Role of Plagiarism Detecting Software in Reducing Academic Dishonesty at M.Phil Level
Muhammad Sarwar*, Muhammad Moin** & Mehlah Jabeen***

Abstract
The study intended to explore the M.Phil scholars’ views regarding the role of plagiarism detecting software for improving the quality of research work. The sample of this study was 30 M.Phil scholars of three public sector universities of central Punjab. The data were collected through semi-structured interview schedule. The data were analyzed through thematic analysis technique. The analysis and synthesis of the data revealed that the respondents acknowledged the positive role of plagiarism detecting software in reducing the academic dishonesty. Plagiarism detecting software highlights the material that is copied. It is very difficult to find out means to avoid plagiarism detection software, but scholars try to avoid plagiarism check by using some tactics like rephrasing, using synonyms and inverted commas. The present study may contribute to reduce plagiarism by sensitizing faculty, scholars and management about the role of plagiarism check in improving the quality of research work by reducing the academic dishonesty at M.Phil level at higher education institutions.

Keywords: Plagiarism, Plagiarism detecting software, Academic dishonesty

Introduction
Plagiarism is emerging as a universal problem and increasing day-by-day in all the institutions at international level and also being observed in the educational institutions of Pakistan. The prevalent policies, rules and punishments for plagiarists show the reality that plagiarism itself is a challenging notion and having widespread optional aspects at the work place in any sort of resolution of any
claim of plagiarism. Plagiarism is a process to cheat others in the world of academics. It is an activity of shoplifting the work of other people and utilizing it as their own work without any acknowledgement. Plagiarism can be defined as copying the idea of a person and using it as one’s own. In all the fields of life the ownership right whether it is a notion, concept, idea, discovery, artistic work, experiment or academic outcome, it must be protected.

In the context of Pakistan the academic institutions are focusing on research and development by providing financial support to the scholars and faculty members of graduate and post graduate research programs. In newspapers, social and print media and in Higher Education Commission (HEC) there are many reports of plagiarism from the higher education institutions of Pakistan. Higher Education Commission (HEC) of Pakistan has made policies and plans to avoid plagiarism, provided proper directions, awareness and guidelines to the higher education institutions for detection of plagiarism. HEC has given Turnitin (plagiarism detection software) to all universities of Pakistan. The question is whether there is downward trend in plagiarism or not. It is general perception among faculty that the required results to end plagiarism from the Pakistani universities have not been achieved. One of the reasons for the situation might be lack of proper and up-to-date empirical evidence about the level of plagiarism in the research work and role of Turnitin in reducing it.

The aim of the present study was to examine the role of plagiarism detecting software in reducing academic dishonesty at M.Phil level in the higher education institutions. This study also explored the reasons behind the involvement of scholars in plagiarism and academic dishonesty.

Literature review

Plagiarism detection software
To detect plagiarism is a complex task; different software are used for the purpose in the world. One of the plagiarism detection software ‘Turnitin’ has been provided by Higher Education Commission of Pakistan to various universities of Pakistan and is mostly used in Pakistan for detection of plagiarism. It examines the assignments, reports and projects to find out the copyright material from various sources for example articles, dissertations, books, websites and already submitted scholars work. This plagiarism
detecting software is used by the instructors, teachers or scholars in order to check the originality of work.\textsuperscript{7} 

**Reasons of doing plagiarism**
The literature reports many causes of plagiarism including: easily available e-resources for example internet, computers and iPhones etc., unattainable deadlines, competition of publications among teachers and scholars for promotion and last but not least the lack of writing skill. There are some other reasons of plagiarism explained by different authors who are as followed: there is gap in communication of the supervisors and the supervisees, pressure of teachers in submission of the assignments and high expectations of the supervisors from their supervisees, the personal attributes of the scholars or researchers. Some scholars suppose that they have no skills to do quality work so they find out wrong ways to accomplish their academic tasks and indulge in academic dishonesty. The scholars usually have less knowledge about the negative effects of doing plagiarism in their research work.\textsuperscript{8} The weak ethical training of scholars in the context of research is also a cause of doing plagiarism.\textsuperscript{9} 

**Limitations of plagiarism detecting software**
Plagiarism detection software has many limitations. Some of them are being described here as: the authenticity of the citations cannot be verified by plagiarism detecting software. The most probable limitation is that the unpublished material of books cannot be checked through this software. Another limitation is limited number of experts trained to deal with this software.\textsuperscript{10} Along with these one more important limitation of this software is that it identifies words matches but unattributed paraphrases are not recognized by this software.\textsuperscript{11} 

**Theoretical Framework of the Study**
Theoretical explanations of academic dishonesty can enhance the understanding of various factor that lead to academic dishonesty in universities.\textsuperscript{12} The roots of this study have been driven from two theories which are (1) dishonesty theory and (2) theory of planned behavior. 

