Influencing Features and Factors of Reference Management Software among University Research Scholars in Tamil Nadu, India

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Abstract - This study examined the awareness and influencing features and factors of reference management software among university research scholars in Tamil Nadu, India Descriptive survey method was adopted for the study. The Web-based questionnaire was used to collect data for the analysis. The total population of the study is 200 people. Among total responses, 177 were returned, representing the study's response rate is 88.50%. The study's findings revealed that the research scholars use Mendeley as the most-used reference management software. It was recommended that research scholars should be trained on how to make use of the most used reference management software.
Keywords: Reference Management, Software, Mendeley, Endnote, Universities, Tamil Nadu

I. INTRODUCTION

Reference management software, citation management software, or bibliographic management software is software for scholars and authors to use to record and utilise bibliographic citations (references) and manage project references either as a company or an individual. Once a citation has been recorded, it can be used repeatedly in generating bibliographies, such as lists of references in scholarly books, articles and essays. The rapid expansion of scientific literature has driven the development of reference management packages. These software packages usually consist of a database in which full bibliographic references can be entered, plus a system for generating selective lists of articles in the formats required by publishers and scholarly journals.

Modern reference management packages can usually be integrated with word processors so that a reference list in the appropriate form is produced automatically as an article is written, reducing the risk that a cited source is not included in the reference list. They will also have a facility for importing the details of publications from bibliographic databases. Reference management software does not do the same job as a bibliographic database, which tries to list all articles published in a particular discipline or group of disciplines. Such bibliographic databases are significant and must be housed on central server installations. Reference management software collects a much smaller database of the publications that have been used or are likely to be used by a particular author or group. Such a database can easily be housed on an individual's personal computer.

II. REVIEW OF LITERATURE

Gilmour, R., & Cobus-Kuo, L. (2011) tested importing and data management features, fourteen references from seven bibliographic databases were imported into each RM, using automated features whenever possible. To test citation accuracy, bibliographies of these references were generated in five different styles. The authors found that RefWorks generated the most accurate citations. The other RMs offered contrasting strengths: CiteULike in simplicity and social networking, Zotero in ease of automated importing, and Mendeley in PDF management. Ultimately, the choice of an RM should reflect the user's needs and work habits.

Francese, E. (2013) presented research, originally a master thesis, aims to investigate the popularity and usage of Reference Management software among researchers and scholars of the University of Torino, Italy, and the role that university libraries can assume about the subject. Based on a qualitative approach, this study is a descriptive survey composed of an online questionnaire, and direct interviews addressed to the population of professors and researchers of the STM areas at the University of Torino. A qualitative analysis was made across the 187 responses from the questionnaire and the 13 interviews.

Lorenzetti, D. L., & Ghali, W. A. (2013) studied that out of the 78 researchers who responded to our survey, 79.5% reported using a reference management software package to prepare their review. Of these, 4.8% reported this usage in their published studies. EndNote, Reference Manager, and RefWorks were the programs of choice for more than 98% of authors who used this software. Comments with respect to ease-of-use issues focused on the integration of this software with other programs and computer interfaces and the sharing of reference databases among researchers.

Berengueres, J., & Nesterov, P. (2020) described the findings of a survey that covered the topics of stress, citation tool use habits, subjective happiness, h-index, research topic and tenure among a sample of 2286 authors of arxiv.org. Ph.D. students report the lowest emotional happiness score among all faculty roles, while tenured faculty report the highest. No association between citation management tool usage and h-index was found. The average

age at tenure start is 34.9 years. In addition, no significant association between stress levels and the research topic was found. Wahyuningsih, S. (2020) conducted the study about perceptions of Indonesian Islamic Higher Education students, particularly Bidikmisi students in the English Program run by the State Islamic Institute of Kudus regarding the role of reference management in academic writing. It belongs to qualitative research. The result reveals that most students agreed that reference management software such as Mendeley and Zotero has some benefits to academic writing.

Avidiansyah, Z., & Kurniajaya, J. F. (2020) states the management of bibliographic lists with various writing styles can be helped by using software assistance. Observations made by the authors at the Universities Gadjah Mada (UGM) Graduate School Library, many of the theses from students are still not appropriate for writing the bibliography. So, it becomes a question of how students' final self-awareness level is in using citation/reference software. As a result of the survey that has been carried out, the last level students of the Master of Culture and Media Study Program, the Graduate School of UGM, have self-awareness in using citation/reference software.

