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Technological Dualism and Plagiarism in Universities: Analysis of Emerging Trends and Implications on Higher Education

By

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Abstract

Plagiarism is an intellectual property theft committed intentionally or unintentionally. Studies have demonstrated that globally, plagiarism is a problem among university students. A study in a university revealed that 39.3% of students occasionally engaged in plagiarism while 40.1% regularly used other authors' ideas. Further, 22.8% and 48.5% of students regularly and occasionally used a whole phrase and presented as theirs respectively. Kenya has so far reported few documented plagiarism cases both at Masters and doctoral levels. Some plagiarized work was identified through technological tools hence the question, does technology contribute to plagiarism and its management? This paper reviewed empirical studies on factors influencing students' engagement in plagiarism, technological dualism and plagiarism and prospects to curb plagiarism in universities. Data was obtained from journal articles, thesis and research projects globally. Data from empirical studies pointed to lack of time, perceived difficult tasks, pride and quick fix of issues as influencing students' engagement in plagiarism. While technology was perceived as a panacea to intellectual property theft, studies indicated technology is dualistic regarding plagiarism. Prospects to curb plagiarism included a clear definition of plagiarism and consequences thereof. Similarly, hard and soft copies of materials used encourage adherence to originality. Submission of electronic draft copies to anti-plagiarism software alongside electronic copies of original work would curb plagiarism to some level. This paper concluded that plagiarism is real and calls for more than mere supervision to promote ingenuity and shun the emerging intellectual property theft.

Keywords: Higher Education, Plagiarism, Technology, Dualism, Factors, Prospects, Emerging, Trends, Africa

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Introduction

Plagiarism is defined variously with regard to its nature of varying from use of one's words in a sentence, paragraph and or whole document without acknowledgement of the author. The origin of plagiarism was derived from a Latin word "Plagium" translated to mean "kidnapping a man". This implied stealing another person's work, whether intentional or unintentional and personifying it (Anney & Mosha, 2015., Bailey, 2017). Plagiarism is when materials used lack originality, poor citations of material, lack of express permission from the original author(s), non-acknowledgement of original author and use of text excerpts which are not original. Put differently, Bowen (2009) defined plagiarism as an exploit where an individual copies and pastes borrowed texts, ineptitude to paraphrase texts, relates ideas without in-text citations and or references to acknowledge as source of material. From definitions, it is construed that there is a guided definition of plagiarism to imply an abuse on intellectual integrity.

In their study Anney and Mosha (2015) established that 40.1% confessions were that other students regularly used another author's idea(s), 48.5% occasionally used other authors' phrases, 34.7% used another author's sentences or paragraphs, while a paltry 3.0% and 1.2% used an entire document of another author without citation. The study brings out various forms of plagiarism which are unacceptable in academia.

Globally, Germany is notably on record for plagiarism cases among her high profile Doctorate holders. Copyleaks October 2nd 2020 cited the university of Bayreuth Germany, where a minister of defense namely Karl-Theodor Zu Guttenberg was accused of plagiarizing a large part of the work compiled in his PhD Thesis in the year 2006. Investigations revealed that word for word and paragraph form of plagiarism stretching to 94% of the pages as plagiarized work. The Minister was found guilty and stripped off his doctorate degree. In the same year 2011, Silvana Koch Mehrin, a German member of European parliament was stripped off her doctorate for academic fraud by the university of Heidelberg. In 2013, university of Dusseldorf Germany too stripped the education minister Annette Schavan of her doctorate degree following evidence of plagiarized dissertation entitled "Character and Conscience" in 1980. She systematically and intentionally presented someone else's work besides snubbing proper citations. An expert analyst revealed that passages on 60 pages out of 351-page dissertation were plagiarized (Coughlin, 2015). In 2019, Franziska Giffey was accused of using other authors' works when compiling her PhD dissertation without preferring adequate credit to genuine authors in her 2009 studies at Free university of Berlin. The findings established that more than two thirds of the 205-page thesis comprised of plagiarized works (Chuda & Navrant, 2012). The trend was inconceivable among high profile personalities.

Africa has not been spared on matters plagiarism either. In Mozambique, Coughlin (2015) indicated that out of 150 theses, 75% of the work had significant plagiarism (>100-word relevance) while 39% had very much plagiarism (>500 word equivalents) while only 16% had minimal or none plagiarized work. Further, 49% of plagiarized work was either verbatim or paraphrased whereas 51% had reference material without quotation marks.

