacing words for synonyms to appear as your own kind of writing. It is important to remember to include the quotation marks even if it is a paraphrase as this indicates the source you used. Self-plagiarism, this may not sound like plagiarism, using your previous work in a new piece of writing without permission is considered plagiarism. This includes papers from previous years, different courses, and even different schools. Complete plagiarism where students download other authors’ works, edit their names and replace it with them. It is also reported that some lecturers do copy other authors work, localized it and print. Others are. Data fabrication and falsification, paraphrasing plagiarism, inaccurate authorship, accidental plagiarism etc.

Methods of Detecting and Deterring Student from Plagiarism: According to Chowdhury and Bhattacharyya [11], to detect plagiarism of any form, it is essential to have a broad knowledge of its possible forms and classes, and the existence of various tools and systems for its detection. Based on the impact or severity of damages,
plagiarism may occur in an article or any production in several ways. Also, Chowdhury and Bhattacharyya [11] stated that the detection of plagiarism in a text document with high accuracy is a challenging task. Some of the identified methods according to Chowdhury and Bhattacharyya [11] are Character-Based Methods, most plagiarism detection methods belong to this category. These methods exploit character-based, word-based, and syntax-based features. It utilizes these features to find similarity between a query document and existing documents. However, the similarity between a pair of documents may be estimated using both exact matching and approximate matching. In exact matching, every letter in both the strings must be matched in the same order. For instance, some researchers use character 16-gram matching, whereas others use word 8-gram matching. Similarly, some researcher has made effective use of approximate string matching approach. This string matching shows the degree of similarity/dissimilarity between two strings. Vector-Based Method, this method, uses lexical and syntax features are extracted and categorized as tokens rather than strings. The similarity can be computed using various vector similarity measures like Jaccard, Dice’s, Overlap, Cosine, Euclidean and Manhattan coefficients. Our observation is Cosine coefficient and Jaccard coefficients are popular and effective in finding similarity between two vectors. Cosine coefficient in detecting partial plagiarism without sharing documents content. Hence it is useful to detect plagiarism in documents where submission is considered as confidential [12].

According to Elhadi and Al-Tobi [13], Syntax-Based Methods of detecting plagiarism, exploit syntactical features like part of speech (POS) of phrase and words in different statements to detect plagiarism. The elements of basic POS tag are verbs, nouns, pronouns, adjectives, adverbs, prepositions, conjunctions and interjections. Su et al. [14] also stated that authors use POS tag features followed by string similarity metric to analyses and calculate the similarity between texts. In Semantic-Based Methods, sentences are ordered a group of words, two sentences may be the same but the order of their words may be different. The sentence is constructed by just transforming from active voice to passive voice but the semantics of the sentences are the same. The degree of similarity between the two words used in knowledge-based measures by Torres and Gelbukh is calculated using information from a dictionary. This similarity between the two words is used as a semantic similarity between two words. In another approach, Resnik [15] used WordNet to calculate the semantic similarity. Other methods according to Chowdhury and Bhattacharyya [11] may include Structure-Based Methods, Stylometric-Based Methods, Cross-Lingual Plagiarism Detection Methods, Fuzzy-Based Methods as well as Grammar Semantics Hybrid Plagiarism Detection Methods.

Plagiarism can lead to an inability to confront challenges; this is because the issue of plagiarism by students in higher institutions all over the world continue to be a source of concern to stakeholders, especially because research work at the postgraduate level, is of great essence to finding a solution to the unending problem in this complex world, scientific research process induces critical thinking that confronts today challenges, checking plagiarism helps in confronting day to day challenges, not checking plagiarism could lead to the reduction in the number of researchers, as researchers who are supposed to be engaged in critical thinking and logical reasoning, now plagiarize other researchers work, which is as a result of the increased volume of materials available on the internet, some students see this as an opportunity to make only a few researchers explore and proffer solution to problems while they resort to copying. Plagiarism affects the students’ academic performance all around, thereby causing a fall in the standard of education in institutions of learning.

The 21st century has been described as “the information age” because of the abundance of information associated with technological advancement. Information is now easily accessible irrespective of geographic location. The act of plagiarism can also affect other agencies like the Government, public and private sector whose economic development depends on the quality of graduate human resources to boost their economy. It can also lead to a shortage of human resources, this is because students that plagiarize are often expelled from the school, leading to a shortage of manpower, and this can have a negative impact on technological and economic development of a nation.