*Dishonesty Theory*
Dishonesty theory is based on rigorous criticism made against the students about their unethical attitude and behavior and using unfair means to get progress in academic career. Academic
dishonesty has challenged the academic integrity policy of the higher education and against the intellectual property rights of the researchers.\textsuperscript{13} The researches all over the world showed that the academic dishonesty is a universal fact and an important issue in the educational context.\textsuperscript{14} Negative effects of academic dishonesty on the progress of the individuals and community have been reported by many authors.\textsuperscript{15} There are many forms of dishonesty in which scholars indulge just like academic dishonesty, plagiarism, leak out question papers, seeking undue favor in their exams and doing less hard work but expecting more grades etc.\textsuperscript{16} More female scholars rather than males and more scholars living in off-campus than on-campus indulged in academic dishonesty.\textsuperscript{17}

\textit{Theory of planned behavior}

The theory of planned behavior is based on idea that the dishonest behavior could give response with planning to the particular factors. The behavior of a person regarding plagiarism is a combination of attitude of the person toward plagiarism, the individuals’ beliefs about societal pressure, and perceived behavioral control. So, this theory is very important in the context of academic dishonesty of the scholars because if an institution is capable to bring change in leading situations in order to think about the pressure of the society and can minimize the chances of cheating this may guide towards a low frequency of academic dishonesty of the scholars.\textsuperscript{18}

\textit{Significance of the study}

Present study intended to contribute in improving the quality of research work by reducing the dishonesty at M.Phil level in higher educational institutions by sensitizing the stake holders about the role of plagiarism detecting software. This research is hoped to be useful as it provides insights into the importance of knowledge about plagiarism detecting software for the scholars who are doing or inclined to do research projects at different level of education. The findings of this study may be beneficial for the university teachers to guide their scholars for enhancing the quality of their research work by reducing similarity index. The authorities of Quality Enhancement Cell may get information about the tactics used by the scholars to remove plagiarism in their research report and handle them properly that will hopefully improve the quality of research work.
Procedure of the study
The present study was descriptive in nature and the research design was qualitative. Population of the study was all M.Phil scholars of public sector universities of province of the Punjab. From three sampled universities of central Punjab, 30 M.Phil scholars were selected conveniently as a sample, which had either completed their M.Phil within last one year or they were waiting for VIVA after submission of their M.Phil Theses. The study was delimited to the departments of Education.

Development of tool
The interview schedule was developed by following four steps: (1) In the light of review of the relevant literature, related articles and theses the researchers identified themes related to the topic to develop interview schedule. So, seven themes were identified from the review of literature. (2) Then the researcher conducted focus group discussions on the themes identified from literature with PhD scholars who had recently completed their M. Phil. In focus group discussion the themes were increased from seven to nine. (3) In third step the researchers discussed the interview schedule with experts. According to the suggestions of experts themes and sub-themes were merged. Now themes of the interview schedule become five. Then questions developed on themes and showed to the experts along with interview conducting procedures, guidelines and cares. (4) In the last step field testing was conducted on interview schedule and on the basis of results of field testing the researchers readjusted the questions and added some probing questions.

Data collection process
Data were collected by one of the researchers personally. The M.Phil scholars of all three universities were very cooperative and showed a good response to the researcher in the collection of the data. The researcher took the appointment from respondents telephonically for interview. According to the convenience of respondents the researcher conducted interviews with respondents. Researcher with the cooperation of university teachers carried out interviews in the faculty office where they felt easier to share information related to the research problems. Laptop voice recorder was used for recording interviews. The process of data collection proved to be fruitful for the researcher in terms of valid and adequate information regarding the effectiveness of plagiarism detecting software for reducing the dishonesty of research work.
**Analysis of the data**

After collection of data, the data were analyzed. The thematic analysis technique was used to analyze the data. For the purpose of analysis of the data the recorded interviews were transcribed, coded, assessed, interpreted and verified. The procedure for analysis of the data was as following:

- First of all, the researcher who conducted interviews transcribed the first interview and adjusted it in themes and then conducted other interviews. The researcher transcribed first interview in two weeks.
- Then the time was comparatively minimized as 5 to 6 hours for transcription of other interviews.
- The researcher listen the interviews carefully and wrote down the views of the respondents according to the themes of the interview schedule.
- The researcher rearranged the answers of the respondents according to the themes and analyzed different themes.
- Then the researcher synthesized the themes.
- The final part of this process was data confirmation.