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Okoche (2013) study established that plagiarism among students in East African universities was understandably of great magnitude and rolling. The findings indicated 15.83% of 475 students affirmed engaging in plagiarism. These implied students had knowledge of plagiarism hence intentionally engaged in (Mohamedbhai, 2016). In Uganda, with reference to data collected from entrepreneurs and academicians, Magara (2016) established a package of evidence of academic cheating including duplication of other authors' works. Muchuku (2011) study in Tanzania established from students' assignments together with 87.5% that they had plagiarized some work before versus 12.5% who did not.

In 2010 a master's student at the University of Nairobi, Kenya plagiarized a master's thesis of a Maseno university student by lifting a great part of the work which escalated into a legal battle (Rop, Njiraine & Irura, 2017., Onchana, 2011). In another case, the Kenyan Local Newspaper *Daily Nation*, 24th September 2019, ran a story covering a PhD lecturer at Kenyatta university accused of plagiarizing a PhD thesis of a Nigerian scholar. Based on foregoing evidence, plagiarism in universities is a global phenomenon and a threat to original philosophy of research; establishing new facts or additional information to the already existing knowledge. There is quite a lot to unravel in order to uphold intellectual honesty. This article therefore sought to review empirical studies on factors influencing students' involvement in plagiarism, technological dualism and plagiarism and prospects to curb plagiarism in universities.

2.0. Literature Review

2.1. Factors Influencing Students' Engagement in Plagiarism

There are as many known/unknown factors influencing students' engagement in academic misconduct as there are plagiarizers. Iran registered high levels of plagiarism among masters' students in universities. Students paraphrased work without acknowledging sources and omitted quotation marks where material was directly quoted. Ghost writing and lifting of another person's work was associated with lack of poor writing skills usually concomitant with plagiarism to make ends meet. Conclusively, most students unintentionally engaged in plagiarism due to poor knowledge in the vice (Horrom, 2012).

In Slovene, Spracj, Urh and Jerebic (2017) posit that students' responses alluded to teaching as a second factor influencing them to engage in plagiarism. Universities' laxity in putting demands on students created latitude in their exploration without restrictions, consequently led to intellectual property theft. Divergent to Slovenia students, German students claimed pressure of work and pride as basis for their involvement in academic cheating. Slovene and Germany students' responses demonstrated that various factors led students' stealing. This finding resonated with Koul, Clariana, Jitgarun and Songsriwittaya (2009) recommendations that factors influencing students varied from culture to culture.

At Mzuzu university Malawi, Selemani, Chiwinga and Dube (2018) study established that although students had an idea of plagiarism, majority affirmed that at some point, they either intentionally or unintentionally engaged in plagiarism. Most (86.7%) students' responses attributed pressure from their work place, family and search for good grades while 84.9% cited laziness and poor time management. Whereas 62.7% of students strongly agreed laziness and poor time management swayed them into plagiarism, 54.7% strongly agreed that they committed plagiarism because of poor academic writing skills like inappropriate citations, paraphrasing, summarizing or referencing. Besides, 50.9% quoted demands to beat deadlines on given assignments as a factor. The study concluded that students were involved in academic malpractice knowingly and unknowingly. Academic staff responses on factors influencing students into plagiarism portrayed that most lecturers handled large classes

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creating unrealistic environment to detect every single case of plagiarism. Besides, the online content provided space for students to easily copy and paste.

In Nigeria, studies pointed to an upsurge in plagiarism whose cause were dissimilar. In Orim (2015) findings depicted lack of clearly stated writing requirements for students where 81% and 67% of Nigerian origin in UK universities and 40% in Nigeria suffered from lack of knowledge on plagiarism and its ethical implications. Besides, lack of well-organized checks possibly from supervisors or lecturers to discourage the vice was underscored. Going ahead, students unanimously asserted that there was neither structured nor unstructured policies and procedures to end plagiarism alongside lack of tools and or systems in place. A good number of senior management staff observed that students plagiarize because of corrupt learning environments. While some lecturers wanted plagiarism cases addressed others were less concerned. The divergent stand on measures of dealing with the malpractice influenced students' involvement in academic theft.

Mphahle and McKenna (2019) study in South Africa attributed students' involvement in plagiarism to awareness of Turnitin software's inability to identify paraphrased work. They were unlikely to be noticed hence continued cheating. In Mozambique, Coughlin (2015) found motives behind students' involvement in plagiarism as ignorance of professional ethics, poor citation techniques, desire for good research, skilled writing alongside pressure of work. There was no single most factor influencing students' involvement in plagiarism.