Students’ plagiarism can be felt by other groups including; other students, academic institutions and the country’s economy. It can affect the
brand or the standard of the academic institution. It can affect the country’s economy, by invariably leading to a skills shortage in private sector organizations, who recruit university graduates, which lack critical thinking skills needed to succeed in the modern economy through research. Therefore students face consequences when they plagiarize, students can have their degree withdrawn, there are also legal issues for the students that plagiarize, legal action like fines and penalties applies especially regarding copyright and copyright infringement if students plagiarize the content of academic authors. students’ can get expelled from their course, college and/or university. It can result in their work being destroyed etc. The consequences of being caught plagiarizing are high in severity as a damaged academic record will follow a student wherever they go whether it is gaining access to higher education i.e. MSc or PhD or gaining employment. A student found guilty of plagiarizing will find it very difficult to gain access to another college or university placement in the future as in the case of the University of Port Harcourt.

A related study according to Adebayo [16] reported from his findings that a lot of students have a negative attitude towards the process of anti-plagiarism. Similarly Kattan et al. [17] studied the practice and attitude towards plagiarism among postgraduate trainees in Saudi Arabia. A cross-sectional survey was distributed to in-training residents from all specialties in one academic hospital using the attitude towards plagiarism questionnaire. No strong correlation was found between attending research ethics course and plagiarism. However, we found that having a previous publication or attending medical writing courses was significantly associated with a positive attitude towards plagiarism. Despite having had courses in medical writing, research ethics and/or published a scientific manuscript before; we still found a positive lean towards plagiarism. This emphasizes the importance of tackling such behaviour by increasing the level of awareness among trainees to avoid such misconduct.

There is evidence that people do plagiarize when the situational factors in terms of the award and the possibility of punishment is remote. Some people remain committed to the intellectual honesty and have the capacity to control their behaviour even under tempting situations; this certainly must have something to do with attitudinal variances towards the issue and one’s ethical and personality orientations. This thought leads to the selection of the issue for the present investigation. It is worthy of note, that research is being carried out by teachers and students in the higher institutions, these students vary in different perspectives which include their social and psychological factors. Among those psychological and social factors are attitude and gender.

Attitude is the expression of favour or disfavour towards a person, place, thing or event. It is a very distinctive and indispensable factor that defines an individual. An attitude could be formed from a persons’ past as well as their present. An attitude involves an evaluation of something which could range from extremely negative to extremely positive. It could be a positive or negative evaluation of people, objects, events, activities or ideas. It could be concrete, abstract or just about anything in your surroundings. Attitude is a central part of human identity. Everyday people love, hate, like, dislike, favour, oppose, agree, disagree, argue, persuade [18]. Attitudes are influenced by three components. They are cognitive (beliefs, thoughts, attributes), affective (feelings, emotions) and behavioural information (past events, experiences) attitude is "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour. Attitude often comes in pairs, which is the conscious as well as the unconscious. Furthermore, unlike one’s personality, attitude towards something could be stable and can as well be changed easily through indoctrination, experience or events etc. Students, in general, develop either a positive or negative attitude towards something depending on their perception of such a thing. A positive attitude is a strong feeling of satisfaction and behaviour towards something or someone. On the other hand, a negative attitude are those with dissatisfaction of behaviour towards something or someone. Attitude either positive or negative depends on the perception of something. On this note, it could be that student’s attitude whether positive or negative may depend on how they perceive something to be. It could be that if Post Graduate (PG) student perceive plagiarism to be against the progress of their academic achievements, they may develop a negative attitude towards it and vice-versa.

Attitude towards plagiarism is often reflected in the perception of postgraduate students. This is because, while some students perceive
plagiarism as wrongdoing, others do not see it as a serious issue. These personal factors such as attitude towards plagiarism may affect the behaviour of postgraduate students, thereby, adversely affecting their ability to organize and retrieve used information.

Gender is one factor also that considerable have effects on students' perception of plagiarism. Gender refers to the sum of characteristics, structures and functions (either psychological, sociological or behavioural), by which living things can be classified into groups of male, female or mixed (hermaphrodite) [19]. It can also be referred to as social and psychological attributes. Gender affects behaviour both biologically and socially, these influences propel a particular gender in an aspect of life while regressing the same gender in another. Research asserts that though the genders remain competitive in every aspect generally, if aspects are analyzed in isolation a particular gender would be more dominant, this gender inequality as a result of biological differences influences the formation of gender identity. The importance of examining performance in relation to gender is based primarily on the socio-cultural differences between female and male. Some vocations and professions have been gender bias. Consequently, an average Nigerian female goes to school with these fixed stereotypes believe, usually regarding complex and difficult tasks as allocated to the male while the female is expected to handle the relatively easy and less demanding tasks. As a result of this way of thinking the larger society has tended to see female as a weaker sex*. Since research work is tasking, meticulously and carefully carried out, there is every tendency for it to affect the perception of plagiarism. Given the belief that students' gender may have an impact on the students' research writing skills, thus affecting their attitude towards plagiarism. This study will examine the attitude of male and female PG students towards plagiarism at the University of Port Harcourt, Nigeria.

