November 2021

Online reference management tools and referencing styles: A study of awareness and usage among research scholars of Aligarh Muslim University

NAHAV ALAM ANSARI MR.
Aligarh Muslim University, nahav546@gmail.com

M MASOOM RAZA Prof.
Aligarh Muslim University, masoomr@yahoo.com

Online reference management tools and referencing styles: A study of awareness and usage among research scholars of Aligarh Muslim University

Introduction

Citations and references is the only recognized way of acknowledging the others' ideas, text or statements incorporated in ones' own work. According to NCSU[1] researchers are keeping themselves engaged in academic writings and any piece of writing is not possible without consultation of previously written and existed studies. Supporting, a study with the findings of earlier researches brings quality in researchers' work. When a researcher quote others' work in the study, he/she need to cite that cited/quoted author and here the need of citation management tools arises. Prior to these developed tools, researchers are bound to do this job manually and this takes too much time and intellectual power. With the help of these tools, this time consuming work is done easily by automatically generating citations along with references in various formats. Therefore, usage of online citation and referencing management tools is now part of contemporary scientific research and production.

Background information

Researchers are primary known for their writings and publishing activities. Whether researchers write an article for journal publication or write research paper for publication in conference proceeding or any other piece of writing for publication in any other mediums, they need to consult other authors' work. In their writing process for consulted piece of writings, acknowledgement is given to avoid the instance of plagiarism. These acknowledgments formally known as citations and bibliographies/references. The inclusion of citations and references may be done manually or mechanically using some sort of referencing management tools (RMTs). The use of these automatically RTMs may be chargeable or free of cost. The present study picked up some of the free online RTMs to assess their awareness and usage among the researchers of AMU, Aligarh. Some prominent freely available RMTs were selected for this study because researchers may not have capability of paying the cost of subscription for paid tools. As said by Francese[2] literature about RMTs focuses mostly on the technical analysis of distinguishing features offered by the RMTs. Therefore, instead of evaluation of features provided in these software, the present study investigates the awareness and usage of these management software among the research community of AMU, Aligarh.

Objectives of the study:

- To explore the awareness about referencing styles and RMTs among the scholars.
- To examine the usage of selected referencing styles and RTMs by the researchers.
- To highlight the problem faced while using referencing styles and RTMs.
- To determine their level of satisfaction.

- To find out whether they need training or guidance to use these tools or they are technically competent.

Limitations of the study

The study carried out with two major limitations. Firstly, the study is confined to some selected referencing styles and RMTs. Secondly, the study population covers only Doctor of philosophy (PhD) and Post Doctorate Fellowship (PDF) students. Furthermore, the study includes researchers of all branches of sciences, broadly researchers of science and social science disciplines, pursuing any of the above mention courses on regular basis under the guidance of the faculty members.

Methodology

The present study has been carried out using a survey method. Besides demographic details, the questionnaire was comprised of major three sections with several questions in each section on different aspects of referencing styles and RMTs. The feedback was gathered from the research scholars on three major themes; firstly on current practices in creating referencing and bibliographies, secondly on their general impression on RMTs and thirdly on library support. A total of 240 well-structured questionnaires were distributed to collect data from the respondents. In response to 240 questionnaires, sums of 149 correct responses were included in the study reaching out to 62.08% response rate. The task of preparing questionnaire, its distribution and retrieving the questionnaire back took almost one month. Once the data was collected, it was analyzed by using MS Office tools. Later, the data was interpreted with the help of tables and figure. At last, major findings were discussed and reasonable conclusion was drawn with an informative abstract.

Review of related literature

Beginning with one of the latest study carried out by the Sarrafzadeh and Khaleghi[3] examined the role and support from the academic libraries in providing instruction to use citation management tools. The researcher encompasses all Iranian academic libraries and visited the websites of selected libraries for the purpose of gathering data. Their study revealed that about half of the libraries' websites were found void of any information on account of how to use bibliographic management tools. The study further indicated that EndNote was the only software which supported by the rest of examined libraries. On the support of the libraries a similar study conducted by McMinn[4] investigating a huge number of 111 American university libraries' websites for citation management software instruction and guide to use citation management tools. The results show that 72 percent of the libraries have provided instructional materials for RefWorks and EndNote training. The study of Hensley[5] was focused to address the role of academic librarians in making software available and easy to use for students and scholars. The researcher concluded his study stating that the librarians are providing training program and guides for its users as per the users' expectations.