Inter University of East Africa (2015) study demonstrated that 61% of graduates from Tanzania were "unfit for jobs" and "lacked job market skills". The shortcomings were blamed on technology for providing a quick and easy fix for lazy students. Lack of research skills and software to detect cheating pressed students into lifting work from internet. Such factors among influenced students' engagement in academic cheating and consequently impacting on individual students' integrity.

The findings of a study titled "The White-Collar Hustle: Academic Writing and the Kenyan Digital labour Economy" described contractual cheating as an emergent form of plagiarism in Kenya. Although contractual cheating fell under commercial plagiarism, it is broadly under academic dishonesty, a malpractice commonplace in Kenya and Africa through internet. Students seeking contract cheating are notably weak, poor concept of English language, lazy and economically stable. Ironically, English language is the medium of instruction and inadequate skill perception inevitably hinder sound grammatical writing. Qualitative data ostensibly depicted lecturers as less observant in identifying plagiarism, acknowledging their failures on the subject or simply never read through students' work. Individual students and institutional integrity on originality in research is becoming shaky in academia (Wachira, 28th January 2012., King'ori, 2021).

Kenyans have greatly been mentioned on the map for ghost writing as a form of academic cheating. Walkers (2017) and Wachira 28th January 2012 claimed that ghost writing in Kenya is real and explains about conflicting factors that necessitate search for ghost writers. Ghost writers though invisible but whoever purchases the paper is the original author of the article. Face-to-face interviews with some ghost writers, established that technology is central in promoting and supporting ghost writing industry especially for lazy and economically stable students. The internet is a quick fix to their work. On whether intellectual surrogates are a contributory factor to plagiarism, is an area for further research.

2.2. Technological Dualism and Plagiarism

Technology presents itself as a double edged sword on matters plagiarism. In Germany, plagiarized work was detected in university of Bremen. The original author found

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unacknowledged passage in newspaper article in form of word for word and a paragraph on the US embassy website. According to Schaffhauser (2013), student access to internet material provides free space to copy paste, lift passages, paragraphs or whole documents and submit as their own. Technology in this case facilitates plagiarism, while employing Turnitin.com aids detection of fraud by identifying plagiarized work.

Horrom (2012) opines that although academic misconduct hurts the integrity of scientific community, the issue has not been given the seriousness it deserves. The author contends that usage of computers and the internet has been a conduit to academic misconduct; where plagiarists have the advantage of click and copy paste with less effort to originality. This observation speaks to technological dualism with regard to the use of computers and internet to access material besides providing latitude for plagiarism. At university, the onus is two-fold where students and instructors follow right procedure in scientific writing.

Mphahlele and McKenna (2019) study in South African universities established that Turnitin software presents as twofold. For instance, Turnitin company claims the software doesn't detect plagiarism, it only encourages students to change tact to avoid being identified by paraphrasing. However, Turnitin software provides an array of capabilities in demonstrating how to quote multiple sources which if followed would enhance academic writing.

In the scholarly world, there is publication of articles and dissertations in local and international journals, books and newspapers. Ochuke (2013) stated that scholars have access to such material on the internet as they compile their work. Nonetheless, students have misused this online opportunity by downloading material and copy pasting to enrich their falsified material for presentation or publication. Such misconduct damages the novelty of the documents to be and the institution of scientific writing.

Rop, Njiraine and Irura (2013) study on application of plagiarism detection software to enhance research claimed that the internet is a doubled edged tool with reference to plagiarism. The internet provides leeway to plagiarize online work from sources like journals and electronic theses and dissertations. Conversely, internet tools like Turnitin could help detect plagiarized work which in essence presents a typical case of the double-edged internet with regard to plagiarism. Plagiarism in universities is associated with the advancement of technology and internet has made learning easier in terms of accessibility. However, the advancement has contributed to several cases of academic cheating (*The Standard Digital*, 28th March 2019).

2.3. Prospects to Curb Plagiarism in Universities

The World Intellectual Property Organization (WIPO), an international convention molded by the United States had 188 member states Kenya included. The organization among its roles formulates policies in the direction of uniformed intellectual property rules alongside capacity building. The WIPO ventured into protecting intellectual property and encouraging originality of academic work globally (Rop, Njiraine & Rop, 2013). The trio assert that such intellectual property protection initiatives coined in Africa included but not limited to African Regional Intellectual Property Organization and Kenya Copyright Board Organization to dissuade academic theft. This fundamentally describes the global, regional and national visions on commitment to minimize if not eradicate plagiarism and encourage originality.