It was done by re-listen the interviews which permitted the researcher to confirm the transcribed data.

In interview schedule there were five themes, namely:

i). Awareness about plagiarism,
ii). The role of plagiarism detecting software,
iii). Techniques to deceive plagiarism detecting software,
iv). Limitations of detecting software and
v). Respondents' opinions about the plagiarism detecting software

The analysis of the data was described according to following five themes:

*Awareness about plagiarism*

During interview, regarding questions about above mentioned themes, all respondents reported that they have no knowledge about other types of plagiarism detecting software. Nineteen respondents stated that as per their knowledge, Turnitin is the Plagiarism detecting software that is used in Universities approved by HEC to check the scholars’ research work. Twenty two respondents revealed that Plagiarism detecting software highlights the writing material that is plagiarized in any source and tell us
how much percent (%) plagiarism is found. Three respondents were found unaware of the plagiarism detecting software used in their University because their teachers check their work by plagiarism detecting software. One of the scholars reported that those scholars, who showed more interest in research work and to get access to plagiarism detecting software, can have a chance to check other scholars’ work with the coordination of their supervisor. They may improve their writing abilities by using plagiarism detecting software.

The role of plagiarism detecting software
The majority of the scholars (24 respondents) stated that the role of plagiarism detecting software is vital for the improvement of research work and they admired that the software plays the most effective role in reducing the plagiarism. This software, checks each and every thing even it examines the documents word by word. It leaves no chance for the researcher to deceive this software. Because of this software, scholars were conscious to work according to the university requirements. The plagiarized work is not accepted for final submission. As a result the scholar cannot achieve a degree. Scholars were conscious because of this software and they try their best to produce work that is not plagiarized. It is all because of the fear of this software. One of the scholars stated that:

“I admit that plagiarism detecting software improves the abilities of paraphrasing”.

Yet surprisingly, she did not agree with the narrative of other scholars that plagiarism detecting software improves the quality of research work. She added:

“Ability to paraphrase research report is not the whole some indicator of quality research work. The real purpose of the research is to produce creative and innovative ideas and concepts”.

Twenty seven respondents reported that plagiarism detecting software improved the abilities to rewrite the research work. The reason behind this is that the scholars have to rewrite the research work after correcting their mistakes highlighted by the plagiarism detecting software. This practice helps a great deal to improve their skills of rewriting the content. They pointed out the deficiency of university teacher in this regard that they do not put their scholars into practice on checking plagiarism through the software at an early stage of their research work.
Techniques to Deceive Plagiarism Detecting Software

Regarding questions of above mentioned themes twenty five respondents were of the opinion that they were unable to deceive plagiarism detection software at M.Phil level because they had no orientation of this software prior to this stage. Twelve respondents said that there were rare chances to deceive plagiarism detecting software only by using rephrasing technique because it can detect and highlights each and everything in the material. One of the scholars said that:

“Scholars use different techniques or tactics to deceive this software. However, I know many software that are used for minimizing plagiarism.”

Fourteen respondents viewed that male scholars use more tactics to deceive plagiarism detecting software as compared to the female scholars because they have more expertise in using digital resources, greater level of exposure and vast social circle. On the other hand, some of them were of the opinion that both male and female equally try to deceive plagiarism detecting software. Respondents of the study showed diversified opinions on variety of tactics used by the research scholars to reduce similarity index. As per their opinions, research scholars used deceiving tactics as under: (a) Paraphrasing, (b) Inverted commas, and (c) Partition of the paragraph to reduce similarity index. Six respondents reported that they know the experts who claim to be competent enough to deceive this software and can generate 0% plagiarism report by using some special tactics.