The study carried out by Madhusudhan[6] explored the usage of online citation management tools by the students of library and information science at the University of Delhi. He used survey

method and questionnaire was used as a tool for collection of data. The findings of his study indicated that a major portion of respondents were found to be highly aware of citation management tools. EasyBib was appeared as the most common used citation management tool after Mendeley. The author further reports that though, the users were found highly aware, they need to be trained to uses citation management tools. A more precise study on the use of bibliographic management tools with special reference to RefWork was carried out by the Salem and Fhrmann[7] determining its use among 19 selected graduates. The participated graduates included in the focus group to get qualitative data. The results suggested that there was growing awareness of citation management tool among graduates and they made an imperative use of these tools for generating citations and bibliographies.

The paper of Ullen and Kessler[8] inspected the functionality and accuracy of low priced or freely available citation application on iOS and Android mobile phones. First of all, they installed citation application on several mobile phones and tablet devices. Later, the author generated citations in MLA and APA format and eventually evaluated each of them one by one. The major findings of the study showed that majority of tested application inaccurate citation and function in restricted and limited manner. Among all tested citation application, only EasyBib produced best and most accurate results. Earlier in their study Kessler and Van Ullen[9] took an account of two web based citation generators viz. NoodleBib and EasyBib to compare the accuracy with EndNote. Some of the findings of the study revealed that EndNote designed with error checking features that make for better formatted citations which was missing in the compared other two citation generators. Zhang[10] compared the main features of EndNote, Zotero, Connotea, and Medeley from the viewpoint of medical researchers. At last, two other studies discussed library instruction for citation management. One of them by Harrison[11] who discussed about how librarians developed online tutorials, face to face conversation through organized classes after they purchased a campus license to EndNote. Parallel to harrisons' study, Walker[12] also established online training for the library users at the University of Tennessee. These online developed tutorial guiding user how to use EndNote citation management tool.

Data analyzes and discussion

Awareness of major referencing styles

There are varieties of referencing styles and some of the most prevailing ones picked up and included in the study. These styles are crucial part of successful academic writing and assisting researchers to avoid plagiarism. They bring uniformity in acknowledgement to thoughts, ideas works of other with the help of some set of rules. The six styles selected for the study viz. American Psychological Association (APA), Modern Language Association (MLA), Chicago Manual Style (CMS), Harvard Style (HS), Cambridge Style (CS) and the Institute of Electrical and Electronic Engineers (IEEE). The table 5 exhibits that researcher have been appreciably familiar with all these referencing styles. They are extensively aware and APA is most common

familiarized style among the researchers, followed by CS, CMS, MLA, IEEE and HS in the last place.

Table 1 Awareness of referencing styles

Terms	FA*	PA*	N*	PU*	FU*	Total
APA*	136	3	2	-	8	149
MLA*	121	12	4	2	10	149
CMS*	126	9	1	6	7	149
HS*	98	18	8	11	14	149
CS*	127	12	9	-	1	149
IEEE*	103	5	9	13	29	149

(**APA***= American Psychological Association, **MLA***=Modern Language Association, **CMS***= Chicago Manual Style, **HS***=Harvard Style, **CS***=Cambridge Style, **IEEE***=Institute of Electrical and Electronic Engineering, **FA*=**Fully Aware, **PA***=Partially Aware, **N***=Neutral, **PU***=Partially Unaware, **FU***=Fully Unaware)

Referencing styles and their usage

Awareness and usage are different terms. Though, the awareness is considered as leading factor behind the usage of any product and service, but it does not guarantee the usage of a particular item. Undoubtedly, the researchers were found significantly aware of styles, but they do not use them as per awareness. The table 6 explains the usage of these referencing styles by the respondents. The APA style is secured top place in users' choice for citation and references, followed by MLA and CMS. As shown in table below, about half of the researchers have used APA more than three times whereas IEEE used by only 3.35% researchers. In case of never used, CS counts maximum researchers i.e. 44.29% researchers never used it, followed by IEEE with 32.88% researchers.

