

Promoting Best Research Practices Amongst Palms Scientists in Nigeria: the issue of Plagiarism.

by

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Abstract

The aim of this paper is to investigate the level and reasons of plagiarism of literature among palm scientists in Nigeria. The questionnaire was adopted to gather data in this study. The questionnaire was administered by the researcher to scientists that have published at least one palm article. Usable data were collected from 40 Palms Scientists that used the Nigerian Institute for Oil Palm Research Library to access research information between May 2007 and March, 2009. Plagiarized papers were content analyzed to verify claims. Results of detailed investigation from the respondents who indicated that their papers were plagiarized revealed that one of the scientist's paper was actually plagiarized by his colleague by re-sending their already published work in a book where the plagiarist was a second author to a journal for second publication with the plagiarist name now as first author. This is double publication and plagiarism of authorship. The reason for plagiarism was due to unscrupulous behaviour of the scientists trying to outwit his colleagues to gain unwarranted merits which is against the principle of best research practices and capable of creating distrust among scientists. This study concludes that plagiarism of palms literature exists in Nigeria but on a very low level. This means that most palms scientists in Nigeria uphold ethical standard in carrying out research. The study therefore recommends proper scrutiny of papers submitted for promotions, outright cancellation of plagiarized papers, and withdrawal of intellectual right to such works among others to serve as deterrent.

Introduction

Culture can be defined as that complex whole which includes knowledge, belief, art, morals, customs and any other capabilities and habits acquired by men as members of societies (Benge, 1970). All human activities are culturally significant including scientific research. Scientific research has its own culture. Feuer, Towne and Shavelson, (2002) defined scientific culture as a set of norms and practices and an ethos of honesty, openness, and continuous reflection, including how research quality is judged. In carrying out scientific research, there are laid down procedures, rules, culture and ethics to be followed by the scientists to be able to conform to the required standard. Hanley (2009) posited that scientists operate within a science-specific group of values, behaviour, norms, customs, rules and taboos. Behavioural rules and norms in science includes comprehensive citing of sources, while avoidable scientific taboos are fabricating data, plagiarism, and failure to give credit or appropriate citation. Hanley (2009) concluded that to operate within the culture of science, scientists must use scientific methods and credit their sources among others. However, that is not the case with some scientists or authors.

Plagiarism is derived from the Latin word *plagiarius* meaning abducting, kidnapping or kidnapper, and it refers to a kind of intellectual theft defined as "the false assumptions of authorship (Chaudhuri and Mundava, 2005 and Dunn, 2009). To "plagiarize" according to Merriam-Webster Online Dictionary (2005) means: to steal and pass off the ideas or words of another as one's own, to use of another's production without crediting the source, to commit literary theft and to present as new and original an

idea or product derived from an existing source. In other word, plagiarism is an act of fraud. It involves both stealing someone else's work and lying about it afterward. While plagiarism deals with intellectual rights of authors, copyright deals with economic rights of authors. Plagiarism is a very serious offence and it is committed by all groups of people. In many cases, plagiarism is carried out by talented and experienced people (Martins, 1994). Within academia, plagiarism by students, professors, or researchers is considered academic dishonesty, scientific misconduct or academic fraud and offenders are subject to academic censure. Some individuals caught plagiarizing in academic contexts claim that they plagiarized unintentionally, by failing to include quotations or give the appropriate citation. While plagiarism in scholarship has a centuries-old history, the development of the Internet, where articles appear as electronic text, has made the physical act of copying the work of others much easier. Notable scholars, workers, college and university and researchers are being accused of plagiarism resulting in loss of credibility and integrity. The issue of plagiarism has assumed an alarming dimension all over the world. It has become common features in scientific gathering and publications in recent times (Bowman, 2002).

Forms of Plagiarism

Martins (1994) identified eight forms of plagiarism as follows:

1. Plagiarism of authorship - Is the blunt case of putting one's name to someone else's work, or ask someone else to write for you, or copying so much words or ideas from a source that it makes

up the majority of your work, whether you give credit or not.