The university education environment is a vast learning environment, which creates an equal ground for students to strive, irrespective of the students' differences in gender, social-economic, social-cultural ethical and psychological status. The university system like the University of Port Harcourt has undergraduate and postgraduate levels of education, the postgraduate level of the University is where meaningful research takes place, students are often under this pressure to publish articles, and not checking plagiarism at this level will lead to students plagiarizing because of their exposure to vast information on the internet. Researchers are expected to add to knowledge, but if researchers are involved in plagiarism, they will end up duplicating ideas instead of adding to the existing knowledge. this will, in turn, have a negative impact on the standard of institutions and the products of the institutions, that constitute the nation's workforce of a nation. Since the university is the centre of research and development and students, teachers are always engaged in continuous learning and research, this makes it very important to examine the postgraduate students' attitude as it continually plays a consistent role in plagiarism.

2.1 Statement of Problem

Research and publication of articles are mandatory at the postgraduate programme of many institutions of higher learning, and this can mount pressure on the students. Since postgraduate students are often under this pressure to publish articles, they may be tempted to copy and paste from the internet, where a huge amount of information is easily accessible. In most universities in Nigeria and the University of Port Harcourt, despite the effort to enlighten students on ethical issues on proper citation practices and a clear definition of what constitutes plagiarism. Students are still seen to be plagiarizing consciously or unconsciously, there seen to be no much effort in examining postgraduate students’ attitudinal variances towards plagiarism in the University of Port Harcourt. Thus there is an urgent need to identify the attitudes of postgraduate students towards plagiarism in the University of Port Harcourt. Against this backdrop, this study was undertaken to determine the attitude of Post Graduate students towards plagiarism in University of Port Harcourt.

2.2 Objectives

1. The extent to which Post Graduate (PG) students have a positive or negative attitude towards plagiarism in the University of Port Harcourt.
2. The extent to which the attitude of male and female postgraduate students towards plagiarism differs in the University of Port Harcourt.
3. The extent to which the attitude of masters and PhD students towards
plagiarism differs in the University of Port Harcourt.

2.3 Research Questions

1. To what extent do postgraduate students have a positive or negative attitude towards plagiarism at the University of Port Harcourt?
2. To what extent does the attitude of male and female postgraduate students towards plagiarism differ in the University of Port Harcourt?
3. To what extent does the attitude of masters and PhD students towards plagiarism differ in the University of Port Harcourt?

2.4 Hypotheses

1. There is no significant difference in the attitude of postgraduate students with a positive and negative attitude towards plagiarism at the University of Port Harcourt.
2. There is no significant difference in the attitude of male and female postgraduate students towards plagiarism in the University of Port Harcourt.
3. There is no significant difference in the attitude of masters and PhD students towards plagiarism in the University.

3. MATERIALS AND METHODS

The study adopted a descriptive research design. This as defined by Elvis [20] is a design that gives room to the researcher to sample respondents from a larger population, study them, make findings and generalize such to the entire population. In the same vein, the researcher sampled responses from PG students drawn across a larger population of respondents and make generalizations on their attitude towards plagiarism. This consists of all postgraduate students at the University of Port Harcourt. As at when the study was carried out, there were 1762 PG students in the institution. This data is as gotten from the academic office, [21].

A sample of 200 PG students was drawn for the study using the purposive non-random sampling technique from a population size of 1762 (Masters and PhD programme) students in the University of Port Harcourt.

The instrument for data collection is a self-developed questionnaire called Attitude of Post Graduate Students towards Plagiarism Questionnaire" (APSPQ) was used the instrument. Both positive and negative items were used in the development of the instrument. The instrument contained 20 items in all, weighted 4,3,2,1 for positively keyed items and 1,2,3,4 for negatively keyed items. The instrument was scored using a 4-point Likert Scale of Strongly Agreed to Strongly Disagreed. To determine students with positive or negative attitudes, the researcher used the mean score of the 200PG students on APSPQ. This gave 51.25 which was approximated to 51. Hence all those who score 51 and above were regarded as having a negative attitude while those who have below 51 were adjudged to have a positive attitude towards plagiarism.

