Plagiarism Software is a Creator or Destroyer for Effective Writing

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ABSTRACT

Plagiarism is malpractice, the fabrication of others' "ideas or work" published without the proper permission or citation of the original contributors. Plagiarism is detected through different software, i.e., Turnitin, before publishing any research data. The present survey study assesses whether academicians, researchers, and scholars around the world perceive this software as a creator or destroyer of new thoughts and ideas. A survey of this research data was conducted with academicians, researchers, and scholars around the globe. The number of respondents is 1100, including 688 teaching professionals, 347 non-teaching, and 65 others. The present study finds that 82.7 per cent of research professionals mentioned that plagiarism could be appropriately citable. 76.7 per cent suggested that plagiarism can be completely avoidable, and 72.4 per cent has been proposed to be punishable. The study also described that plagiarism software is a good, efficient, and effective creator for new ideas.

Keywords: Academic integrity; Academic misconduct; Research ethics; Plagiarism

1. INTRODUCTION

The aim of conducting research is to present original ideas and thoughts to the readers and researchers. In recent times, many research papers have been plagiarised. Plagiarism is constantly increasing worldwide after the invention of the Worldwide Web and the internet. It is a severe issue and threat to academicians, researchers, and students[1-2].

Plagiarism is defined as reusing sentences, paraphrasing texts, and utilising someone's ideas without crediting the author or resources[3-5]. Plagiarism is paraphrasing, patch writing, verbatim, replication, unethical, misconduct, misleading, misinterpretation, and minimising the originality of one's writing and skills[6-8]. Poor academic writing skills, lack of English language skills are also the reasons for plagiarism. Plagiarism is common and avoidable: Authors consider their writing possible to omit plagiarism in sentence and structure. Plagiarism is not pre-planned all the time, but it mostly arises unintentionally and unknowingly. Common types of plagiarism are intentional, unintentional or accidental, and self-plagiarism. Intentional plagiarism is knowingly copied from other intellectual ideas. Unintentional plagiarism does not give the proper citations and credit to the authors. Accidental plagiarism does not know how to cite the resource, intentionally avoiding or neglecting to cite the resource, and self-plagiarism is when the author publishes the data from their pre-published papers.

Similarly, websites are given the number of search results for each keyword, but some run without providing the sources when the author cite that website. When it goes to plagiarism software, it shows the original resources, so in that time, accidental plagiarism happened unintentionally[9-10].

Furthermore, the taxonomy of plagiarism is two types i) literal plagiarism (replicate plagiarism, self-plagiarism, accidental plagiarism, Mosaic plagiarism) ii) Intelligent Plagiarism (Structural plagiarism, idea plagiarism, and metaphor plagiarism)[11].

Plagiarism detection tools help find out the similarities in text and help to avoid plagiarism. It allows the advancement of writing and depth of thinking. Virtually all educational institutes, organisations and countries prohibit academic misconduct like plagiarism. Society expects new knowledge to be created by researchers but too often plagiarises old findings rather than new ones. It has to be taught at the school level to the university level to achieve academic integrity. One of the major errors commonly found is to add published content without giving citation.

2. LITERATURE REVIEW

A 2010 study by Stone[12] *et al.* examined the students' academic misconduct and cheating intent. The reported survey study deals with a small sample, i.e., 241 graduate students. The researchers identified that the students accepted academic misconduct for various reasons from this study. They are cheating on tests for scoring good marks, helping others to cheat, the intention of cheating, and plagiarism on paper.

There was a long research gap following Stone *et al.*'s study. Then, in 2018, a similar analysis was performed by Jereb *et al.*[13] (2018), in which the researchers investigated higher education students' plagiarism and gender differences. The results suggested a significant difference in the females' having more cynicism about plagiarism compared to men. Additionally, the authors provide us with definite rules and regulations that could be formulated to avoid plagiarism-related issues.

Immediately after that study, Vuong[14] (2018) reported a case study on how the researchers violated research ethics? Three case studies were described in the reported data: In Case 1 (2010), the first author originally published a book in 1986. The second person, copied or without checking plagiarism, published another book on the content. Similarly, a third person also published the same content in another book. But the second person strongly criticises the third person about the plagiarism related to that published book. Due to this, the third person had different health issues. The present author finds that he could not find that book. It may be retracted from the publications. In Case 2 (2015) During the different program, one Professor guides the doctoral student as well as the master student, in which the master student copied doctoral students' research work. Then, the Professor explained the implications of different plagiarism-related problems. Finally, the students understand their problems with plagiarism. In Case 3 (2018), a report sent by the Professor to the state council is self-plagiarism and self-cited of two papers. State Council offended authors can re-use their work in the Vietnamese language. Finally, the cases revealed a violation of research ethics, not punishment. Hence, the author recommends whenever the funding agency gives the amount to verify if students were following the research ethic and academic integrity or not.

Olivia-Dumitrina[15] *et al.* (2019) conducted a research survey on cyber-plagiarism. The research findings show that 60.8 per cent of the students have not agreed that they "copied web resources without proper citation." 69.30 per cent of respondents agreed paraphrasing has not come under plagiarism. 82.1 per cent of students consider the translation of the other's work plagiarism. These findings show students are aware of plagiarism, emphasising that the citation is forcibly wherever the text is copied.

