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Plagiarism: Pros and Cons

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Abstract
In this review, the most seriously viewed problem in the scientific community are described, in recent years plagiarism is growing like a cancer diseases by authors unknowingly and it is the main reason for the rejection of the most of the article. From the school education, the students are encouraged to duplicate the text as answers, so the copying of text from the publications is more common since ancient years, but it is most prevalent in the scientific research in the form of methods, figures, tables and results, etc. the plagiarism is not defined in a few words but stealing of the words, ideas, methods, results from already published resources without citing and manipulating the previous data as new findings. In this paper, we comprise the types of plagiarism, problems and detection of plagiarism using modern tools to help in the reduction of plagiarism in the submitted articles.

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INTRODUCTION
The primary aim of scientific research is to improve the life style of human being, using relevant knowledge of the particular field. In ancient period, many scientific facts were not revealed to everyone. The advance of Science and technology leads to the fact that; every small work is published. The government introduces the ranking system in educational and research institutions which urges the fast publications, which leads to scientific corruption. Bibliometric is the only available technique to measure research output of an author, institution, and nation or in a specific subject area. So the researcher wants a number of publications within short time with copying and pasting the existing text available in the website (Chauhan, 2018). Plagiarism, which refers to the duplication of previously published information without appropriate attribution to the source, whether intended or otherwise, is a major academic offense (Satyanarayana, 2010). No doubt, there is plagiarism in the scientific community, although it is against basic scientific principles. Plagiarism is useless, meaningless, unethical and thus forbidden (DeVoss and Rosati, 2002). One of the pathological components in the relationships between people is the legal culture in society (Pakjou et al., 2011). Plagiarism involves using another person's ideas, processes, results, or words without giving adequate credit. Increasing instances of plagiarism may be due to pressure to publish among students and faculty or lack of integrity. Reviewers and editors of journals usually check for plagiarism (Ali, 2011). However, no system is foolproof, and the onus lies squarely on the authors. Plagiarism detection software too may have limitations as

brought out in the editorial. It is important to create awareness among the scientific writers toward what constitutes academic misconduct and plagiarism. Universities should conduct a sensitization program for researchers to highlight the consequences of plagiarism. Serious efforts must be made to inculcate the virtues of sound knowledge, scientific curiosity, and ethical conduct (Singh & Guram, 2014). Recently, there has been a "mushrooming growth" of predatory journals which do not have any scientific values as they follow unethical publication practices (De & Chowdhury, 2010). The most predatory journals, even not proof reading and accept the manuscript as such for the publication charges, so many researchers are cheated and disappointed when the journals are removed from Scopus or from UGC care list. Some journals provide wrong information like which are indexed in Scopus and many other indexing agencies. There are many reviews and articles regarding plagiarism are already available, in this review, the prevalence of plagiarism in the scientific community and its effects on research, causes and consequences and remedies in scientific writings are summarized.

TYPES OF PLAGIARISM
Direct Plagiarism
The commonest form of plagiarism is of text known as "copy-cut-paste" or "word-to-word" writing wherein complete sentences, paragraph, tables or even pictures are reproduced without acknowledgement. Although previous research need to be discussed complete copying of text is to be avoided. With use of computers and the internet this form of plagiarism is very prevalent. Copying of ideas is a common form of plagiarism wherein someone else's ideas, presentations, audio or video files, thoughts, inferences or suggestions are made into research and presented as own without proper acknowledgement. This is of course very difficult to detect or prove. Some other methods are taking ideas from books, previously published thesis, journals, magazines, conferences or meetings (Ambrose, 2014; Das, 2011; Reyse,2009; Roig, 2015)

Self-Plagiarism
This happens when the author has added research on a previously published article, book, contributed chapter, journal, and presents it as a new without acknowledging the first article or taking permission from the previous publisher. Submission of the same article to multiple journals to increase the chances of publication or making multiple articles from a single article, known as, "salami slicing" is another form of plagiarism. WAME's Ethics Committee says: "With respect to the issue of how much overlap is too much…a rule of thumb that some editors have applied when considering the amount of overlap between two review articles (not book chapters) has been overlap of more than one-third of the material" (Cicutto, 2008; Iverson,1998).