III. OBJECTIVES OF THE STUDY

1. To know the sources of information about Reference Management Software.
2. To identify awareness about Reference Management Software.
3. To assess the level of understanding of Reference Management Software.
4. To determine the various style manual used by the research scholars.
5. To know the features and factors of Reference Management Software.

IV. METHODOLOGY

The survey was used to investigate the awareness of influencing feature factors of reference management software among the research scholars in Universities in Tamil Nadu. The questionnaires were used to collect the data from the universities among the research scholars: Alagappa University, Madurai Kamaraj University(MKU), Manonmaniam Sundaranar University (MSU) and Gandhigram Rural Institute. The 200 questionnaires were distributed, 177 questionnaires were filled and returned for usable by the participant, and the remaining were not replied to. The response rate is 88.50%. Some statistical tools like simple percentage, WAM and Chi-square tests were used based on the collected data.

V. LIMITATION

This study covers only the research scholars from the four universities in South Tamil Nadu, i.e., Alagappa University, Madurai Kamaraj University, Manonmaniam Sundaranar University, and The Gandhigram Rural Institute in Tamil Nadu. And other universities, Engineering Colleges, Arts & Science colleges and other institutions were not considered for this study.

VI. ANALYSIS AND INTERPRETATION

A. Distribution of Questionnaires

This attempt is to find out the influencing features factors of reference management software among research scholars in universities in Tamil Nadu, as shown in table I.

TABLE I DISTRIBUTION OF QUESTIONNAIRES

Sl. No.	Universities	Distributed		Received	
		No.	%	No.	%
1	Alagappa University	50	25.00	47	23.50
2	MKU	50	25.00	45	22.50
3	MSU	50	25.00	47	23.50
4	GRI	50	25.00	38	19.00
	Total	200	100.00	177	88.50

Table I shows the distribution of the questionnaires among research scholars; 200 questionnaires were distributed. The stratified random sampling was used and equally distributed the questionnaires to all the four universities such as Alagappa University, Madurai Kamaraj University (MKU), Manonmaniam Sundaranar University (MSU) and Gandhigram Rural Institute (GRI).

Among the 200, 177(88.50%) questionnaires were received with duly filled, which consisted of 47(23.50%) from Alagappa University, 45(22.50%) from Madurai Kamaraj University, 47(23.50%) from Manonmaniam Sundaranar University and 38(19.00%) from Gandhigram Rural Institute. The response rate is 88.50%.

B. Demographic Details of the Respondents

The demographic details of the research scholars in universities in Tamil Nadu were categorised based on gender, Qualification, Domicile, age & Years of Research, which are shown in table II.

The demographic details of the respondents are shown in table II. Out of 177 research scholars, 110(32.2%) were from 'Male' which consists of 31(17.51%) from Alagappa University, 31(17.510%) from Madurai Kamaraj University, 22(12.43%) from Manonmaniam Sundaranar University and 26(14.69%) from Gandhigram Rural Institute. Followed by 67(37.85%) were from 'Female', which consists of 16(9.04%) from Alagappa University, 14(7.91%) from Madurai Kamaraj University, and 25(14.12%) from Manonmaniam Sundaranar University and 12(6.78%) from Gandhigram Rural Institute.

TABLE II DEMOGRAPHIC DETAILS OF THE RESPONDENTS

Sl. No.	Demographic Details	Alagappa University	MSU	MKU	GRI	Total
Gender						
1	Male	31(17.51)	31(17.51)	22(12.43)	26(14.69)	110(62.15)
	Female	16(9.04)	14(7.91)	25(14.12)	12(6.78)	67(37.85)
Qualification						
2	M.Phil	18(10.17)	23(12.99)	15(8.47)	6(3.39)	62(35.03)
	NET	2(1.13)	2(1.13)	1(0.56)	0(0)	5(2.82)
	SLET/SET	4(2.26)	10(5.65)	0(0)	2(1.13)	16(9.04)
	P G	23(12.99)	10(5.65)	31(17.51)	30(16.95)	94(53.11)
Domicile						
3	Urban	8(4.52)	15(8.47)	18(10.17)	9(5.08)	50(28.25)
	Semi urban	13(7.34)	12(6.78)	14(7.91)	16(9.04)	55(31.07)
	Rural	26(14.69)	18(10.17)	15(8.47)	13(7.34)	72(40.68)
Age						
4	Below 25	6(3.39)	5(2.82)	13(7.34)	3(1.69)	27(15.25)
	25-30	21(11.86)	19(10.73)	21(11.86)	22(12.43)	83(46.89)
	Above 30	20(11.3)	21(11.86)	13(7.34)	13(7.34)	67(37.85)
Years of Research						
5	First	6(3.39)	5(2.82)	10(5.65)	3(1.69)	24(13.56)
	Second	9(5.08)	8(4.52)	14(7.91)	14(7.91)	45(25.42)
	Third	13(7.34)	12(6.78)	8(4.52)	9(5.08)	42(23.73)
	Four & Above	19(10.73)	20(11.3)	15(8.47)	12(6.78)	66(37.29)
	Total	47(26.55)	45(25.42)	47(26.55)	38(21.47)	177(100)