2. Plagiarism of idea - Is where an original thought from another is used but without any dependence on the words or form of the source.
3. Plagiarism of data – Is the act of inventing and copying someone’s data in research.
4. Paraphrasing plagiarism - When some of the words are changed, but not enough, resulting in paraphrasing plagiarism especially when the original source is not cited.
5. Word for word plagiarism – Is copying from someone else’s work word for word without using quotation marks, acknowledging the source or both.
6. Plagiarism of secondary sources - Is when a person gives references to original sources, and perhaps quotes them, but never looks them up, having obtain both from a secondary source which is not cited.
7. Plagiarism of the form of a source (primary source) - Is the use of structure of the argument in a source without due acknowledgement of the source. This includes cases in which the plagiarist looks up the primary source but does not acknowledge a systematic dependence on the citations in the secondary source.
8. Self plagiarism – Is the reuse of significant, identical or nearly identical portions of one’s own work without acknowledging or without citing the original work.

Most cases of plagiarism can be avoided by citing sources used adequately. Rivoire (2003) opined that a better approach to curb scientific misconduct is an emphasis on implementing good research practice guidelines. A good scientific paper should not contain any plagiarized material as plagiarism is a serious offence and a serious charge against the author Stapleton (1995). This is where best research practices come to play. According to Martins (1994) there is a great fear that one’s idea will be stolen by unscrupulous competitors and this often results in an unwillingness to share ideas. This is not good enough for research.

Librarians’ Roles in Curbing Plagiarism

Librarians are concerned by this issue of plagiarism because they serve as information gatekeepers and a liaison between researchers and their finished scholarly products. As custodian of knowledge, the librarians have cultural responsibilities to protect the intellectual properties in their care and to ensure that scientists adhere to laid down standard in producing research papers. They have great role to play in combating and enlightening researchers on this issues. According to Burke (2004) the role of librarians in the campaign against plagiarism is not the detection rather it is to educate faculty and students as to what constitutes plagiarism and how to avoid it.

Objective of Study

The main objective of this study therefore, is to investigate the level of plagiarism of palms literature in Nigeria. Others are:

- i. To identify the cases of plagiarism.
- ii. To find out the percentage of articles plagiarized.
- iii. To identify reasons of plagiarism.

Methodology

Palms scientists who used NIFOR library for research between 30th May, 2007 and March 30th 2009 formed the population of this study. To qualify for sampling, the scientists must have published at least one or more articles in any aspects of Palm sciences. The choice of the NIFOR library is because it is the only library solely devoted to palms research in Nigeria. The questionnaire used to collect data from the scientists consists of 20 questions. Some scientists were given the questionnaire to fill and return on the spot while some took theirs away to return later. Out of 53 copies given out, 40 (75.47%) usable responses were received as shown in Table 1. Nigerian Institute for Oil Palm Research (NIFOR) 32(80%); University of Benin, Benin City 5(12.5%); Benson Idahosa University (BIU), Benin City 1(2.5%); Delta State University Enterprises (DELSUE), Abraka 1(2.5%); University of Uyo (UNIUYO), Uyo 1(2.5 %). Simple percentage was used to analyse the data collected. Some of the publications claimed to have been plagiarized were content analyzed by this researcher to identify plagiarized materials.

Table 1: Response Rates of Respondents

Institutions	Frequency	%
NIFOR	32	80
UNIBEN	5	12.5
BIU	1	2.5
UNIUYO	1	2.5
DELSUE	1	2.5
Total	40	100

Table 2: Details of Reported Cases of Plagiarism by the Scientists

Cases	No of articles Plagiarised	Affiliation of the Plagiarists	Subject of article Plagiarised	Sections of Articles Plagiarised
No. 1	12	Research Institute	Agric. Engineering	Method, Results Conclusion, Recom.
No. 2	1	Univ./Res./Industry	Genetics/Biotechnology	Methodology, Result
No. 3	1	University	Food Chemistry	Result
No. 4	1	Research	Soil science/Extension	Whole paper
No. 5	1	Polytechnic	Agric. Economics	Whole paper
No. 6	3	Univ./Res. inst	Instrument Technology	Methodology

N=6

Results and Discussions

Result of demographic information of respondents showed that 16(40%) possess Ph. D, 23(57.5 %) M.Sc. and 1(2.5%) B.Sc. Thirty nine (97.5%) are male and 1(2.5%) female and they are all married. The above data shows that majority of the population are experienced scientists. Further results revealed that all (100%) the scientists believed and are aware that there is plagiarism and 97.5% agreed that the practice is evil. On the number of Palms articles published by the scientists, result showed that the least published scientist has one paper while the highest has 88 publications, a range of 1 - 88.