Mosaic Plagiarism
This happens when a new author uses the previous article text by replacing, reordering or rephrasing the words or sentences to give it a new look without acknowledging the original author. The American Medical Association Manual of Style describes mosaic plagiarism as"… borrowing the ideas and opinions from an original source and a few verbatim words or phrases without crediting the original author. In this case, the plagiarist intertwines his or her own ideas and opinions with those of the original author, creating a confused, plagiarized mass" (Das, 2011; Iverson, 1998).

Accidental Plagiarism

Accidental plagiarism occurs when a person neglects to cite their sources, or misquotes their sources, or unintentionally paraphrases a source by using similar words, groups of words, and/or sentence structure without attribution. The Students must learn how to cite their sources and to take careful and accurate notes when doing research. Lack of intent does not absolve the student of responsibility for plagiarism. Cases of accidental plagiarism are taken as seriously as any other plagiarism and are subject to the same range of consequences as other types of plagiarism.

Source Plagiarism
This type of plagiarism uses previous article's citations without actually reading or cross referencing the bibliography.

Ghost writing
In this type the main contributor is not given due acknowledgement or someone who has not contributed is given due credit.

Collisional
In this type the author asks a professional agent or institution to write an article and then claims as its own.

REASONS FOR PLAGIARISM
Increasing instances of plagiarism reported these days could be due to one or more of the following reasons: (a) easy availability of information, (b) intense pressure for publication (publish or perish) in academia for career progression, (c) lack of confidence and writing skill, particularly amongst novices, (d) writing manuscripts in a hurry or under stress for achieving a target, (e) lack of awareness about what constitutes plagiarism, (f) lack of awareness amongst authors that it is incorrect to copy-paste word-by-word even if one gives reference to the original text, (g) many authors also believe that there is nothing wrong in using their own concept/data/ text in a new article without citation, as it does not entail copying from someone else's work and (h) habitual plagiarists, those who can write a research paper in no time just by engaging themselves with their internet-enabled computers, as they have done in the past with or without getting caught (Mohammed *et al*.,2015; Juyal *et al*., 2015).

DETECTION OF PLAGIARISM
Most of the plagiarism is an unintended, but the reputed journals like Elsevier, Science Direct, American Journal of Chemical Society, Nature, Tayler and Frances, RSC advances etc., consider plagiarism is unethical and punishable offense. Most of the authors paste the few sentences in the google and find the similarities in any other document on the website. However, this process is tedious and time consuming for checking an entire document. It is not uncommon these days for a researcher to find replication of His work in another published article by someone else without any suitable acknowledgement (Debnath, 2016). All the writers must check for the text duplication by using plagiarism detection software before submitting to any journal office. Reviewers also should use plagiarism detection tools in order to avoid the false publication practice. When the manuscript passes from the reviewers to the editors without identifying the copied text or ideas, the editor of the journal should finalize the fate of the article based on the extent of plagiarism by using powerful plagiarism detection software. The complete detection of plagiarism is very difficult because the freely available plagiarism tools showed a different percentage of plagiarism than paid tools (Sharma & Singh, 2011; Ali, 2011; Schulze, 2012; Ramaswamy, 2007; Garner, 2011; Bazdaric, 2012). Institutional Academic Integrity Panel (IAIP) shall impose the level of plagiarism and penalty considering the severity of the Plagiarism

Plagiarism would be quantified into following levels
      i.   Level 0: Similarities upto 10%
     ii.   Level 1: Similarities above 10% to 40%
   iii.   Level 2: Similarities above 40% to 60%
   iv.   Level 3: Similarities above 60%

Level 0: Similarities upto 10% - Minor Similarities, no penalty.
Level 1: Similarities above 10% to 40% - Such student shall be asked to submit a revised script within a stipulated time period not exceeding 6 months.
Level 2: Similarities above 40% to 60% - Such student shall be debarred from submitting a revised script for a period of one year.
Level 3: Similarities above 60% -Such student registration for that programme shall be cancelled.