Weber-Wulff (2014) opines that combating and preventing plagiarism boils down to detection, remedial and disciplinary measures to carry a significant primary importance. Students being informed about their supervisors' role in their work for possible occurrences

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of plagiarism and sounding possibilities of facing dire consequences, dissuades potential plagiarists from the malpractice (Fish & Ihura, 2013). According to Chuda and Navrant (2012) even though it's obvious that it is absolutely important to prevent plagiarism, managing it in institutions is cumbersome given the lecturer- student ratio. However, use of software to detect plagiarism is effective and less involving on human resource.

Standler (2012) suggested that consequences meted against plagiarists should be spread out even at post-graduation and certificate issuance. The institutional leadership should supremely support actions in place to empower lecturers' efforts to curb the vice. Further suggestions include motivating lecturers who institute disciplinary measures on reported plagiarists to appreciate their efforts. Motivation of employees brings about job satisfaction and productivity.

In Germany, the upsurge of plagiarism necessitated formulation of measures including strict and effective copyright laws to maintain quality of higher education in learning institutions. The actions included research paper cancelation whose impact damaged plagiarist and institutional reputation. Besides research paper annulment, plagiarists risked facing both monetary and academic year loss and in some cases the original author constituted legal charges. Students and lecturers involved in academic fraud would use CopyLeak copyright checker which ensures the paper is free from any form of plagiarism (CopyLeaks, 2nd October 2020).

Germany plagiarists variously stumbled in their PhD studies. Some measures to curb plagiarism were instituted. Karl Theodor zu Guttenberg the minister of defense and a student in Bavaria University of Bayreuth, Franziska Giffey minister of Family Affairs, Senior Citizens Women and Youth of Germany's Free University and Annette Schavan Minister of Education were individually accused of plagiarism. Franziska's dissertation focusing on European Commission's engagement in civil society reportedly used her own work as a commissioner for European Affairs in Berlin as an example. Mavrinc, Bromine, Bilic-Zulle and Petroveki (2010) described Franziska's action as self-plagiarism. The Guardian, 22nd May 2021, reported careless referencing in the doctoral thesis. The VroniPlag Wiki a crowd sourcing platform focused on unearthing Germany's plagiarism in doctoral theses tormented Franziska lost her PhD title and job through resignation in 2013. Similarly, Schavan lost her PhD in 2013 where her certificate was rescinded and job through resignation from big positions due to legal implications, public demand and embarrassments.

Guttenberg was awarded doctoral degree over his dissertation in law titled "Constitution and constitutional treaty" in 2007 and published in a legal publishing house in 2009 (Rolland, 2011., Rolland & Tanjev, 2011). However, a review by a law professor identified similar texts which ignited investigation with first allegations emerging publicly that Guttenberg's dissertation was a product of academic deception (Fischer- Lescano, 2011, BBC News, 2011 February 17th). Further, that he inserted a report from Bundestag's research department in his thesis without citing source. Punishment of the vice included public apology to parliament for blemishes in his thesis (Reuters, 2011 February 23rd). The university of Bayreuth instituted a thorough investigation whose findings led to withdrawal of his doctorate certificate and publicized report. Some prominent academicians, legal scholars and the political divide swung into action and vehemently blamed Guttenberg for academic malpractice. As evidence of plagiarism emerged, Guttenberg proffered his resignation as minister of defense, his seat in the Bundestag research department and other political offices he held at the time. In legal restraint, criminal proceedings were discontinued on condition that he paid \$20,000 to charity organizations. In conclusion, the prosecutor identified 23 copyright violations worth trial however the damage caused on original authors was termed

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as negligible. Guttenberg's plagiarism case attracted diverse actions to curb plagiarism in Germany.

Africa has not been without blemish from plagiarism either. A study in Mzuzu university Malawi demonstrated evidence of plagiarism among postgraduate students and several measures were put in place to curb the vice. The findings indicated 76% of student plagiarists were warned as punishment for the offense, 54.2% had students rewrite and resubmit their work, 37.5% were either awarded zero marks or no credit at all or simply ignored without action taken. Lecturers justifying forms of punishment described plagiarism cases committed as less serious to necessitate reporting to university's disciplinary committee mandated to either suspend or dismiss such students. While the interventions were not as stringent, the study recommended several measures including but not limited to use of text-matching software detected plagiarized work. The software had the advantage of assisting students improve their work prior to submission, a precursor to deter plagiarism. The study recommended that academic staff reports any form of plagiarism to institutional disciplinary committees for action and that institution conducts awareness campaigns on negative effects of plagiarism on postgraduate students and their academics. The introduction of advanced training on information literacy on academic writing pays attention to text summarizing, synthesizing and recommended referencing. Such measures were basic to reducing plagiarism (Suleiman, Chawinga & Dube, 2018., Ellis, Zucker & Randall, 2018).