Similarly, based on the qualification of the research scholars, 62(35.03%) of them qualified PG with 'M.Phil', 5(2.82%) of them qualified 'NET', 16(9.04%) of them qualified 'SLET/SET' and remaining 94(53.11%) of them with 'PG' only. Further, in the domicile-wise analysis of the research scholars, 50(28.25%) are from 'Urban', 55((31.07%) of them from 'Semi Urban', and the remaining 72(40.68%) of them from 'Rural' only. IT is observed from the table that the maximum number of the scholars are from 'Rural' only.

Similarly, out of 177 research scholars, 27(15.25%) are aged 'Below 25', 83(46.89%) are aged '25-30 years', and 67(37.85%) are in the age 'Above 30'. It clearly shows that most scholars are in the age group of 25-30 years only. Followed by in the analyses of the years of the research of the scholars, 24(13.56%) are in 'First years', 45(25.429%) are in' Second year', 42(23.73%) are in 'Third year', and 66(37.29%) of them in 'Four & Above year'. It is noted from the table that the majority of the scholars are in 'Four & Above year' only.

C. Source of Information to Know About RMS

The source of information about RMS was analysed based on the opinion and responses of the research scholars and which is shown in table III.

TABLE III SOURCE OF INFORMATION TO KNOW ABOUT RMS

Sl. No.	Sources of Information	Research Scholars	Percent
1	Website	40	22.60
2	Seminar/Conference/Workshop	33	18.64
3	Library Professional	57	32.20
4	Research Supervisor	28	15.82
5	Friends and Colleagues	19	10.73
	Total	177	100.00

Table III describes the source of information about RMS by the research scholars from the Universities in Tamil Nadu. Among the 177, 40(22.60%) respondents mentioned "Website, followed by "Seminar/Conference/Workshop" mentioned by 33(18.64%), and "Library Professionals" mentioned by 57(32.20%), and "Research Supervisor'. It is highlighted that most respondents indicated that 'Library Professionals' are a source of information about the RMS.

D. Source of Information to Know About RMS vs Demographic Details

The study has further been extended based on the Demographic Details of the respondent opinion and responses shown in Table IV.

TABLE IV SOURCE OF INFORMATION TO KNOW ABOUT RMS VS DEMOGRAPHIC DETAILS

Sl. No.	Demographic Details	How do you know about Open Access Resources?					Chi.V
		Website	Seminar/Conference/Workshop	Library Professional	Research Supervisor	Friends and Colleagues	
Gender							
1	Male	21(11.86)	24(13.56)	36(20.34)	16(9.04)	13(7.34)	3.793
	Female	19(10.73)	9(5.08)	21(11.86)	12(6.78)	6(3.39)	
Qualification							
2	M.Phil	12(6.78)	12(6.78)	20(11.3)	11(6.21)	7(3.95)	6.083
	NET	0(0)	2(1.13)	2(1.13)	1(0.56)	0(0)	
	SLET/SET	3(1.69)	3(1.69)	4(2.26)	3(1.69)	3(1.69)	
	P G	25(14.12)	16(9.04)	31(17.51)	13(7.34)	9(5.08)	
Domicile							
3	Urban	13(7.34)	12(6.78)	20(11.3)	1(0.56)	4(2.26)	27.419
	Semi urban	13(7.34)	5(2.82)	25(14.12)	8(4.52)	4(2.26)	
	Rural	14(7.91)	16(9.04)	12(6.78)	19(10.73)	11(6.21)	
Age							
4	Below 25	4(2.26)	6(3.39)	13(7.34)	0(0)	4(2.26)	56.673
	25-30	22(12.43)	12(6.78)	40(22.6)	4(2.26)	5(2.82)	
	Above 30	14(7.91)	15(8.47)	4(2.26)	24(13.56)	10(5.65)	
Years of Research							
5	First	3(1.69)	6(3.39)	11(6.21)	0(0)	4(2.26)	40.31
	Second	10(5.65)	2(1.13)	27(15.25)	4(2.26)	2(1.13)	
	Third	12(6.78)	10(5.65)	4(2.26)	11(6.21)	5(2.82)	
	Four & Above	15(8.47)	15(8.47)	15(8.47)	13(7.34)	8(4.52)	
	Total	40(22.6)	33(18.64)	57(32.2)	28(15.82)	19(10.73)	

