Plagiarism in Research: The Source and Solution

Urvashi Sharma Mishra

Asst. Prof. in Computer Science, Hans Raj MahilaMahaVidyalaya, Jalandhar.

Received: March 15, 2018 Accepted: May 09, 2018

ABSTRACT Plagiarism is the major problem in today's research. It is not confined to any specific area. It is spread across all disciplines and all areas ranging from social sciences to pure sciences and from sociological studies to experimental research as well. The problem of plagiarism is not new in the area of research but it has become more prominent and popular today. The basic reason for this is that its incidence has increased manifold for the reason that today's researcher is in hurry to achieve the targets overnight. The pressure of score in academic promotions, interest of the periodicals in getting payment for assured and early publications and the imperfect tools of testing plagiarism equally add to the incidence of this malady. Moreover, today many more sources are available for copying. As yesterday the source of plagiarism used to be only the books or the published articles but today there are many more sources and plenty of material easily available on all topics. Moreover, the testing tools for marking plagiarism are available today which were largely missing yesterday. However, many of such tools which are commonly used for identifying plagiarism are not very scientific and standardized resulting in wrongly marking or not marking the matter as plagiarized. The sources of plagiarism are largely concerned with Internet where the material is available in the form of articles, write ups, lectures, tutorials and publications in the reports as well as the newspapers. Online journals like IEEE, Science Direct, etc. are also a rich source of encouraging plagiarism. In addition, the old source of books and journals also continue to be available to those indulging in plagiarism. But plagiarism needs to be distinguished from paraphrasing and intentional plagiarism differentiated form the ignorantly practiced one, atleast for the purpose of inflicting punishments. If India is to make a mark in the field of research, the malady of plagiarism needs to be curbed and cured immediately. The solution for this lies in filing criminal cases of cheating by personation which is an offence under the Indian Penal Code inviting imprisonment upto 3 years under Section 416/419. In addition, plagiarism is also a violation of the Copyrights Act which again invites punishment. What is desirable is to make use of such stringent punishments in addition to taking disciplinary action against the accused researchers. Moreover, more authenticated tools for identifying plagiarism are also required to be created and conscious level in this field increased and upgraded.

Keywords: plagiarism, copying, paraphrasing.

INTRODUCTION

Plagiarism is another recent malady in higher education and research. The problem is not confined to any geography or any area of study but is spread all over the globe ranging from the underdeveloped world going to the developed nations as well, permeating throughout the disciplinesranging from social sciences to the pure sciences as well as the technology part of it. The incidence of plagiarism has been measured in the developed world of Europe and America and has been found to the tune of more than 64% as per the survey conducted by the scholars (Z. Cheema et.al 2011) [2]. Many times, the plagiarism is unintentional also although the intentional part of it cannot be ignored. The unintentional plagiarism finds its source in ignorance of the plagiarist in regard to the method of citation and the need for making reference to the literature studied and examined by their researcher.

When we find ways and means to grapple with the problem of plagiarism, it is often found that one standard cannot be universally applied for identifying plagiarism. It is so for the reason that different standards of education and research are applied in different disciplines as well as in different geographical regions. Accordingly, a different standard will be required to name plagiarism in a particular field of research or education (B. Honig and A. Bedi, 2012)[4].

It needs to be rightly understood that plagiarism is the major cause for our low standard research, thereby resulting in low ranking of our universities in terms of their excellence. Despite our best efforts, India has failed to find a place in the top ranking 200 Universities of the world⁸⁴. [6]

This paper makes a humble effort to identify the sources of plagiarism so as to suggest some measures that can be applied for remedying the situation in the Indian society.

Research Paper

⁸⁴ As per 2018, World University Rankings Indian Institute of Science, Bangalore continues to be No. 1 institution of India but its ranking has further slided from 200 to 250 to the bracket of 251-300.

CONCEPT OF PLAGIARISM

In common parlance, plagiarism means copying another author's writing and presenting the same as one's own. The practice is common in research papers, published articles and going upto the research dissertations at all levels i.e. undergraduate, post graduate as well as doctorate levels. But plagiarism is not so simple in its concept nor in its scope and dimensions.