Reported Cases of Plagiarism

Result of data collected from respondents revealed that six (15.00%) of the respondents indicated that some of their palms publications were plagiarized and all the six respondents were from NIFOR. Details of their claims are as presented in Table 2. A total of nineteen (19) articles were claimed to have been plagiarized as shown in column 2, Table 2 above. The suspected plagiarists of these papers were from different institutions and in different subject areas. All parts of the papers were also claimed to be affected.

Actual Cases of Plagiarism

To ascertain actual cases of plagiarism, this researcher met the six scientists who indicated that their papers were plagiarized. The researcher personally interviewed them to verify their claims. They were asked to produce their original

publications and the plagiarized versions for comparison to verify their claims. The following revelations were made after the verifications as follows:

Case No. 1: On interrogation the scientist said that if he decides to go ahead with his case, it will lead to disaffection in the affected institution. However, he concluded that we should let the sleeping dog lie. So his case was neither here nor there and therefore stroked out.

Case No. 2: During my interaction with the scientist, he informed the researcher that as a Head of a Research Programme, he supervised a research team to carry out a research project titled **“Rapid Callus Proliferation, Somatic Embryogenesis and Organogenesis of Oil Palm (*Elaeis guineensis* Jacq.)”**. The research team comprised of himself and three other laboratory technologists. The leader of the team wrote the report of the work as a personal project and excludes other contributors’ names. Efforts made by the supervisor and other team members to make the leader include their names in the report failed. Before they could seek redress on this matter the paper has been sent for publication. So, they left the matter unresolved. The report was later published as a journal article in 1996 as a personal study by the leader. This claim was corroborated by one of the technologist. On interrogation the technologist complained bitterly of the action or betrayer of their colleague because they brought him into the research programme and they also contributed to the success of that project. The

opinion of the accused technologist could not be sought on this matter because he could not be reached. However, from the above corroborated evidence of the two contributors, it is clear that the two researchers have been cheated by the leader because they contributed their idea and knowledge to the success of that investigation that he claimed sole authorship. This is plagiarism of authorship and idea.

Case No. 3: On interrogation, scientist No. 3 could not substantiate his claim. He could not produce the plagiarized version of the paper. Therefore, his claim was nullified.

Case No. 4: The scientist reported that their book chapter titled **“Oil Palm Production Systems and Sustainable Development in Nigeria”** page 75 – 79, April, 2004 by himself, as first author and Gwaram, M.Y. as second author in a book titled **”Scientific and Environmental Issues in Population, Environment and Sustainable Development in Nigeria”** edited by O.A. Ibitoye, published by the Dept. of Geography and Planning Science, University of Ado-Ekiti, ISBN: 978-978-42872-6-7 was later published as a journal article with the same title **“Oil Palm Production Systems and Sustainable Development in Nigeria”** in the **Biological and Environmental Science Journal for the Tropics (BEST) vol. 1 No. 1 , page 108 - 113, August, 2004** by Gwaram, M.Y. now as first author and the former first author Gere, S.O. now as second author without any changes made to the original paper, and without the knowledge and consent of the original first author, Gere, S.O. **The only difference between the two papers is that the last paragraph of the Introduction of the original paper was now used as the abstract for the journal article.** This is a clear case of plagiarism of authorship.

Case No. 5: The scientist confirmed to this author during questioning on 8th June 2010 that his fellow religious brother, who was not part of his research team but assisted in typing the manuscript, took it and publish it with his name as first author. However, this scientist wouldn't want his religious brother to be persecuted hence he wouldn't want details of his offence published in this paper. This claim is also nullified. However, this would have also been a case of plagiarism of authorship.

Case No. 6: Scientist No. 6 was asked to provide evidence to support his claim that his three papers

were plagiarised. He promised to bring the details but never came up with any. His claim was therefore nullified.

The above findings have established the fact that there is plagiarism of palms literature in Nigeria but the rate of occurrence is very low. They were cases of plagiarism of authorship and idea by unscrupulous scientists without good moral and ethics of scientific research. Their conducts violates best practices in scientific research. Also, it is clear from the above analysis that some of the scientists who claimed that their papers were plagiarized but could not substantiate their claims may have seen some literature that look like their own and became suspicious that their research work has been plagiarized. This problem may be due to the fact that some scientists may be unaware of current research going on in their field of study and thus duplicate such work.

