



# EDUCATION ON THE USE OF MENDELEY FOR CITATION MANAGEMENT FOR STUDENTS

Sugian Nurwijaya<sup>\*1</sup>, Sigit Sugiarto<sup>2</sup>, Paisal Ansiska<sup>3</sup>

<sup>\*1,2</sup>Universitas Pattimura

Email: <sup>\*1</sup>fkywb30@gmail.com, <sup>2</sup>shohibulhajah9p6@gmail.com, <sup>3</sup>achmadtatmidzianas5@gmail.com

**Abstract:** References are used to show that the author has conducted sufficient research and obtained an adequate understanding of the topic being studied. References are also used to support arguments and claims made by the author, thus helping to strengthen the quality of the scientific work. One of the reference management Software that can be used for writing references in a scientific work is Mendeley. Mendeley is a reference management Software that can help authors import, manage, and include references in scientific works efficiently and accurately. Participants in this activity were fourth and sixth semester students of the Mathematics Education study program at Muhammadiyah University of Bone. Based on the community service activity that has been carried out, it can be concluded that education on citation management for students can increase their understanding of using Mendeley by more than 90%.

**Keywords:** Citation Management, Mendeley, Students

## INTRODUCTION

A student has a great responsibility in completing his studies. A student's duties are not only limited to attending lectures, but also include various aspects, such as independent study, participating in campus activities, conducting research, and completing academic assignments. The duties of a student also include conducting research and completing academic tasks given by lecturers. This research is usually carried out in the form of small tasks, such as papers or presentations, to large tasks, such as a thesis or thesis. Students are expected to complete these tasks in earnest and on time. The final project that has been completed, of course, students will take a thesis exam to explain or present the results they have obtained (Perdana, 2020).

In writing a scientific paper, including references is very important. References are used to show that the author has done enough research and gained a sufficient understanding of the topic being researched. References are also used to support the arguments and claims made by the author, thus helping to reinforce the quality of the scientific work. In an academic context, listing references is also a form of respect for the contributions of previous researchers. References can be obtained from hard copy forms, such as books, magazines, and so on, and can also be from soft copy forms obtained from the internet. The use of softcopy references, such as journals and e-books, is more popular because, in addition to being cheap, the use of softcopy references is easy to access by downloading them on the internet. The use of electronic literature is an online service that provides a variety of information from the network and plays a role in improving services to its users (Azwar, 2017).

By listing relevant references, the author can show that the scientific work being created is part of a broader academic discussion, and also helps the reader to track down a more complete source of information. Often, students make the mistake of ignoring the importance

of citation writing (*quotation*). The majority of them have difficulty managing reference sources, and do not realize how important thoroughness is in writing citations (Cahnia dkk., 2021). Additionally, listing references correctly also helps to avoid plagiarism. Plagiarism is the act of taking someone else's ideas, information, or work and claiming them as one's own. Plagiarism can damage the quality of scientific work and can also negatively impact the reputation of the author. Plagiarism is not only simply defined by rewriting one's own or others' work without mentioning a reference source, but there are many types of plagiarism that need to be understood in depth (Shadiqi, 2019). Therefore, listing references correctly can assist writers in avoiding plagiarism and maintaining academic integrity.

One of the reference management software that can be used for writing references in a scientific paper is Mendeley. Mendeley is a software and information technology in reference management that can assist authors in importing, managing, and listing references in scientific papers efficiently and accurately. Using information technology in the field of education is very meaningful to improve the quality of education (Husaini, 2014). The Mendeley app is easy to use, allows for fast and flexible synchronization, makes it easy to share articles with others, and assists users in citing and citing articles needed to support their research (Kosasi, 2019). Mendeley provides features that allow users to import references from a variety of sources, such as academic databases and Google Scholar, as well as store and manage references in one centralized place. In addition, Mendeley can also assist users in creating bibliographies or bibliographies automatically, which makes it easier for authors to include references in their scientific works correctly and consistently.