Stamatatos[5] defines the term plagiarism as "taking a duplicate copy or slightly modified version of the work of another researcher without permission to do." In this word, 'permission' may mean proper acknowledgement in the work of author having borrowed the original. US Federal Policy [1] on Research defines plagiarism as an aspect of misconduct known as falsification, fabrication or plagiarism in the area of research. As research misconduct, it is defined as 'fabrication, falsification, or plagiarism in proposing, performing or reviewing research, or in reporting research results.' The research misconduct under US Federal Policy also clarifies, 'plagiarism is appropriation of another person's ideas, processes, results or words without giving appropriate credit.'

As the area of plagiarism is vast, embracing research and publication in all streams of knowledge, therefore, the definition of the term plagiarism vary in their focus and form from discipline to discipline and from pure academics to pure research or the middle of the two.

The American Urologist outlines the concept of plagiarism in its general sense with the following words:

"Plagiarism is the presentation of another person's words, work, or ideas as one's own. It has two components, (i) the taking of the words, work, or ideas from a source, and (ii) the lack of acknowledgement of the source in the use of the words, work or ideas. The first of these components often leads commentators (even some in this issue) to claim that plagiarism is stealing but it is not. The act of reading or listening to a lecture is essentially a matter of taking words and ideas from another author into one's own mind, which certainly does not qualify as stealing. Plagiarism rests in the subsequent component: representing those words or ideas as one's own, usually by failing to acknowledge the source. This misrepresentation is fraudulent (in the general though not necessarily legal use of this term). It creates the false impression that another's words or ideas originated with oneself."

Confining our discussions to the Indian practices in the areas of research publication, we note a common trend of researchers or academics copying from publications or the internet material and changing the same here and there. Some plagiarists break the continuity of language borrowed, others change the structure of sentences or the place thereof. The wise amongst them read the material and then reproduce the same in their own language and thereby claim that it is not plagiarism at all because the testing tools are not pointing out the same. The common feature in all these acts of plagiarism is that the copying author does not acknowledge the original author and instead claims the piece of work as his own original work.

This approach of plagiarism comes close to the concept of paraphrasing. A computer scientist marks the difference between paraphrasing and plagiarism as:

"Paraphrasing is rewriting ideas or re-writes the words using other words special for the writer. Synonyms of words can be used or using another words as well as changing the structure of phrases where it can change the order of words that existing in the original text to create a personal structure of writer". [5]

The author suggests that the copying author with repeated readings of another material may grasp the content to one's understanding and even then must quote the original text wherefrom the idea has been borrowed. Otherwise, even such paraphrasing amounts to plagiarism.

There are some other areas of plagiarism like translation plagiarism i.e. translated material from one language to another, unpublished plagiarism i.e. copy from an unpublished material by a researcher or by research guides from the work of their students. The experts also refer to self-plagiarisms i.e. the author himself/herself has earlier published article or a book and in the second one again copying the same without mentioning the earlier publication. Self-plagiarism is also misconduct because it affects the originality of the research work otherwise claimed by the author as well as the publisher of either articles or books. Therefore, plagiarism is copying in any form of the work of any other person or of is own without acknowledging the original author and his publication. Such copying may be of the text, process, ideas or results of the work of academics or scientific production.

CAUSES AND SOURCES

The recent rise in the extent of plagiarism takes birth from the easy availability of a wide range of literature on the websites and easy access of the researchers to these sites. Another potent reason for this is

Cosmos Impact Factor 4.236

the pressure on the researcher to complete the work within the stipulated time caught in the situation of a pressure for getting incentives attached to the published works and conferences/seminars for placements and promotions in one's career (Hermann Maurer et.al) [3].

The difficulties involved in original research are many. First, it is very difficult to do original research because everyone is not competent and capable to achieve it but being in a profession, research becomes his/her compelling need, may be for the entry or for the next career promotions.

The limitations of time, attached to the submissions of research works or to the time frame for publications, as a precondition, push the people to plagiarism. A genuine researcher certainly gets astonished to see the commoner in the field having published more than one book in a year and preparation of 'research articles' in a few hours. The practice of submitting a research work to the guide at every stage and non-permissibility of submission without his/her approval sometimes lures the research supervisors to use the same for own use since there exists no record that the work was that of the student.[1]

The sources of plagiarism are the tradition books particularly those which are out of print, the journals and articles relatively unknown, un-authored material on the Internet, the reports and lectures available on the net. The plagiarism does not only mean copying the script or observations of an author but it also includes changing the words and structure of the sentences, copying ideas from a source and adopting these as one's own without giving a credit to the original author.