The content validity of the instrument was determined by subjecting the instrument for vetting by experts in measurement and evaluation. They were given copies of the instrument with a request to vet for face and content validity for clarity and the ambiguous items removed. The reliability of the instrument APSPQ was determined using the Cronbach alpha method to test the instrument reliability and a reliability index of 0.75 was realized. After the responses, the instrument was collected on the spot. Data generated were analyzed to get the mean, standard deviation, while the mean and standard deviation were used to answer research question 1-3, their corresponding hypotheses were tested for significance using independent t-test and Two-way ANOVA were applicable.

4. RESULTS AND DISCUSSION

The result in Table 1 showed that the mean score of PG students identified as having a positive attitude towards plagiarism is 49.66 while those with a negative attitude is 39.22. The result shows that there is a difference in the mean scores of PG students at the University of Port Harcourt who have a positive attitude towards plagiarism and those with a negative attitude. From the result of Table 1 the calculated t-value =9.67, P-value (p=.05) is less than the alpha level, hence the null hypothesis is rejected. This means that there is a significant difference in the attitude of PG students with a positive and negative attitude towards plagiarism at the University of Port Harcourt.
From Table 2 male PG students were 105 while females were 95. Males with a positive attitude were 42 while 63 had a negative attitude towards plagiarism. Their mean values were 47.83 and 52.52 respectively. This mean indicates that males had a negative attitude towards plagiarism. On the other hand, 19 females had a positive attitude while 76 had a negative attitude. Their mean value was 57.58 and 52.75 respectively. This mean showed that females had a positive attitude towards plagiarism.

From the analysis in Table 3, the calculated F was 4.98, while p-value was 0.027. hence, since p-value (p= .05) is less than the alpha level, the null hypothesis was rejected meaning that there is a significant difference in the attitude of male and female postgraduate students towards plagiarism in the University of Port Harcourt.

From Table 4, the result shows that masters' students with a positive attitude had a mean value of 42.97 while those with negative attitude had a mean score of 55.38, these mean values indicate that masters' students had a more negative attitude towards plagiarism. On the other hand, PhD students had mean scores of 58.39 for a positive attitude and 49.13 for negative attitude, this shows that PhD student has a positive attitude towards plagiarism.

From Table 5, the result shows that the Calculated F was 30.33 while the p-value was 0.001. Hence, since p-value (p=0.05) is less than the alpha level, the null hypothesis was rejected meaning that, the attitude of Masters and PhD students towards plagiarism in the University of Port Harcourt differ significantly.

The findings from research question one showed that PG students generally from the University of Port Harcourt have a positive attitude towards plagiarism. This finding surprisingly means that students at the University of Port Harcourt do not see anything wrong with copying other peoples work. The finding is very surprising to the researchers because the University of Port Harcourt does not take the act of plagiarism kindly, the non-lenient measure adopted by the University of Port Harcourt, should probably scare the students towards developing a positive attitude towards plagiarism. However, this non-lenient approach may be the reason why students do this. The findings of Adebayo (2011) is in line with this study.

From research findings two, it is seen that there is a significant difference in the attitude of male and female postgraduate students towards plagiarism at the University of Port Harcourt. This finding specifically indicated that female students have a more positive attitude towards plagiarism than male students. This finding also implies that male PG students may take the issue of plagiarism seriously more than their female colleague. This finding may be attributed to the researchers’ observation that male postgraduate students at the University of Port Harcourt may be more careful and meticulous in their academic work than female students. The finding, however, is in line with previous studies Kattan et al. [17] whom all noted that the perception

<table>
<thead>
<tr>
<th>Table 1. Mean, standard deviation and independent t-test analysis of the attitude of PG students towards plagiarism in the University of Port Harcourt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitude</strong></td>
</tr>
<tr>
<td>Positive</td>
</tr>
<tr>
<td>Negative</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2. Two-way ANOVA showing the analysis of the difference in the attitude of male and female PG students towards plagiarism in the University of Port Harcourt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Table 3. Two-way ANOVA of the attitude of male and female PG students towards plagiarism in the University of Port Harcourt

<table>
<thead>
<tr>
<th>Sources</th>
<th>Sum of square</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>P-value</th>
<th>α</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cor. Model</td>
<td>1378.37</td>
<td>3</td>
<td>459.45</td>
<td>2.64</td>
<td>.049</td>
<td>.05</td>
<td>Significant</td>
</tr>
<tr>
<td>Intercept</td>
<td>420856.94</td>
<td>1</td>
<td>420856.94</td>
<td>2443.33</td>
<td>.000</td>
<td></td>
<td>reject Ho</td>
</tr>
<tr>
<td>Gender</td>
<td>942.78</td>
<td>1</td>
<td>942.78</td>
<td>5.473</td>
<td>.020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>0.182</td>
<td>1</td>
<td>0.18</td>
<td>0.001</td>
<td>.974</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender / Attitude</td>
<td>859.18</td>
<td>1</td>
<td>859.18</td>
<td>4.988</td>
<td>.027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>33760.43</td>
<td>196</td>
<td>172.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cor. Total</td>
<td></td>
<td>199</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Mean and standard deviation of attitude of masters and Ph.D students towards plagiarism in the University of Port Harcourt