Guerrero-Dib[16] *et al.* (2020) conducted a research survey on 1203 college students from Mexico. The study looked into the link between academic integrity and ethical behaviour, particularly at the workplace. The findings disclosed that students usually have dishonesty and academic misconduct related to writing in multiple contexts[16].

Yi[17] *et al.* (2020) conducted research involving biomedical researchers. The sample study covered Europe and China. Their investigation result found that one-third of respondents did plagiarism unknowingly and unintentionally. The study's significant findings are that plagiarism happened continuously without knowing; 96 per cent responded to plagiarism online resources without citing.

Maharajh[18] (2021) conducted a focused group study on students' perspectives of plagiarism and academic integrity. The study revealed that the students are unaware of plagiarism and have some presumptions about plagiarism. The author discussed plagiarism, perceptions about plagiarism, how universities tackle plagiarism, and academic integrity in this paper.

Most of the reviewed studies suggested the importance and implications of plagiarism in various research objects. The present study tried to explore the role, views, and opinions of plagiarism software in general.

3. OBJECTIVES OF THE STUDY

• To better understand the scientific writing difficulties
• To analyse the researcher's opinions toward plagiarism detection tools
• To learn more about whether the plagiarism software viewed as A creator or destroyer of effective writing

4. RESEARCH METHODOLOGY

A quantitative research method was used, and a survey study was adopted for this study. The population comprised a heterogeneous group of academicians, researchers, and scholars. The technique used purposive sampling. Email IDs were collected from the web of science and Scopus databases from various journals. The data was collected from March 2021 to July 2021. The questionnaire comprises two parts: part I, socio-demographic details of the respondents; In part II- related to academic writing and plagiarism. The questionnaire was distributed with 44000 indexed researchers email IDs; these 2844 emails failed because of some technical reasons. Around 41156 questionnaires were distributed, and finally, 1100 valid responses were received worldwide with several reminders. After collecting the data, appropriate statistical techniques were used. Tests conducted ANOVA and independent sample T-test, percentage and frequency used for these analyses SPSS software used.

Table 1. Socio-demographic details

Demographic details	Variables	Frequency	%
Educational qualifications	PhD	720	65.5
	MPhil	117	10.6
	Post Graduate	185	16.8
	Graduate	78	7.1
Is English your first language?	Yes	426	38.7
	No	674	61.3
Occupation	Teaching	688	62.6
	Not-teaching	347	31.5
	Other	65	5.9
Continents	Asia	439	39.9
	Africa	120	10.9
	Europe	228	20.7
	North America	146	13.3
	South America	112	10.2
	Australia/ Oceania	55	5
Research publications	1	76	6.9
	2-5	599	54.5
	6-15	178	16.2
	16-25	109	9.9
	26-50	76	6.9
	51-75	22	2
	76-100	26	2.3
	Above 100	14	1.3

5. RESULTS AND FINDINGS

Table 1 displays the socio-demographic details of the participants. For the educational qualifications of participants, 65.5 per cent completed a PhD, 16.8 per cent completed a master degree, 10.6 per cent did their M.Phil., and 7.1 per cent had a bachelor's degree. English is the first language of 38.7 per cent of respondents, while 61.3 per cent of respondents have some other primary language. For respondents' occupations, 62.6 per cent teachers, 31.5 per cent are not teachers and 5.9 per cent belong to other professionals. 39.9 per cent of respondents were from Asia, 20.7 per cent from Europe, 13.3 per cent from North America, 10.9 per cent from Africa, 10.2 per cent from South America and 5 per cent from Australia/ Oceania. 54.5 per cent of respondents published 2 to 5 research papers.

Table 2 explains scholarly article writing difficulty. The majority of the respondents, 50.9 per cent, mentioned languages as the primary issue. The second most common findings were challenges with finding relevant resources because Google gives most of the relevant information. Many researchers do not have the facility for accessing databases and are also unaware of finding a suitable platform for resources. Third, 37.1 per cent of respondents emphasised referencing format used by different publications because there is no uniformity in referencing format used by different publications, and this produces confusion. Fourth, 35.1 per cent of respondents identified usage of grammar as a challenge. Lastly, 25.8 per cent of respondents felt that a lack of knowledge about research methods produced barriers.

Table 2. Difficulties in manuscript writing

Scientific writing difficulties	Frequency	Percentage
Finding resources	421	38.3
Language	560	50.9
Grammar	386	35.1
Research methods	284	25.8
Referencing formats	408	37.1

Table 3. Plagiarism detection software is necessary

Is plagiarism software necessary?	Frequency	Percentage
Not at all important	95	8.6
Slightly important	148	13.4
Important	221	20.1
Fairly important	248	22.6
Very important	388	35.3

Table 3 displays findings of perception whether plagiarism software is needed or not. 35.3 per cent of respondents stated that this software 'very important'; 22.6 per cent of respondents stated that it is 'fairly important'; 20.1 per cent of respondents stated that it is 'important'; 13.4 of respondents stated that it is 'slightly important and 8.6 per cent of respondents stated that 'not at all important.