Ignorance of a plagiarist is also a major cause for this misconduct. A student is many times unaware of the fact that what he was copying is objectionable misconduct and can lead him to trouble going to the level of criminal prosecution and cancelation of his degree and what not? It is so for two reasons; i) the Indian students are in the habit of preparing notes for the university examinations and such notes are simple copy of the material in the books, articles and on internet. And secondly, the teachers give notes to the students borrowed from other authors but without ever acknowledging the author they have coped even verbative in good many cases. As such, the students are mentally trained to borrow material of other authors without quoting the source thereof. This kind of ignorance when named Plagiarism -research misconduct or even a criminal wrong is perplexing and unpalatable to the researchers. It is, therefore, essential that in the school and colleges when non-research students they must be taught and made conscious of the evil plagiarism - its extent, types and consequence. This will prepare the ground for avoiding ignorant plagiarism and trained researchers for proper testing and avoiding this misconduct. It is then the evil of plagiarism will be the result of a conscious and intentional act and may be covered under absolute offences where the intension of the perpetrator is not required to be proved by the prosecutor.

EVIL EFFECTS OF PLAGIARISM

Plagiarism is infact a disease that ails the academics in all its aspects. It eats into the vitality of the researcher, the quality of the research, standards of the education and academic institutions and through these to the society at large. Today when India is achieving accelerated pace of economic development we are decelerating in the world ranking of our Universities and institutions. There are many reasons for this lag but one of the mention worthy reason is certainly the evil practice of plagiarism in our research.

Plagiarism also corrupts the mind of the researchers and academicians. It is basically the germination of the criminal tendency. Although plagiarism itself is an illegal practice but its successful attempt definitely promotes and prompts for more serious criminal acts, which is unbecoming and unfortunate development in the area of education.

The universities do take notice of plagiarism in research work submitted to them for the award of masters or doctorate level degrees. Infact it has been accepted as a pre-condition for the submission of research work. But the lack still remains for the reason of tools applied for testing plagiarism and the loopholes permitting undetected plagiarism. The same is the case with journals and periodicals publishing research articles. So far as the law on plagiarism is concerned, it is presently confined to the domain of policy at the level of universities and editors of journals. In case of research works, the universities reject the thesis and in a few cases even take administrative action. At the level of publishing houses, it amounts only to the rejection of article and nothing more. In fact, it is a clear cut violation of copyright law and in an amounting to an offence in the Indian Penal Code. Under the Copyright Act, 1957, plagiarism is covered under infringement defined under Section 2 (M) and made punishable under Sections 63 and 63 B. Under IPC, it is named as cheating by impersonation as defined under section 416 and punished under 419. In both the cases, punishment attracted goes into 3 years imprisonment.

THE TESTING WEAKNESSES

For testing plagiarism, there are variety of tools used which vary in their potency and upgradation. For example Small SEO Tools, etc. are the simple tools which mark the plagiarised part if it is copied verbatim or with very minor modifications of the sentences. Since these tools are free, therefore the researchers and even normal publishers use these tools. The process applied in such software is testing the language in parts of the text depending upon the capacity of the software which is normally confined to 1000 words. Having checked the plagiarised portion in parts, then the author has to make out the sum total of the plagiarism in the research work. Therefore, in addition to the lesser capability of determining plagiarism, the weakness of such software remains that these are incapable of being applied to the whole of the research article or of the research work. There are middle level software like Viper which have the advantage over the first category that it applies to the full text of the article and in addition it also suggests by marking the plagiarised part in the work. Another weakness of these two categories of software is that these remain applicable only to the material, published or unpublished which is in the normal hands i.e. everybody has an access to it. But these fail to the applicable to the rare materials which is selectively available in the high profile paid journals like IEEE. The third higher category of software is like that of Turnitin which is more refined and is a paid software, thereby, it comes in the hands of only standard authors/editors or institutions. Such software catch even the material in the research publications of high standard like IEEE journals and is applicable only in one go.

The problem area in all these software still remains that they fail to match the ideas which are plagiarised by way of change of language and arrangement. This is the researchable area for developing more sophisticated software for determining plagiarism. The following figure (which is self-explanatory), portrays the process that is applied for testing the plagiarism. It is based on the proposed system suggested by A.M. Hussein [5].