<table>
<thead>
<tr>
<th>Gender</th>
<th>Attitude</th>
<th>N</th>
<th>Mean</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td>Positive</td>
<td>38</td>
<td>42.97</td>
<td>13.25</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>94</td>
<td>55.38</td>
<td>12.28</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>132</td>
<td>51.81</td>
<td>13.73</td>
</tr>
<tr>
<td>PhD</td>
<td>Positive</td>
<td>23</td>
<td>58.39</td>
<td>11.36</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>45</td>
<td>49.13</td>
<td>11.86</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>68</td>
<td>52.26</td>
<td>12.42</td>
</tr>
<tr>
<td>Total</td>
<td>Positive</td>
<td>61</td>
<td>48.79</td>
<td>14.57</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>139</td>
<td>53.97</td>
<td>12.46</td>
</tr>
</tbody>
</table>

Table 5. Two-way ANOVA showing the analysis of the difference in the attitude of masters and Ph.D students towards plagiarism in the University of Port Harcourt

<table>
<thead>
<tr>
<th>Sources</th>
<th>Sum of square</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>P-value</th>
<th>α</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cor. Model</td>
<td>5480.89</td>
<td>3</td>
<td>1826.96</td>
<td>12.12</td>
<td>.0001</td>
<td>.05</td>
<td>Significant</td>
</tr>
<tr>
<td>Intercept</td>
<td>412910.11</td>
<td>1</td>
<td>412910.11</td>
<td>2738.22</td>
<td>.0001</td>
<td></td>
<td>reject Ho</td>
</tr>
<tr>
<td>Gender</td>
<td>818.78</td>
<td>1</td>
<td>818.782</td>
<td>5.43</td>
<td>.021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>96.74</td>
<td>1</td>
<td>96.74</td>
<td>0.64</td>
<td>.424</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender / Attitude</td>
<td>4573.30</td>
<td>1</td>
<td>4573.30</td>
<td>30.33</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>29555.87</td>
<td>196</td>
<td>150.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>575100.00</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cor. Total</td>
<td>35036.75</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

of male and female PG students towards anti-plagiarism check as enhancing educational quality control certainly does not differ significantly.

From research finding three, it is seen that the attitude of Masters and PhD students towards plagiarism in the University of Port Harcourt differ significantly. This result means that there is a difference in the way and manner these two sets of PG students perceive plagiarism. Specifically, it is revealed that masters' student has a negative attitude towards plagiarism, while the PhD students have a positive attitude to plagiarism. This finding infers that PhD students are more prone to plagiarism than the masters' students. These findings are however surprising because PhD students are often seen to be more meticulous than the masters students. The present result may also arise because the PhD students have a lot of literature to review and due to this volume in literature, they may be open consciously or unconsciously to plagiarize materials irrespective of how careful they may be. On the other hand, it could be that masters' students are taking their studies more seriously compared to PhD students.

5. CONCLUSION

The present study has shown that plagiarism occurred among the studied participants. The level of positive attitude towards plagiarism is high in PG student especially among male
students as well as PhD students. The most common factor for plagiarism was willful copying as well as ignorance of what constitutes plagiarism. However, the most common preventive measures were the use of anti-plagiarism software and orientation.

From the findings, it is recommended that:

1. The University of Port Harcourt from time to time should organize orientation programmes for all PG students based on the concept.
2. Post Graduate students should be taught good writing skills in every higher institution. This will help those who are not competent in writing or research to avoid plagiarism.
3. Students should be taught of the ill effect of plagiarism on time as while as research ethics.

CONSENT

As per international standard or university standard written participant consent has been collected and preserved by the author(s).

ACKNOWLEDGEMENT

The authors acknowledge the support of Ibrahim Ajala of Ignatius Ajuru University of Education, Port Harcourt in reviewing an earlier draft of this paper.

COMPETING INTERESTS

Authors have declared no competing interest.

REFERENCES

5. Park C. In other (people’s) words: Plagiarism by university students literature and lessons. Assessment and evaluation in higher education, Rwandan Journal of Education. 2003;2(4):471-488.


© 2020 Orluwene and Magnus-Arewa; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
http://www.sdiarticle4.com/review-history/55798