Table 2 Usage of referencing style

Terms	Once	Twice	Thrice	MTT*	Never	Total
APA*	7	53	67	11	11	149
MLA*	16	79	37	3	14	149
CMS*	35	57	31	7	19	149
HS*	57	32	12	2	46	149
CS*	51	25	5	2	66	149
IEEE*	48	36	13	3	49	149

(APA*= American Psychological Association, MLA*=Modern Language Association, CMS*= Chicago Manual Style, HS*=Harvard Style, CS*=Cambridge Style, IEEE*=Institute of Electrical and Electronic Engineering.)

Awareness level of selected RMTs

The development of online referencing management tools has reduced the efforts of researchers by providing them readymade solution for referencing. These tools are gaining grounds in the academic environment particularly in the scientist and researchers' community. Some of the most popular free tools like Mendeley, Zotaro, EndNote RefWork, CiteULike incorporated in the study. Table 7 depicts researchers' level about these tools and the researchers found to be shallowly aware of these online tools. As per the responses in table below expressing those except Mendeley rest of the tools are unknown to the majority of respondents. The figure in 4th column has been increasing at every next tool. Notably, there is a significant gap between the awareness and usage. Particularly, Mendeley is known to 79% researchers but in case of usage just 8.72% researchers have used it. Same gap is found in others two tools i.e. Zotaro and EndNote. If, talking about Cite ULike and RefWork only one researcher used both of two tools so for.

Table 3 Acquaintance of RMTs

Free tools	Know and used	Just know	Do know	Total
Mendeley	13	119	17	149
Zotaro	9	69	71	149
EndNote	3	56	90	149
RefWork	1	21	127	149
CiteULike	1	7	141	149

Adoption of RMTs by the research scholars

It is clear form the above table that the researchers are lagging behind in the use of these tools, though they are highly aware about these tools. However, users' frequency was evaluated as how many times a particular uses have used RMTs. Total, out of 149 respondents, only 27 respondents used RMTs. Mendeley is used by maximum 13 researchers followed by Zotaro and EndNote i.e. used by 9 and 3 researchers respectively. RefWork and CiteULike used by only one researcher. None of the researchers used these tools thrice and more than trice except two researchers used Mendeley twice.
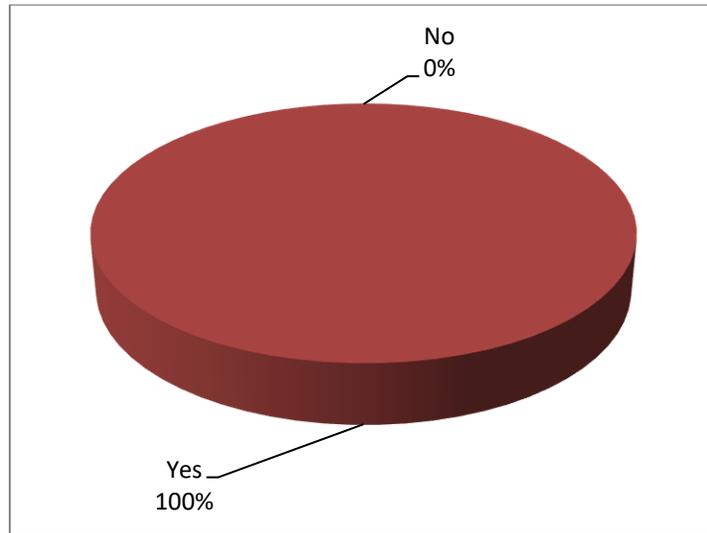
Table 4 Usage of RTMs

Terms	Once	Twice	Thrice	MTT*	Total
Mendeley	11	2	-	-	13
Zotaro	9	-	-	-	9
EndNote	3	-	-	-	3
RefWork	1	-	-	-	1
CiteULike	1	-	-	-	1