With the onset of technology, most institutions are moving towards the application of technological software even as new developments counter the notion. Mphahlele and McKenna, (2019) study revealed that application of Turnitin software to detect and curb plagiarism was not a panacea to end plagiarism after all. Although Turnitin was largely used by universities to identify plagiarized work, it was a detection software rather than a text matching tool. It was suggested that students should be given knowledge on how to write good academic papers instead of Turnitin. To promote creative writing, universities should invest more resources in developing students' comprehension of good writing and knowledge production in various academic fields.

In Mozambique universities, the application of two different software revealed plagiarism aspects in various theses. Through Turnitin, 70% of 138 theses had significant plagiarism while Urkund software raised plagiarism detection levels to 75%. This implied that use of only one method might not provide final status of plagiarized work. The use of environmental codes and application of legal measures would significantly reduce plagiarism. Lecturers' and administrators' approach to handling plagiarism associates with guided layout structure that puts into consideration students' human rights. Similarly, to promote scientific writing and analytical skills, provision of technology to foster academic and ethical quoting, referencing and paraphrasing would ameliorate intellectual property theft (Coughlin, 2015).

Ramadhan, Botha, Chang'ach and Khau (2017) study claimed that although Turnitin software was on record as university tool for identifying plagiarism, most East African universities portray a missing link between theory and practice. The findings projected that given the widespread plagiarism, Turnitin was the ideal technology if put into practice. Other projections cited as per policy documents included mounting seminars, workshops, five-year orientation programs and making it compulsory for students to commit themselves by signing plagiarism declaration documents. Supervisors would provide a significant role in reduction of plagiarism in universities by taking students through introductory parts of the course to discuss plagiarism and its consequences. The introduction of plagiarism detection software was quoted as a panorama that required supervisors to put software into practice.

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In Kenya, Onchana (2011) and Rop, Njiraine and Rop (2017) cited a plagiarism case in Bungoma High court of Anne Nang’unda Kukali an M. ED student at Maseno University Kenya versus Mary Akinyi Ogola an M.A student at University of Nairobi Kenya and another (2010) eKLR. M/s Kukali accused M/s Ogola of plagiarizing her Master of Education thesis and submitting as her original work for examination and subsequent award of an M.A degree. The plaintiff sought for legal intervention and the court in its proceedings to affirm the claims conducted a side-by-side comparison of both documents. The findings established that the respondent produced nearly word by word of the complainant’s original work and that the respondent reproduced same material content under similar subthemes. In conclusion the court ruled that there was substantial evidence that the respondent infringed the intellectual property rights as claimed and issued an injunction to the University of Nairobi in September 2010 from including M/s Mary Akinyi Ogola on the graduation list and any other future graduations. The court orders awarded for infringement of the applicant’s intellectual property rights where the respondent was ordered to pay applicant. The application of law prevailed as punishment aimed to instill lucidity, fear and restraint to potential academic fraudsters. Both the student respondent, and university’s name were tainted in effect.

Withdrawal of already awarded certificates and discontinuation of students from their programs has been applied. Amos Kariuki Ngaruiya a Kenyatta university PhD lecturer in Kenya plagiarized a PhD thesis belonging to Aisha Balarabe Bawa of the department of History, Usman Danfodiyo University, Sokoto, Nigeria. Through the internet, Dr Bawa came across some work titled “The Transformation of the institution of first ladies in Kenya” authored by Amos Kariuki Ngaruiya, Department of History, Kenyatta University Kenya”. Doctor Bawa found a complete dissertation awarded in August 4th 2018 which appeared new compared to hers awarded in 2014 and uploaded in 2015. The Kenyatta University lecturer’s dissertation had various forms of plagiarism and with adequate evidence the original author reported her concerns to Kenyatta university authorities and investigations into the matter ensued through quality assurance department. The findings established overwhelming evidence against the Kenyatta University lecturer that he plagiarized a PhD thesis of the Nigerian University lecturer. Kenyatta University recommended withdrawal of doctoral certificate awarded to Amos Kariuki Ngaruiya and subsequent expulsion from service as a lecturer which was implemented to the letter (*Daily Nation*, 25th September 2019). Such acts create fear among potential plagiarists, emphasizes and inculcates culture of originality of thought and respect for intellectual property rights.

Okoche (2013) described plagiarism as a growing cancer with common forms of plagiarism in East African Universities being copying of phrases or passages from published work on the internet. Common mistakes include either ignoring use of quotation marks, acknowledgement of original author or both. The study established that some students were unaware that such actions amounted to plagiarism and recommended that lecturers develop better strategies to teach students about plagiarism. This implied that there is a gap in knowledge of the vice that should be addressed. The study recommended that universities invest in procurement and use of anti-plagiarism software.