ROLE OF PLAGIARISM TOOLS

We emphasized the role of authors, reviewers and editors for the importance of checking the manuscript which is free from plagiarism. With the availability of online manuscript submission systems, checking for plagiarism is not as difficult as it used to be during the era of 'hard copy' manuscript submission. In this context, a reliable, web enabled, a plagiarism detection tool (PDT) is a boon for the Editorial Board. There are a number of free as well as commercially available PDTs available today (Mayden, 2015). There are many free as well as paid plagiarism tools are available in the website, iThenticate found to be very useful in the detection of similarities of text in submitting manuscripts. It is suggested that all journals adopt similar screening measures for checking plagiarism at the entry level so as to avoid any plagiarism-related issues at a later date (Debnath, 2016). The following are few plagiarism detection software which helps in screening for matching text in the article submitted by the authors.

ANTI-PLAGIRISM TOOLS

- Plagiarism Checker X
- Copyscape
- Ginger
- Plagscan
- Duplichecker
- WhiteSmoke
- Copyleaks
- Plagium
- Unicheck
- Quetext
- ithendicate
- Plagly
- EduBirdie
- Eduzaurus
- Sameday paper
- Pro-Papers
- Dustball
- Plagiarisma
- CopyCatch Gold
- EduTie.com
- EVE2: Essay Verification Engine
- Glatt Plagiarism Program
- Google
- Joint Information Systems Committee (JISC)
- Electronic Plagiarism Detection
- Jplag
- Library Electronic Databases
- Moss
- Plagiarism.org
- The Plagiarism Resource Site
- PlagiServe
- Turnitin
- WordCHECK
- PaperRater
- Urkund
- Copy tracker
- SafeAssign
- SeeSources

REMEDIES OF PLAGIARISM

Awareness and prevention at all levels is the only remedy for the vexatious issues of plagiarism. Authors, editors and to some extent reviewers have a vital role in ensuring that publications continue to remain free of plagiarism (Pupovac, 2016). The following measures are suggested:

For Authors

(1) All authors must be aware that plagiarism is considered as one of the most serious forms of publication misconduct and is also one of the major causes for article rejection and retraction by any journal.

(2) Authors must be aware that, by and large, it is not difficult these days to detect plagiarism by an alert editorial team, irrespective of whatever methods are employed by the authors to deceive the editorial system of any journal. In case, verbatim copy-paste is unavoidable for a portion of the manuscript, make sure that it is put under quotation marks.

(3) Always cite references if even a small portion of the text or facts and figures are taken from any other study. It is always a good idea to acknowledge and give due credit to the original work in case an author has benefited from such work in any manner while planning and writing an article. Make sure that you cite the correct reference in the appropriate place in the text.

(4) Authors have to cite references even if some of the contents are from their own previous work in the same or a different journal.

For Editors

(1) Journal editors must have access to a reliable PDT, which has a large database to check for similarity in all submitted manuscripts. An ideal PDT should be always up to date so as to detect content from recent documents. All tested documents should ideally be available in the archive of the PDT through the journal account for future reference.

(2) It is suggested that all articles submitted to a journal be checked for similarity index with the help of a professional PDT at the pre-review stage. No article should be processed for peer review, unless it is confirmed that the similarity level is within acceptable limits, which may vary from journal to journal.

(3) Editors should use their own judgement when interpreting results of PDT similarity checks and not
merely go by the percentage results, as highlighted earlier, before a decision is made about acceptability of an article for further review.

(4) Checking for plagiarism is a task for editors rather than for reviewers. Reviewers are best utilized for critical review of a manuscript.

(5) In case similarities are noted in a submitted manuscript, which is not verbatim copy-pasted, authors may be advised to revise the manuscript in the specific areas where modification is required. In this manner, more authors will be encouraged to learn and address the issue of plagiarism, thereby increasing author compliance, while maintaining the journal publishing ethics (Debnath, 2016).

CONCLUSION

Creating awareness among research scholars about the plagiarism and penalties will reduce this type of activity some extent. The entire academic fraternity should join hands, pool their resources, and strive collectively to combat this menace to ensure credibility of research publications.

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CopyTracker (http://copytracker.ec-lille.fr/?lang=en)

Plagiarismdetect (http://www.plagiarismdetect.com)

Plagium (http://www.plagium.com

SeeSources (http://seesources.com)

Plagiarism-detector(http://www.plagiarism-detector.comies

SafeAssign (http://www.mydropbox.com)

Urkund (http://www.urkund.com/int/en

https://www.begindot.com/best-plagiarism-checker-tools/

https://www.hostingsprout.com/best-plagiarism-checker-tools/