Table 4. Plagiarism tool used by authors

Plagiarism checker used	Frequency	Percentage
Paid	387	35.2
Free	490	44.5
I did not use	223	20.3

Table 5. Textual plagiarism

Plagiarism in text	Frequency	Percentage (n=1100)
Avoidable	844	76.7
Citable	910	82.7
Modifiable	321	29.2
Payable	78	7.1
Punishable	796	72.4
Removable	216	19.6

Table 4 shows what types of plagiarism tools are used by the survey respondents. The majority of the respondents, 44.5 per cent, used open-source and free tools, 35.2 per cent of respondents used paid tools, and 20.3 per cent did not use any tools.

From Table 5, it can be observed that plagiarism in the text is citable (give credit to the authors) by 82.7 per cent of respondents, 76.7 per cent of respondents suggested that avoidable, 72.4 per cent respondents suggested it is punishable, 29.2 per cent of respondents believed it is modifiable, 19.6 per cent of respondents highlighted that it is removable, and 7.2 per cent of respondents said it payable (collecting the fine from plagiarised researchers).

Table 6 shows that plagiarism software is a creator in the view of researchers when it is easy to comprehend content by means of repeated plagiarism testing, plagiarism software detects the similarity of the uploaded content with the published one when the researcher check whether the published one is incorporated in their article. In this way they produced error free content. However, plagiarism software is a destroyer when it destroys the author's flow of ideas, forcing the author to use standardised phrases and affecting the flow of thinking. Some plagiarism software companies used both plagiarism and grammatical check together on the special version e.g. Grammarly premium version. The publisher's point of view reduces the time taken for finding the originality of the content, and it is a fast-growing economic business. Thus it is the creator, but the significant fact that everybody accepts is that it allows the content irrespective of context. This is the major flaw that needs to be addressed.

6. DISCUSSION AND CONCLUSION

The study reveals that plagiarism software tools are essential to find the similarity in texts and avoid future consequences. A large number of respondents suggest that whenever and wherever ideas are copied, the author must be credited with proper citation or reference. Plagiarism software is compulsory for avoiding duplication and maintaining the originality of research. Plagiarism software is a creator that is

Table 6. Effectiveness of plagiarism tool

Plagiarism software	Variables	N	Mean	SD	T Value	F Value	P-value
Easy to comprehend the content	Accept	1100	1.62	1.20	14.658	213.8815	0.0001
	Reject	1100	2.37				
Reduce time taken for finding originality of the content	Accept	1100	2.38	1.45	-12.292	150.01839	0.0001
	Reject	1100	1.62				
Enhance error-free content	Accept	1100	2.53	1.35	1.911	335.89138	0.0561
	Reject	1100	1.47				
Predict grammatical and syntactical errors	Accept	1100	2.64	1.32	-22.564	505.63606	0.0001
	Reject	1100	1.36				
Reliable	Accept	1100	2.20	0.93	-10.339	110.12329	0.0001
	Reject	1100	1.79				
Destroy the new idea of the author/s	Accept	1100	2.06	1.40	-2.178	4.89415	0.02705
	Reject	1100	1.93				
Forced to use standardized phrases	Accept	1100	2.26	1.42	-8.753	77.62664	0.0001
	Reject	1100	1.73				
Affect the sentence flow of thinking	Accept	1100	2.48	1.28	-17.772	318.45852	0.0001
	Reject	1100	1.51				
Allow the content irrespective of context	Accept	1100	2.75	1.40	-25.295	628.72569	0.0001
	Reject	1100	1.24				
Fast-growing economic business	Accept	1100	2.22	1.14	-9.257	87.20335	0.0001
	Reject	1100	1.77				

easy to comprehend content, create error-free content, predict grammatical and structural errors and reliability. If plagiarism software is a destroyer when it destroys the author's new ideas, forcing the author to use standardised phrases and affecting structure coherence. However, if the researchers are strong in scientific and technical writing, they can avoid plagiarism. The impact of plagiarism software varies the writing style of the research community, especially in academic and scientific writing. So, this research concludes that plagiarism software is a creator of effective writing. This research is intended to study the nature of plagiarism software. Plagiarism software is available in a free and paid version. Many people avoid the plagiarism check on the basis of their strong belief about their article. They have a fear of non-acceptance of the article due to the plagiarism value. Researchers considered it as a creator or destroyer for its purpose. So, the researchers studied it whereas it is a creator or destroyer.

The present study provides some views as to crucial points related to the issue of plagiarism; i) plagiarism software tools are essential to find out the similarity in texts/ data, and they help to avoid the future consequences related to unintentional plagiarism, ii) whenever and wherever the ideas are copied the author must be given credit to the original publishers with a proper citation or reference and iii) Plagiarism software is essential for avoiding/ duplication and maintaining the originality of research. Further, this study also suggested that if the researchers are strong in scientific and technical skills, they can easily avoid plagiarism. If researchers are not experienced with scientific writing, it is challenging to overcome these plagiarism problems.

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