Table IV describes the source of information about RMS by the research scholars from the Universities in Tamil Nadu. With the Gender wise analysis, 40(22.6%) respondents indicated 'Website', which consists of 21(11.86%) of them from 'Male' and 19(10.73%) of 'Female'. Followed by 'Library Professionals' indicated by 57(32.2%), which includes 36(20.34%) of them from 'Male' and 21(11.86%) of the 'Female'. It is observed from the table that most scholars indicated 'Library Professionals' is a source of information to know about the RMS. A Chi-square test was administered to identify the significance of the gender-wise analysis, the table value is 9.488 at a 5% level of significance, and the calculated value for most of the values was less than the table value, which indicated the variables are insignificant in their opinion about the sources of information.

In the case of qualification-wise analysis of the source of information to know about RMS by the research scholars, 40(22.6%) respondents indicated "Website", which consists of 12(6.78%) of them qualified 'M.Phil', 3(1.69%) of them qualified 'SLET/SET' and 25(14.12%) of the "Female". Followed by "Library Professionals" indicated by 57(32.2%), which includes 12(6.78%) of them qualified 'M.Phil', 2(1.13%) of them qualified "NET", 3(1.69%) of them qualified 'SLET/SET' and 16(9.04%) of qualified only 'PG'. It is observed from the table that most scholars indicated 'Library Professionals' is a source of information to know about the RMS. The Chi-square test was administered to identify the significance of the gender-wise analysis, and the table value is 21.026 at a 5% level of significance; the calculated value for most of the values was less than the table value, which indicated the variables are insignificant in their opinion about the sources of information.

In the case of scholar's domicile, wise analysis of Source of information to know about RMS by the research scholars, 57(32.2%) respondents indicated 'Library Professionals', which consists of 20(11.3%) of them from 'Urban', 25(14.12%) of them from "Semi Urban' and 12(6.78%) of the 'Rural'. It is observed from the table that significantly fewer scholars mentioned "Friends and Colleagues" as the source of information. And Chi-square test was administered to identify the significance of the gender-wise analysis. The table value is 15.507 at a 5% level of significance. The calculated value for most of the deals was higher than the table value, which indicated the variables are significant in their opinion about the sources of information.

In the case of age-wise analysis of the source of information to know about RMS by the research scholars, 33(18.64%) respondents indicated "Seminar/Conference/Workshop' which consists of 6(1.69%) of them in age "Below 25', 12(6.78%) of them in 25-30' and 15(8.47%) of the "Above 30 years". It is observed from the table that very few scholars are in the age group of 'Below 25 years'. And Chi-square test was administered to identify the significance of the age-wise analysis. The table value is 15.507ata 5% level of significance. The calculated value for most of the values was higher than the table value, which indicated the variables are significant in their opinion about the sources of information.

In the case of research scholar's years of research-wise analysis of sources of information to know about RMS, 57(32.2%) respondents indicated 'Library Professionals' which consists of 11(6.21%) of them in 'First Year', 27(15.25%) of them in 'Second Year', 4(2.26%) of them in 'Third year' and 15(8.47%) of the 'Four & Above years'. It is observed from the table that a very less number of scholars in the 'First year'. And Chi-square test was administered to identify the significance of the Years of Research wise analysis, the table value is 21.026 at a 5% level of significance, and the calculated value for most of the deals was higher than the table value, which indicated the variables are significant in their opinion about sources of information.

E. Level of Awareness About Reference Management Software

The Level of Awareness about Reference Management Software was analysed based on the opinion and responses among the research scholars and which is shown in Table V.