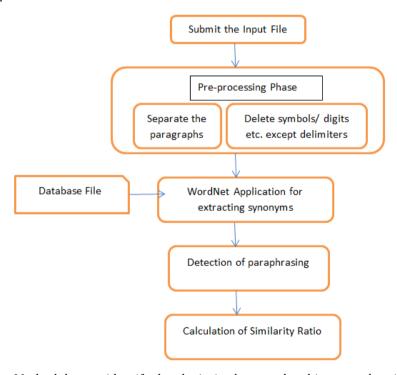


Fig: Methodology to identify the plagiarised text and making paraphrasing

CONCLUSION AND SUGGESTIONS

Plagiarism is a virus that is corrupting the minds of students, researchers, teachers and publishers alike, thereby infecting our research quality and decelerating our academic growth and development. The visible result is that like the famous phrase: 'the treatment led to the aggravation of disease', the conscious efforts of our government to get a world place within top 100 academic institutions, we have gone down from the bracket of 200-250 to 251-300 for our best institution of science at Bangalore. For the common Universities and research institutions of India, little said the better.

The reason for large scale plagiarism in research and publications is for the major reason of uninterrupted and unindexed availability of material as unpublished, on computer and other sources. The ignorance about the concept of plagiarism and its consequences has also added to its growth. The role of Universities and the publishers is also quite large in promoting plagiarism. There is also a need for improving upon the process and technology of testing plagiarism.

For humbly suggesting the solution for this evil: it can be found at four different levels namely at the level of publishers; authors; social organizations and the state level. The publishers are required to be very particular about plagiarism and if it happens they should come forward to initiate action against the author. Those publishers who do not play their desired role should also be made liable for the criminal act of abating plagiarism. The authors are expected to be more conscious about proper acknowledging the sources and authors whose language, ideas, processes or anything they have relied upon in their writing. The standard tools of testing plagiarism applying the good search engine like Google and doing style analysis called stylometry and application of servers like Urkund, Copycatch, WCopyfind, Eve2 (essay verification engine), GPSP (Glatt Plagiarism Screening Program), Moss (a measure of software similarity), IPlag Internet Based Server, etc. may be applied by the researchers. In addition, the advanced technologies like Levin's classes of verb, Latent Semantic Analysis (LSA) and Normalized Word Vectors (NWV), may also be made known for application (H. Maurer et.al explains it). If they failed to do so, the state and social organizations should come forward for prosecutions. The social organizations belonging to the academic and research field including the media of all forms should become a leader to generate consciousness about the evil effects of plagiarism and taking due initiatives for curbing this evil. At the state level, the universities should provide for education in this regard like compulsory education on environmental studies. They should also develop proper technology and fool-proof processes for testing plagiarism of each and every kind. The governments must formulate a clear policy in this regard and come with stringent provided in the policy as well as clear law made by the legislature for this purpose. If India is to be a leader in the area of research and academics, the disease of plagiarism is urgently needed to be curbed and cured.

REFERENCES

- [1] Anderson, M.S., Steneck, N.H. (2011). The Problem of Plagiarism. *Urologic Oncology: Seminars and Original Investigations, Elsevier, 90-94.*
- [2] Cheema. Z., Mahmood, S., Mahmood, A., & Shah, M. (2011, January). Conceptual awareness of research scholars about plagiarism at higher education level: Intellectual property right and patent. *International Journal of Academic Research*, 3(1), 666-671.
- [3] Hermann Maurer, Frank Kappe, Bilal Zaka, Plagiarism A Survey, *Journal of Universal Computer Science*, vol. 12, no. 8 (2006), 1050-1084.
- [4] Honig, B., &Bedi, A. (2012). The fox in the hen house: A critical examination of plagiarism among members of the academy of management. *Academy of Management Learning & Education*. 11(1), 101-123.
- [5] Hussein, A. M., (2016). Paraphrasing Solution to the Problem of Plagiarism. *Asian Journal of Information Technology*, 15(16): 2743-2746.
- [6] Prashant K. Nanda, (2017), The World University Rankings 2018: IISC slides, no Indian institute in top 200, Available at: www.livemint.com
 - Yadav, S., Rawal, G., Baxi, M. (2016). Plagiarism A Serious Scientific Misconduct. *International Journal of Health Sciences and Research*. Vol.6; Issue 2.

Seeing yourself as you want to be is the key to personal growth. ~ Anonymous