Limitation of Plagiarism Detecting Software

Ten respondents stated that they have no idea that the plagiarism detecting software checks the original citation or not. While, twenty respondents asserted that plagiarism detecting software does not check the original citation. It can check the copy-pasted material only while scholars rephrase the material and insert citations. They further stated that they can cite any sentence after paraphrasing and detection software is unable to check that citation whether it is original or fake. It is the responsibility of the supervisor and external evaluator to highlight the fake citation through cross verification. Nine respondents who have a little knowledge about plagiarism detecting software reported that it can check the original citation. Fourteen respondents said that the software cannot check the material that is rephrased. Nine
respondents added that material in inverted commas is not also detected by the software. There were still a significant number of respondents (eighteen) who claimed that limited access, unpublished material and authenticity of citations are also the limitations of plagiarism detecting software.

Respondents’ Suggestions
Seventeen respondents opined that teachers should make the scholars aware at the initial stage of research work even at masters level so that they may avoid copy-pasted material. One of the respondents authenticated that the guidance from the teachers was sufficient and there was no need to provide additional information. Proper training workshops on plagiarism detecting software are required for the scholars at the initial stage of research work. Two of the respondents proposed that limited access and practice to plagiarism detecting software is required at the initial stage of research work. Five respondents stated that if access to plagiarism detecting software is made easier they will not indulge in plagiarism. Eight respondents pointed out that there were some websites and consultancy centers that attract the scholars to involve in dishonesty in research work. These websites offer their clients that the website will complete their research work by receiving a handsome amount of money. Research supervisors can control this type of dishonesty. It can also be reduced by sensitizing the scholars that this practice is unethical, unlawful and against the teachings of religion. A few of managerial issues were highlighted by the eight respondents, particularly at the time of thesis submission. For example, some scholars may generate fake plagiarism reports and attach therewith. It calls for cross verification of the reports by the staff of Controller Examination and Quality Enhancement Cells at the time of final submission of thesis.

Discussion
The study intended to explore the role of plagiarism detecting software on the dissertation writing practices of M.Phil scholars. So, this study explored scholars’ views regarding the role of plagiarism detecting software in improving the quality of research work, the techniques used to deceive the software and the limitations of plagiarism detecting software. The analysis and synthesis of the data revealed that the respondents acknowledge the positive role of plagiarism detecting software in reducing the dishonesty and improving the quality of research work. Especially
in the era of modern technology the sources of plagiarism has been increased. So the role of plagiarism detecting software has been augmented. A recent research highlighted in the roles of plagiarism detecting software as file management, copyright protection and plagiarism prevention. It was also found that only Turnitin was used in the universities of Pakistan because it is approved from higher education commission (HEC). Turnitin is top performance plagiarism detecting software because in its database technical tricks and locating sources are addressed. Plagiarism detecting software highlights the material that is copied. Similarly it is argued that due to use of plagiarism detecting software the material copied from internet resources can be checked in a short time. It is very difficult to deceive plagiarism detecting software, but scholars try to avoid plagiarism check by using some tactics like rephrasing, using synonyms and inverted commas. The reasons behind the tactics used by scholars may be because of the pressure to achieve high marks, lack of time, financial resources and interest in study, lack of understanding of subject matter and task, unawareness about constitutes of plagiarism. But some researcher argued that there is no acceptance of any rational regarding plagiarism.

**Conclusion**

- It was concluded that the respondents were only aware of the Turnitin as plagiarism detecting software. They did not know about any other plagiarism detecting software. The underlying causes behind this phenomenon were that they were not introduced with this software at earlier stages of their research work. It was neither included in their course work nor given them access to these software during their research work.
- Plagiarism detecting software improves the quality of research work. It also improves the rewriting abilities of the scholars.
- To avoid similarity index scholars commonly use tactics like paraphrasing, putting inverted commas and rearrangement of the paragraph.
- This software is unable to detect material that is paraphrased, put in inverted commas and unpublished material. Limited access to research scholars and failure to check the authenticity of citations are also the limitations of the software.
- Plagiarism detecting software should be introduced at the initial stages of research work. Seminars/ workshops and orientation classes need to be organized for the awareness of scholars about plagiarism detecting software.
Notes and References

5 Muhammad Ramzan, Muhammad Asif Munir, Nadeem Siddique and Muhammad Asif, “Awareness About Plagiarism Amongst University Students in Pakistan”, Higher Education 64, no. 1 (2012): 73-84
6 Ibid.
Role of Plagiarism Detecting Software …

Sarwar, Moin & Meblah