According to Masic (2012), prevention of plagiarism could be well managed by use of various software. The author recommends the use of Turnitin software and safeAssign for ease of academic fraud detection while CrossCheck and eTBlast software would serve in scientific plagiarism. The author claims the software is celebrated for its algorithms, which enhances capability of detecting similarities, associated databases and web sites as it compares the article to the original copy. While the software is recommended, it’s not clear how many universities in developing countries have embraced this form of technology.

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Majority of universities today have developed plagiarism policies to restrain plagiarism as an emerging trend. In Kenya, University of Nairobi like other universities developed plagiarism policies after a review of international policies on the same to enhance creative writing. This called for the introduction and application of Turnitin software to detect academic plagiarism levels (Rop, Njiraine & Rop, 2017., University of Nairobi 2016). Similar policies have been developed including Kenyatta and Maseno universities among others. In a reviewed anti-plagiarism policy, states that a scholarly paper should have a similarity index of not more than 16% and material should not be more that 1% from an individual article. The policies dissuade students from plagiarism or over reliance on individual articles (Kenyatta University, 2021., Maseno University, 2018).

2.4. Theoretical Analysis

This paper adopted the Theory of Performance (TOP) developed by the University of Idaho in United States of America and extensively written on by (Don Elgar, 2007). The author asserts that the current level of performance depends wholly on six components namely context, level of knowledge, level of skills, level of identity, personal and fixed factors. This article narrowed down on the context, level of knowledge and skills.

Elger postulates that to perform is taking a complex series of actions that one integrates knowledge and skills to give valuable results and describes a performer as an individual or a collection of people. He outlines performance areas and examples of performances as well and discusses several levels. However, for purposes of this paper, only relevant ones apply. For instance, one of the performance areas is presenting a research paper at a technical conference. Such an act fundamentally requires great levels of skills and knowledge to produce a valuable research article for presentation.

In the TOP, Elger further describes skills as a culmination of specific actions used by an individual, groups or organizations in diversified types of performances. With relevance to this paper, thesis, project or term paper depends on the conventional writing skills to be adopted by an individual or group of students undertaking the work. The use of APA, MLA writing style, endnotes brings an admirable skill based writing outcome. Adequate writing skills provide a rich environment that abhors academic fraud, hence enhancing originality, creativity, and self-efficacy in writing.

In describing the level of knowledge, Elger's TOP averred that this level requires facts, information, concepts, theories or principles by a person or group obtained through experience or education. Typical of any student in coming out with original work, the levels of knowledge described must be abound so as to be creative enough to come up with original work. Knowledge acquired through education is taught for instance at the university or by own experience with books or research. With regard to this paper, universities have a role to play in coming up with programs to educate and create awareness on forms of plagiarism, consequences and how to be creative in writing good research work. Better still, students' can have acquaintance with material through library information, internet and consultation with their lecturers and supervisors on creative writing and respect for intellectual property principle.

In discussing the context of performance, Elger proclaimed that the component comprises of variables associated with situations that individuals or organizations perform in. To this end, potential academic fraudsters are ignited by the environment under which they are likely to commit the vice. In institutions with corrupt environments where plagiarism is aided, lecturers or supervisors are least concerned with plagiarism and lack of institutional plagiarism policies, students are more likely to commit the vice than otherwise. Performance

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of an individual is demonstrated based on personal or environmental factors; hence, plagiarism is individually or environmentally influenced.

3.0. Methodology

According to Bowen (2009) document analysis is a form of qualitative research in which documents are reviewed, interpreted, analyzed and organized nonstructural information into a standard format that allows one to give voice and inference about characteristics and meaning of written and otherwise recorded information. In this article identified material from examined journals, thesis, legal documents, university policy documents and newspaper publications related to plagiarism was discussed under article sub themes. The information was then analyzed and compiled according to sub themes. This method of data collection was found viable since the article relied on secondary data.

4.0. Application

This paper reviewed literature on factors influencing students' involvement in plagiarism, technological dualism and plagiarism and prospects to curb plagiarism in universities. Empirical studies demonstrated that indeed plagiarism was disturbingly rolling where students committed academic theft intentionally or unintentionally based on minor or major factors. Ndebele (2020) cites availability and access to internet without difficulty as one very source that lures students to engage in either form of plagiarism. In this case, students are unrestricted to copy paste material from internet to their work and submit unnoticed. Regardless of the factor that pushed one into plagiarism, the misconduct fundamentally threatens the integrity of universities and their academic standards.