Other Forms of Plagiarism

My interaction with some of the scientists showed that there are other unreported and unverified cases of plagiarism. Many believed that plagiarism do exist as earlier indicated above. Apart from the above form of plagiarism, the scientists were asked to indicate other forms of plagiarism since they are directly involved in research as presented in table 3.

Result in Table 3 showed that 34 (85%) of the respondents indicated improper citation as a major form of plagiarism. Similar finding by Chaudhuri and Mundava (2005) revealed that students of the University of Tennessee had the similar problem of improper citation and research skills. This attitude when unchecked follows the students to their places of work after graduation and this must have accounted for the many cases of plagiarism today. That is why research-based writing in American institutions today are filled with rules that have to do with research and proper citation, and gaining knowledge of such rules helps to avert mistakes that can lead to plagiarism (Stolley, 2006). We have also seen these lapses among palms scientists and students using NIFOR library because they will come back after using a source to ask for the citation. In the biological sciences, El-Sharkawy (2009) affirmed that he has personally suffered from citation violation and omission.

Table 3: Forms of Plagiarism

Variables	Freq.	%
Using the work of other people without proper citations	34	85
Using the data of other people	24	60
Copying the results of other people	21	52.5
Including colleagues names that did not contribute to the study	20	50

N=40

Table 4: Reasons for Plagiarism

Variables	Freq.	%
Increased pressure to publish	32	80
Due to access to a huge amount of research on the internet	10	25
Lack of scholarly standards in the academic community	20	50
Lowered integrity and ethical standard of scholars	30	75
Inadequate knowledge of citing used sources in scientific papers	24	60

N=40

Table 5: Effect of Plagiarism

Variables	Freq.	%
Second-rate individual may get ahead of you	31	77.5
Plagiarists receive undue credit	32	80
It can lead to hoarding of information	20	50
It reduces innovation and creativity of scientists	32	80

N=40

Falsification of data is prevalent in scientific research the world over. The above result revealed that 24(60%) of the respondents indicated using other researcher's data is another form of plagiarism. Rivoire (2003) reported that physicist Victor Nirov in 2002 was fired from Lawrence Berkley National Laboratory in California after his computer analysis of the discovery of elements was found to be fabricated. Grant (2009) also reported that two renal researchers faked data while conducting animal studies on immunosuppressant. Scientists should therefore avoid data fabrication because it will be detected sooner or later.

On why scientists plagiarize, result from respondents revealed that 32(80%) of the respondents indicated increased pressure to publish, 30 (75%) lowered integrity and ethical standard of scholars, and inadequate knowledge of citation 24 (60%) as major reasons why scientists plagiarized as shown in Table 4.

This syndrome of publish or perish is also affecting computer scientists and engineers in the UK to the point that Computing Research Association (2004) in their Best Practices Memo recommended critical evaluation of the publications submitted for promotion and tenure to establish a connection between the staff intellectual contribution and the

benefit claimed for such work. On low integrity and ethical standard of scholars, Chaudhuri and Mundava (2005) reported that "the everybody is doing it syndrome" is also affecting Students of the University of Tennessee. To reverse this trend, Harris (2002) opined that lowered integrity and ethical standard of scholars can be enhanced by institutions honour and reward for excellence in scientific research. Also, institutions can formulate guideline and policies against plagiarism, and also encourage scientists to remain in academia (Harris, 2002 and Martin, 1994). Librarian and other stakeholders in research should organize training to impact skills on citation and research methodologies on their staff to ensure best practices in research. Adequate funds should be provided at the right time by government for research to discourage researchers from data falsification.

On the effects of plagiarism, results in Table 5 revealed that 32 (80%) of the scientists indicated that plagiarists receive undue credit for work not done while 31(77.5%) indicated that plagiarists may unduly get ahead of others. This may have great consequences for research if plagiarists are allowed to get away with the practice. Genuine researchers may be discouraged and can lead to reduced innovation and creativity of scientists as indicated by

32 (80%) of respondents. This result agreed with Martin (1994) that plagiarism reduces innovation, causes alienation and inefficient use of the talents of the workers. This may cause distrust and non collaborative work. Other result also revealed that plagiarism leads to hoarding of information as indicated by 50% of the respondents. This may be the reason why some NIFOR scientists are hoarding their papers and publications, and not willing to submit them to the library.