Users' opinion on required training on RMTs

The users' opinion was taken to know that whether they need training program in future or not. The figure 3 of pie chart unveils results of this query. Surprisingly, all 100 percent researchers expressed that they need training to use RMTs. The researchers lack of knowledge and low skills have signaled that they extremely need training on RMTs. Therefore, they look library as the only source that can help to overcome this problem.
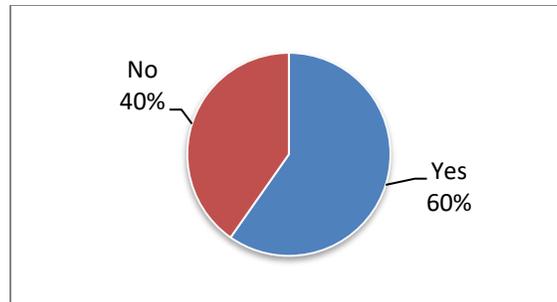
Figure 1 Requirement of the training on RMTs

No
0%

Yes
100%

Respondents view on training of referencing styles

Referencing styles also used mechanically because they follows some sort of pattern and formats. They need careful attention while using them particularly putting punctuations. Every referencing style is based on its own rules and guidelines which are provided by the parent organization. Besides, RMTs respondents were also asked to mention that whether need support to use referencing styles or they are self-potent. The results are quite liberal as shown in figure 4 that exactly one sixth portion of the population required training to use referencing styles. Though, one fourth of the population declared that they need not any training to use any of given referencing styles.

Figure 2 Training on Referencing Styles

Conclusion

Referencing management tools which are also known with various other similar terms like bibliographic citation management tools, citation managers, personal bibliographic management softwares etc. These multipurpose tools offers a multi advanced features which vary from software to software. The usage of these softwares along with available referencing styles may bring authenticity and quality in academic writing. The researchers of AMU have knowledge of RMTs and referencing style but they have lack of skills to use RMT properly. Additively, the researchers may be turned to effective users of RMT if library organizes training programs on regular basis with little more focus on novices or newly admitted researchers.

Practical Implication of the study

In today's contemporary world any research can't be completed without generating referencing. Therefore, the role of referencing in academic writings is continues to grow. Hence, the findings of this study open a door for librarians to acquaint with current situation of scholars on the usage of referencing and referencing management tools. Thus, the ongoing study intensely advocates the routine training courses for scholars on these challenging issues.

References

1. North Carolina State University, Citations and references. Available at https://www.ncsu.edu/labwrite/res/res-citsandrefs.html (accessed on 2 October 2015).

2. Francese E, Usage of reference management software at the University of Torino. *JLISIT*, 4 (2) (2013) 145-73.

3. Sarrafzadeh Maryam and Khaleghi Narges, Instruction of Citation Management Tools by Academic Librarians: The Need for Training the Trainers, *Webology*, 14 (1) (2017) 54-66.

4. McMinn S H, Library support of bibliographic management tools: A review, *Reference Services Review*, 39 (2) (2011) 278-302.

5. Hensley M K, Citation Management Software, *Ref. & U. Serv. Quart.,* 50 (3) (2011) 204-218.

6. Madhusudhan Margam, Use of Online Citation Tools by Students and Research Scholars of Department of Library and Information Science, University of Delhi, *DESIDOC Journal of Library & Information Technology*, 36 (3) (2016) 164-172. Available at 10.14429/djlit.36.3.9428 (Accessed on 2 October 2015)

7. Salem Jamie, Bibliographic Management Software: A Focus Group Study of the Preferences and Practices of Undergraduate Students, *Public Services Quarterly*, 9 (2) (2013)110-120. Available at https://www.tandfonline.com/doi/abs/10.1080/15228959.2013.785878

8. Van Ullen Mary K and Kessler Jane, Citation apps for mobile devices, *Reference Services Review*, 44 (1) (2016) 48-60. Available at https://doi.org/10.1108/RSR-09-2015-0041 (Accessed on 2 October 2015).

9. Kessler J and Van Ullen M K, Citation generators: generating bibliographies for the next generation, *Journal of Academic Librarianship*, 31 (4) (2005) 310-316.

10. Zhang Y, Comparison of select reference management tools, *Medical Reference Services Quarterly*, 31 (1) (2012) 45-60.

11. Harrison M, Summerton S and Peters K, EndNote training for academic staff and students: the experience of the Manchester Metropolitan University Library, *New Review of Academic Librarianship*, 11 (1) (2005) 31-40.

12. Walker T B, Row J S and Dolence T, Teaching and supporting EndNote at the University of Tennessee: designing online alternatives to high demand classes, *Electronic Journal of Academic & Special Librarianship*, 8 (2) (2007) 7-15.