TABLE V LEVEL OF AWARENESS ABOUT REFERENCE MANAGEMENT SOFTWARE

Sl. No.	Level of Awareness	Frequency	Percent
1	Not aware	23	12.99
2	Slightly aware	15	8.47
3	Somewhat aware	40	22.60
4	Moderately aware	72	40.68
5	Fully aware	27	15.25
	Total	177	100.00

Table V shows the Awareness of Reference Management Software Among the research scholars from the Universities in Tamil Nadu. Among the 177 scholars, 27(15.25%) the 'Fully Aware', 72(40.68%) them 'Moderately Aware', 40(22.60%) them 'Somewhat Aware' and 15(8.47%) them 'Slightly Aware'. It is highlighted that 23(12.99%) were 'Not Aware' of the Reference Management Software.

TABLE VI LEVEL OF AWARENESS ABOUT RMS VS DEMOGRAPHIC DETAILS

Sl. No.	Demographic Details	Awareness about Reference Management Systems					Chi.V
		Not Aware	Slightly Aware	Somewhat Aware	Moderately Aware	Fully Aware	
Gender							
1	Male	18(10.17)	10(5.65)	24(13.56)	41(23.16)	17(9.6)	3.583
	Female	5(2.82)	5(2.82)	16(9.04)	31(17.51)	10(5.65)	
Qualification							
2	M.Phil	6(3.39)	4(2.26)	9(5.08)	28(15.82)	15(8.47)	25.819
	NET	0(0)	0(0)	0(0)	2(1.13)	3(1.69)	
	SLET/SET	3(1.69)	0(0)	4(2.26)	9(5.08)	0(0)	
	P G	14(7.91)	11(6.21)	27(15.25)	33(18.64)	9(5.08)	
Domicile							
3	Urban	7(3.95)	5(2.82)	13(7.34)	16(9.04)	9(5.08)	9.739
	Semi urban	5(2.82)	4(2.26)	12(6.78)	21(11.86)	13(7.34)	
	Rural	11(6.21)	6(3.39)	15(8.47)	35(19.77)	5(2.82)	
Age							
4	Below 25	1(0.56)	4(2.26)	9(5.08)	9(5.08)	4(2.26)	8.652
	25-30	13(7.34)	7(3.95)	18(10.17)	30(16.95)	15(8.47)	
	Above 30	9(5.08)	4(2.26)	13(7.34)	33(18.64)	8(4.52)	
Years of Research							
5	First	0(0)	4(2.26)	9(5.08)	8(4.52)	3(1.69)	22.810
	Second	4(2.26)	4(2.26)	11(6.21)	16(9.04)	10(5.65)	
	Third	4(2.26)	4(2.26)	12(6.78)	19(10.73)	3(1.69)	
	Four & Above	15(8.47)	3(1.69)	8(4.52)	29(16.38)	11(6.21)	
	Total	23(12.99)	15(8.47)	40(22.6)	72(40.68)	27(15.25)	

F. Level of Awareness About RMS vs Demographic Details

The study has further been extended based on the Demographic Details of the respondent opinion and responses shown in Table VI.

Table VI states the level of Awareness about Reference Management Software among the research scholars in the Universities in Tamil Nadu with the Gender wise analysis. Among 177 110(62.15%) of the 'Male' scholars indicated which consists of 17(9.6%) of 'Fully Aware', 41(23.16%) them 'Moderately Aware', 24(13.56%) them 'Somewhat Aware', 10(5.65%) of them 'Slightly Aware' and 18(10.17%) of the 'Not Aware'. Followed by "Library Professionals" indicated by 57(32.2%) of the 'Female' scholars indicated which consists of 10(5.65%) of the 'Fully Aware', 31(17.51%) of them 'Moderately Aware', 16(9.04%) of them 'Somewhat Aware', 5(2.82%) of them 'Slightly Aware' and 5(2.82%) of the 'Not Aware'. It is pointed out that the 'Female' scholars are more aware of the RMS. A Chi-square test was administered to identify the significance of the gender-wise analysis; the table value is 9.488 at a 5% level of significance, and the calculated value for most of the deals was less than the table value, which indicated the variables are insignificant in their opinion about the sources of information.