Universities are known to have high enrolments and lecturers are overstretched in teaching, marking and supervision roles. As Mahabeer and Pirtheepal (2019) claim, large class enrolments to the ratio of a single lecturer weighs heavily on their ability to adequately work on students' assignments which consequently hurts the academic standards integrity. In agreement, Zaenker (2012) observed that in some institutions academicians and administrators are reluctant to punish plagiarists. This hands off kind of culture prompts intentional plagiarism as students are aware of no concomitant repercussions to the vice. University lecturers and supervisors in such case are held liable in one way or another for failing to address the issue and should be held responsible.

Following the very divergent factors influencing students' engagement in plagiarism this review established that some students were propelled by pressure of work on their hands or time constraint to submit. They opt for a quick fix where copy paste of paragraphs or whole document with partial edits here and there. In Sentleng and King (2012) study on University of Pretoria, South Africa concur that out of a sample of 150 undergraduate students, 71.9% confirmed copying other people's work from internet, books and journals and submitting as theirs was commonplace in the institution. Lea and Gary (2011) study findings resonate with this finding that 16% of students affirmed obtaining their papers from the internet while 52% copied a few lines from other people's work from internet without acknowledging original author. This form of plagiarism is both major and minor students copied larger parts of original authors without acknowledge the authors (Okoche, 2013).

Other factors associated with plagiarism included ignorance, lack of scholarly writing skills and knowledge among students. Such factors emanate from institutions that failed to provide programs essential to address plagiarism and their consequences. Students would plagiarize other authors' original work knowingly or unknowing because of lack of institutional concern or failure to implement plagiarism policies in place. Such students seek

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scholarly services from ghost writers or contractual services. As Ndebele (2020) sentiments echoes that lack of institutional programs to address plagiarism lures students into use of ghost writers which is a serious act of plagiarism. Ghost writing is linked to poor writing skills, inadequate or lack of knowledge on academic integrity levels and laziness from students. While the said factors hold, lecturers and supervisors were hardly held responsible whenever students committed the vice as some went ahead to publish students work in peer reviewed journals. Are supervisors therefore partners with students in either intentional or unintentional academic theft? There is need to interrogate such run away malpractice to uphold academic standards.

In another sub theme, literature reviewed illustrated that while technology aids students to plagiarize easily accessed work from internet, it also aids in detecting plagiarized work. There is a saying that goes “publish or perish” which persuades most scholars to work around the o’clock to publish in peer reviewed journals. Unfortunately, this has been field day for plagiarists just to make a quick fix to earn marks or have a thesis, dissertation, project or term paper move to the next level. Students in such comfort mode tend to come out as weak researchers and likely less concerned about plagiarism. The availability of technological tools such as Turnitin software in detecting plagiarism was a point of divergence. Turnitin as a technological tool is not panacea to plagiarism but rather matches plagiarized work within acceptable percentage; hence the call for alternative measures to address fraud. However, Machuku (2011) argues that plagiarism in majority of Kenyan universities today is rife among students’ essays, reports, project and dissertation; for lack of anti- plagiarism detection software. Ultimately institutions send out to the market non creative and innovative personnel with high levels of questionable academic integrity.

Apart from enabling people access material globally, the internet has challenged the academic standards and integrity of individuals and institutions. Technology has changed so much that plagiarism becomes “normal” or provokes temptation in students to plagiarize. The simplified form to plagiarize through the internet attracts more potential plagiarists, lazy and those with limited scholarly writing skills. Bailey (2017) observed that internet entices students to plagiarize just as it does detection much easier. As a modern panacea to plagiarism detection, through technological search engines simplified identification of plagiarized content including verbatim. The same search engines simplified how online information is accessed, explains the dualism of technology regarding plagiarism. Ghost or contractual writing has been made easier through internet. Ghost writers market their skills in scholarly writing yet it’s through search engines like google that students search for ghost writers. In agreement, Walkers (2017) indicated that there were possibly over 40,000 academic ghost writers in Kenya registered by different web-based companies. The other side of academic cheating through the internet unknown to some demeans academic levels in creativity and originality.

In Vietnam Tran, Ut, Huynh and Nguyen (2018) study established that there were high spread cases of plagiarism among higher education students. That 91.7% of graduation reports in a university that never used Turnitin software were plagiarized while 61.7% of graduation reports from university using Turnitin were plagiarized. The conclusion depicts the internet as the main source of plagiarism. It is clear that even with Turnitin software, plagiarism could still happen. Khang, *et al* (2017) findings descriptively revealed that there was prospective evidence of benefits in use of software tools in detection of plagiarism with a role in development of policy formulations. The study highlighted importance of the other side of technology to curb academic dishonesty in institutions.