Penalties for Plagiarists

Thirty eight (95%) respondents supported outright cancellation of plagiarized paper any time it is discovered and 35 (75%) indicated withdrawal of intellectual right to plagiarised work as penalty for plagiarists. These measures when taken seriously may help to stem the tide but experts have however suggested that educating the people involved will be more rewarding. Demotion and fine for offenders may not also help matters as they were least recommended by respondents. University of California supported the above position as they believed that preventing academic dishonesty through education is preferable to establishing elaborate strategies to catch cheaters.

Solutions to Plagiarism

Possible solutions to the problem of plagiarism as indicated by respondents include: setting publication rules in organizations 30 (75%) response, proper scrutiny of paper presented for promotions 32 (80%). In this regard, multiple authors should be made to justify their individual contributions to the paper. Also, papers that are not in the professional core discipline should not count. Further result showed that 26 (65%) of respondents recommended enlightenment through seminar and workshop on research and citation methodology, this Libraries and librarians must pursue vigorously as custodian of knowledge to help curb this menace as Burke (2004) opined that emphasis is not on detection of plagiarism but the enlightenment of scholars to know and avoid it. To this end, Librarians at the University of Tennessee, (Chaudhuri and Mundava, 2005) have mapped out action plans to organize workshops, instructions, orientation etc. for their students to enable them develop good scientific culture that will follow them to their future places of endeavours. Agricultural librarians in Nigeria should emulate this. The use of publications for assessing scientists' progress is inevitable as result showed that only 8 (20%) of respondents supported its cancellation. Therefore, it is not enough to receive papers for promotions from staff, it is the responsibility of the organizations to find out the contributions of the

individuals listed as authors in such papers because some authors now list the names of their friends, wives, superiors as co- authors even when such persons are not in the same or related field with the principal author. Where the contributions of the co authors are not substantial, such paper should not count for them. The Computing Research Association, UK (2004) has adopted similar method by evaluating the intellectual contribution of papers submitted by Computer Scientist and Engineers for promotions and tenure. For authors writing new papers, it is strongly recommend that they should follow these "best practices" 1. Provide full disclosure in the introduction that the new work incorporates texts previously published; 2. Ensure there is no violation of copyright and 3. Cite the old works in the references section of the new work.

Conclusion

Plagiarism of palms literature exists in Nigeria but at a very low rate. They were cases of plagiarism of authorship and idea. Some palms authors have reported cases of plagiarism of their work to the appropriate authorities for persecution and sanctions while some did not based on friendship or religion. Unscrupulous behaviour of the scientists involved were the main causes of plagiarism. They were attempts to out smart their colleagues to get unmerited advantage. These are direct negation of the principles of good scientific culture and behavioral norms in research. With the above result, palms researchers have nothing to fear that their papers will be plagiarized but to send their publications to the library for others to use. The study has clearly shown that most palms scientists have high moral and ethical standard in carrying out their research work. Therefore, palms scientists should always apply the basic rules when carrying out research as the best scientific culture rest with them. Other causes of plagiarism such as increased pressure to publish, lowered integrity and ethics problems were highlighted by respondents.

Recommendations:

The following recommendations will help reduce the problem of plagiarism in palms research.

1. Individual scientists should display high level of ethical standard and integrity, by acquiring and applying citation skills where necessary in the conduct of research.
2. Librarians should be involved in organizing seminars, workshops, instructions, orientation etc. to educate scientists on issues of plagiarism and how to avoid it.
3. Research institutions should develop guidelines and policies to encourage best

practices, to guide the conduct of research and reward excellence among staff.

4. Professional bodies should set standard of scientific practice for their members.
5. Scientists should avoid double publishing and multiple submissions of papers for publishing, and ensure proper citation of sources used.
6. Editors and publishers should be more careful in scrutinizing and confirming suspected manuscripts from the originating institutions before acceptance.
7. Authors should check their references before the final manuscript is produced to ensure that they are mentioned in the text.
8. The National Library of Nigeria should formulate guidelines for publications and measures to deal with misconduct as is obtainable in the USA, Europe and Asia.
9. Peer review of manuscript, scientific competition among peer and presentation of papers at seminars before publication should be encouraged.
10. If you plagiarise, you are cheating yourself and you can't grow (Dunn, 2009).

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