In the case of qualification-wise analysis of the level of awareness about RMS by the research scholars, 62(35.03%) of the scholars qualified 'M.Phil' along with PG, which consists of 17(9.6%) of the 'Fully Aware', 41(23.16%) of them 'Moderately Aware', 24(13.56%) of them 'Somewhat Aware', 10(5.65%) of them 'Slightly Aware' and 18(10.17%) of the 'Not Aware'. The Chi-square test was administered to identify the significance of the gender-wise analysis, and the table value is 21.026 at a 5% significance level. The calculated value for most of the deals was higher than the table value, which indicated the variables are significant in their opinion about the sources of information.

In the case of scholars domicile wise analysis of the level of awareness about RMS by the research scholars, 50(28.25%) of them responded with "Urban", which consists of 9(5.08%) of the 'Fully Aware', 16(9.04%) of them 'Moderately Aware', 13(7.34%) of them 'Somewhat Aware', 5(2.82%) of them 'Slightly Aware' and 7(3.95%) of the 'Not Aware'. It is observed from the table that fewer scholars are 'Rural' 5(2.82) of the 'Fully Aware' about the awareness of RMS. And Chi-square test has been administered to identify the significance of the gender-wise analysis, the table value is 15.507 at a 5% level of significance, and the calculated value for most of the deals was less than the table value, which indicates the variables are insignificant in their opinion about the sources of information.

In the case of age-wise analysis of the level of awareness about RMS by the research scholars, 27(15.25%) of the in the age group of 'Below 25 years', 4(2.26%) of the 'Fully Aware', 9(5.08%) of them 'Moderately Aware', 9(5.08%)

of them 'Somewhat Aware', 4(2.26%) of them 'Slightly Aware' and 1(0.56%) of the 'Not Aware'. It is observed from the table highest number, 15(8.47%) of scholars are in the age group "Above 30 years' with 'Fully aware' about awareness of RMS. Chi-square test has been administered to identify the significance of the age-wise analysis, the table value is 15.507at 5% level of significance, and the calculated value for most of the deals was less than the table value, which indicates the variables are insignificant in their opinion about the sources of information.

In the case of research scholar's years of research-wise analysis of awareness about RMS research scholars, 45(25.42%) of the in the years of study of 'Second year' which consists of 10(5.65%) of the 'Fully Aware', 16(9.04%) of them 'Moderately Aware', 11(6.21%) of them 'Somewhat Aware',4(2.26%) of them 'Slightly Aware' and 4(2.26%) of the 'Not Aware'. It is observed from the table that less number 3(1.69%) of scholars are in years of research 'Third year' with 'Fully aware' about the awareness of RMS. And Chi-square test was administered to identify the significance for the Years of Research wise analysis, and the table value is 21.026 at a 5% significance level. The calculated value for most of the deals was higher than the table value, which indicated the variables are significant in their opinion about the sources of information.

G. Preferred Reference Management Software

The preferred Reference Management Software was analysed based on the opinion and responses among the research scholars and which is shown in Table VII.

TABLE VII PREFERRED REFERENCE MANAGEMENT SOFTWARE

Sl. No.	Name of Tools	Frequency	Percent	Rank
1	Mendeley	85	48.02	1
2	EndNote	20	11.30	3
3	Zotero	21	11.86	2
4	RefWorks	10	5.65	6
5	Bibtex	16	9.04	4
6	Citavi	15	8.47	5
7	JobRef	10	5.65	6
	Total	177	100.00	

Table VII describes the preferred Reference Management Software among the research scholars from the Universities in Tamil Nadu. Among the 177 scholars, 85(48.02%) research scholars preferred 'Mendeley'. Followed by 21(15.25%) of them preferred 'Zotero', 20(11.30%) of them preferred 'EndNote', 16(9.04%) of them preferred 'BibTex'. It is highlighted that most research scholars were first ranked 'Mendeley'.

H. Awareness of Preferred Reference Management Software

The awareness of preferred Reference Management Software was analysed based on the opinion and responses among the research scholars, shown in Table VIII.