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Plagiarism and technological dualism are entwined. While the internet is known as the most technological source of resources, studies prove that since its advent, there is an exponential surge in plagiarism cases. In convergence, Walkers (2017) contend that most websites blatantly encourage acts of cheating and plagiarism, they offer or sell programs that attract copying, generate and provide leeway to buy assignments and academic papers. While this is an academic malpractice hurting the reputation and philosophy of academia, suggestions to address it have been implemented.

Other studies argue that plagiarism in universities appears deep rooted but how to curb is the elephant in academia. In their study Mbilinyi and Msuya (2014) established that students were not as knowledgeable as academic staff on matters plagiarism. The duo recommended that quality assurance bureau, communication skills unit and university library departments should be engaged to convey more knowledge on plagiarism to both students and academic staff. The quality assurance bureau is tasked with the responsibility to ensure students observe academic integrity by thoroughly checking their work. The communication skills unit was prevailed upon to introduce a unit on academic writing skills to equip students with adequate knowledge and skills. Providing a whole unit on plagiarism, holding lecturers and supervisors responsible adds value to ending plagiarism. Additionally, the library department equipped with anti-plagiarism software would check plagiarism before filing holds where university librarians upright.

Other prospects include litigation approaches against plagiarist individuals and sometimes institutions. Most researchers indicate that efforts to curb plagiarism albeit increasing levels are encouraging. In Germany, plagiarism a long standing issue among senior political PhD students were legally dealt a blow by losing their PhD degrees. Such approaches are harsh lessons to anybody ever envisaging academic theft or condoning. Similarly, Kenyan plagiarists have been subjected to legal processes a deterrence towards plagiarism (Onchana, 2011).

The level of knowledge awareness on plagiarism and its consequences was fairly spread among students and lecturers. This portrays the need to re-think instituting clear anti plagiarism policies and consequences on student plagiarists and their supervisors. Other strategies include continuous training of students on plagiarism and modalities of avoiding dishonest (Weber-Wulff, 2014).

Plagiarism or no plagiarism, a student's thesis, dissertation, project or term paper ends in the university lecturer, internal or external supervisor/examiner's hands. For this reason, a supervisor should have advanced knowledge detection of plagiarism work which cultivates fear among potential plagiarists and minimize involvement in the misconduct. This observation echoes Zaenker (2012) finding that training of university markers would improve their ability to detect contract cheating prevalent in universities today. The training covers skills in making comparisons of unsupervised and externally supervised work regarding writing patterns and language. Through training, supervisors provide informed verdict on plagiarism based on knowledge and skills acquired.

The media is doing a great job shaming plagiarists. Apart from disgracing plagiaristic works, plagiarism is coming into limelight with a bang for students to learn of its consequences. The misconduct therefore defines one's reputation and might not gain the peoples' confidence to speak of anything constructive.

5.0. Conclusion

This paper review concluded that plagiarism in universities was real and developing. Some of the major factors influencing students' involvement in plagiarism included lack of and

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equipping students with adequate writing skills from onset. This paints a picture that universities are not doing enough on implementation of plagiarism policies, laziness, lack of time and commitment among students to do assignment and less concern due to large classes.

Reviewed literature on technological dualism and plagiarism led to a conclusion that indeed technology is a double edged sword and not a panacea to malpractice. Technology aids students in academic misconduct through accessed work published in peer reviewed journals. Students get away of plagiarizing such work by literally lifting the better part of passages, sentences and words while others plagiarize through paraphrasing work and present as theirs. Even with technology, some wade through undetected. Conversely, with technological software tools, plagiarized work could be matched to bring about similarities. To this end technological dualism is for and against plagiarism.

Globally, the magnitude of plagiarism levels in universities presents a worrying trend to academia and research. This paper concluded that prospects such as use of anti-plagiarism software tools, taking legal action, students, lecturers and supervisors signing of institutional plagiarism code would suffice in limiting academic fraud.

5.2. Recommendations

This theoretical article suggests that students work be it term paper, research projects or thesis, should be subjected to close scrutiny by lecturers and supervisors alongside application anti-plagiarism software tools identify any form of plagiarism. The development and subsequent introduction of plagiarism policies in universities should be implemented to the later and students involved in infringement of intellectual property rights should be subjected to due process and if found guilty jailed and never allowed to undertake studies at that level. That supervisors should be prohibited from publishing students work unless its declared plagiarism free.

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