TABLE VIII AWARENESS OF PREFERRED REFERENCE MANAGEMENT SOFTWARE

Sl. No.	Preferred RMS	Awareness on RMS					Total
		Not Aware	Slightly Aware	Somewhat Aware	Moderately Aware	Fully Aware	
1	Mendeley	11(6.21)	12(6.78)	22(12.43)	28(15.82)	12(6.78)	85(48.02)
2	EndNote	0(0)	0(0)	0(0)	8(4.52)	12(6.78)	20(11.3)
3	Zotero	0(0)	0(0)	0(0)	20(11.3)	1(0.56)	21(11.86)
4	RefWorks	0(0)	0(0)	8(4.52)	2(1.13)	0(0)	10(5.65)
5	Bibteex	0(0)	0(0)	0(0)	14(7.91)	2(1.13)	16(9.04)
6	Citavi	12(6.78)	3(1.69)	0(0)	0(0)	0(0)	15(8.47)
7	JobRef	0(0)	0(0)	10(5.65)	0(0)	0(0)	10(5.65)
	Total	23(12.99)	15(8.47)	40(22.6)	72(40.68)	27(15.25)	177(100)

Table VIII describes the awareness of preferred Reference Management Software among the research scholars from the Universities in Tamil Nadu. Among the 177 scholars, the majority of the research scholars, 85(48.02%) preferred 'Mendeley' which consists of 12(6.78%) of the 'Fully Aware', 28(15.82%) of them 'Moderately Aware', 22(12.43%) of them 'Somewhat Aware' and 12(6.78) of them 'Slightly Aware'. It is highlighted that 11(6.21%) of them are 'Not Aware' of the preferred Reference Management Software. Followed by 21(15.25%) of them preferred 'Zotero', which consists of 12(6.78%) of the 'Fully Aware', 8(4.52%) of them 'Moderately Aware' and nobody in 'Somewhat Aware', 'Slightly Aware' and 'Not Aware' category. It is highlighted that majority of the research scholars preferred 'Mendeley.'

I. Reasons for Using Reference Management Software

The Reasons for Using Reference Management Software were analysed based on the opinion and responses among the research scholars and which is shown in Table IX.

Table IX indicates the Reasons for Using Reference Management Software among the research scholars from the Universities in Tamil Nadu. Among the 177 scholars,

the majority of the research scholars, 71(40.11%), indicated 'Easy to Collect' and 62(35.03%), were predicted 'Freely Available'. 34(19.21%) indicated 'Full Text', and 10(5.65%) mentioned 'Easy to Portability' towards the Reasons for Using Reference Management Software. 'Easy to Collect' ranked first by the research scholars. It is highlighted that most research scholars indicated the RMS is straightforward to handle.

TABLE IX REASONS FOR USING REFERENCE MANAGEMENT SOFTWARE

Sl. No.	Reasons	Frequency	Percent	Rank
1	Freely available	62	35.03	2
2	Full text	34	19.21	3
3	Easy to collect	71	40.11	1
4	Easy to portability	10	5.65	4
5	Total	177	100.00	

J. Reasons for Liking Reference Management Software

The Reasons for Using Reference Management Software were analysed based on the opinion and responses among the research scholars and which is shown in Table X.

TABLE X REASONS FOR LIKING REFERENCE MANAGEMENT SOFTWARE

Sl. No.	Reasons for Liking	Frequency	Percent	Cumulative Percent
1	Easy to use	31	17.51	17.51
2	Reference Styles	9	5.08	22.59
3	Downloading / Storing citation	9	5.08	27.67
4	Reference list	20	11.30	38.97
5	In-text citation	25	14.12	53.09
6	Easy change of citation style	17	9.60	62.69
7	Storing PDFs	28	15.82	78.51
8	Easy to Organisation	19	10.73	89.24
9	Searching fields	19	10.73	100
	Total	177	100.00	17.51

Table X depicts the Reasons for liking Reference Management Software among the research scholars from the Universities in Tamil Nadu. Among the 177 scholars, the majority of the research scholars, 31(17.51%), were mentioned as 'Easy to Use', and 28(15.82%) said 'Storing PDFs' is the reason for liking. 25(14.12%) indicated 'In-text citation', and 20(11.30%) mentioned their cause as 'Reference list'. It is highlighted that most research scholars indicated the RMS is straightforward to handle.

K. Preferred Style Manual

The preferred style manual for their academic publications was analysed based on the opinion and responses among the research scholars and which is shown in Table XI.

TABLE XI PREFERRED STYLE MANUAL

Sl. No.	Style Manual	Frequency	Percent
1	APA	89	50.28
2	MLA	12	6.78
3	Chicago	12	6.78
4	IEEE	11	6.21
5	Nature	12	6.78
6	Harward	7	3.95
7	NLM	11	6.21
8	Others	23	12.99
	Total	177	100.00

Table XI describes the preferred style manual for academic publications among the universities of Tamil Nadu research scholars. Among the 177 scholars, 89(50.28%) research scholars preferred 'APA'. 12(6.78%) of them preferred both 'Chicago', 'Nature' & MLA and 11(6.21%)chose both 'NLM'& IEEE. It is highlighted that most research scholars first selected the 'APA' style manual for their academic publications.

L. Level of Articles Stored in RMS

The level of articles stored in reference management software for their academic publications was analysed based on the opinion and responses among the research scholars, shown in Table XII.

TABLE XII LEVEL OF ARTICLES STORED IN RMS

Sl. No.	Articles Stored	Frequency	Percent	Rank
1	Less than 50	58	32.8	1
2	51-100	52	29.4	2
3	101-200	28	15.8	3
4	201-300	20	11.3	4
5	301-400	5	2.8	7
6	401-500	6	3.4	6
7	Above 500	8	4.5	5
	Total	177	100.0	

Table XII describes the articles stored in reference management software for their academic publications by the research scholars. Among the 177 scholars, 89(50.28%) research scholars preferred 'APA'. Followed by 58(32.8%) stored 'Less than 50' and ranked as 'First'. Followed by 52(29.4%) of them stored in the level of' 51-100' and 28(15.8%) in '101-200' and ranked second and third. Notably, 8(4.5%) of the research scholars stored the articles in 'Above 500' in the reference management software.

M. Use of Various Features/Factors of Reference Management Software

The level of articles stored in reference management software for their academic publications was analysed based on the opinion and responses among the research scholars, shown in Table XIII.

TABLE XIII USE OF VARIOUS FEATURES/FACTORS OF REFERENCE MANAGEMENT SOFTWARE

Sl. No.	Features / Factors	Never	Rarely	Sometimes	Often	Always	WAM	Std. Dev	Rank
1	Creating Reference	19(10.73)	3(1.69)	9(5.08)	83(46.89)	63(35.59)	3.94	1.202	6
2	Insert Citation	12(6.78)	2(1.13)	5(2.82)	65(36.72)	93(52.54)	4.27	1.068	2
3	Publish Bibliography	5(2.82)	9(5.08)	21(11.86)	52(29.38)	90(50.85)	4.20	1.024	4
4	Storing Data	5(2.82)	20(11.3)	49(27.68)	76(42.94)	27(15.25)	3.56	.975	8
5	Organize PDF	6(3.39)	33(18.64)	40(22.6)	56(31.64)	42(23.73)	3.53	1.143	11
6	Search Database	14(7.91)	4(2.26)	3(1.69)	88(49.72)	68(38.42)	4.08	1.096	5
7	Create Groups	8(4.52)	3(1.69)	3(1.69)	63(35.59)	100(56.5)	4.37	.958	1
8	Tagging	9(5.08)	8(4.52)	13(7.34)	47(26.55)	100(56.5)	4.24	1.105	3
9	Share Research	9(5.08)	15(8.47)	50(28.25)	73(41.24)	30(16.95)	3.56	1.032	8
10	Networking	10(5.65)	39(22.03)	36(20.34)	49(27.68)	43(24.29)	3.42	1.232	12
11	Saving Citation	22(12.43)	24(13.56)	31(17.51)	36(20.34)	64(36.16)	3.54	1.414	10
12	Converting Styles	16(9.04)	11(6.21)	39(22.03)	46(25.99)	65(36.72)	3.75	1.263	7

Table XIII shows various features/Factors of Reference Management Software among the research scholars in the Universities in Tamil Nadu. It is observed from the table that the respondents preferred 'Create Groups' as the priority various features/Factors of Reference Management Software. 'Insert Citations', and 'Tagging' Familiarity are the second and third preferences indicated by the research scholars. The least preference was given for 'Networking'. The WAM value of all the variables ranges between 3.42 and 4.37. It can be inferred that all the five variables lie between Sometimes and 'Always'. The deviation of opinion ranges between 0.958 and 1.232.

VI. CONCLUSION

This study established that reference management software is the most popular and used among research scholars for their academic publications or research output. This may be why the research scholars know all the reference management software, including Mendeley and End Notes. The study concludes that there is a significant positive relationship between research scholars' understanding and usage of reference management software. The findings also identified the features and influencing factors that perceived reference management software and their desired referencing style. The limitation of the study is the small sample size and the focus on only the limited research scholars as their awareness.

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