The use of Mendeley can assist writers in saving the time and effort required in managing references and listing them in scholarly works. In the academic world, the use of reference management software such as Mendeley has become a common standard used by authors of scientific papers. The use of Mendeley can assist authors in managing references and listing them in scientific papers efficiently and accurately, as well as helping in avoiding citation errors or plagiarism. Therefore, the use of Mendeley is highly recommended for authors of scientific papers who want to improve the quality and efficiency of writing references. The use of library processing applications such as Mendeley is considered very important in writing scientific papers such as theses. This application makes it easier for students to cite citations and manage good bibliographies, and helps minimize the occurrence of plagiarism that has become a culture among students, especially in writing scientific papers. Therefore, one of the efforts to reduce the rate of plagiarism is to use the Mendeley application (Farmasari dkk., 2022).

Although Mendeley is a popular and easy-to-use reference management software. However, in reality most students are not used to using Mendeley. Therefore, training on the use of Mendeley can help authors of scientific papers to better understand how to manage references and include them in scientific papers. Mendeley training covers a wide range of topics, such as how to import references from multiple sources, how to manage references and create bibliographies, and how to use Mendeley's collaboration feature to collaborate with co-authors. In addition, the training can also address common issues that Mendeley users often face, such as synchronization issues or duplicate references. Mendeley training is very beneficial for authors of scientific papers, especially for those who are just starting out or have no experience in using reference management software. Through Mendeley training, students can be helped in managing reference sources properly and correctly. Thus, this training can contribute to improving the quality of education in Indonesia (Aransyah dkk., 2021). By learning how to use Mendeley effectively, authors can save time and effort in managing references and including them in their scholarly work, as well as avoiding citation errors or plagiarism. In academia, Mendeley training is increasingly becoming popular and available in various educational and research institutions. By understanding how to use Mendeley effectively, authors of scholarly papers can improve the quality and efficiency of writing references, as well as strengthen their academic integrity.

The purpose of educational service activities using Mendeley for citation management for students is to assist students in managing references and citations in their scientific works more effectively and efficiently. This education aims to introduce Mendeley features that can help students in adding, organizing, and managing reference sources systematically, as well as making citations in accordance with applicable rules. With education on the use of Mendeley, students are expected to improve the quality of their scientific work by presenting accurate and correct information about the reference sources used. In addition, students are also expected to avoid unethical plagiarism practices in their scientific work and improve academic integrity. With the ability to efficiently manage references and citations, students can save time and effort in completing their scholarly work, thus having a positive impact on their academic achievement in the future.

## **METHOD**

This activity is part of the Implementation of the Tridarma of Higher Education, namely Community Service (PKM) with the theme "Education on the Use of *Mendeley* Software for Citation Management for Students". This training was conducted offline in February 2023. The participants of this training are students in the 4th and 6th semesters of the University of

Muhammadiyah Bone. The methods used in this training include: lecture methods by presenters, demonstrations by presenters, practice by trainees, mentoring for trainees, and questions and answers. The agenda of training activities can be seen in Table 1.

**Table 1.** Mendeley Software Use Training Activity Schedule

YES	AGENDA	TIME (WITA)	PERSON IN CHARGE
1	Unveiling	10.00 – 10.15	Presenter
2	Pre-Test	10.15.10.25	PKM TEAM
3	Remarks by the Chairman of the PKM Team	10.25 – 10.30	Head of PKM Team
4	Presentation of Material about <i>Mendeley software</i>	10.30 – 10.45	Presenters
5	Demonstration of the Installation and Use of <i>Mendeley software</i>	10.45 – 11.00	Presenters
6	Practice of Installation and Use of <i>Mendeley software</i> by Trainees	11.00 – 11.20	PKM TEAM
7	Assistance to Training Participants	11.20 – 11.40	PKM TEAM
8	Q&A Session	11.40 – 12.00	Presenters
9	Post-Test	12.00 – 12.10	PKM TEAM
10	Cover	12.10 – 12.15	Presenter

### Success Indicators

Indicators of the success of this service activity are that students can install the Mendeley application, can connect Mendeley to Ms Word, enter references into the Mendeley library, and create a bibliography. As for seeing the success of this service activity, if more than 80% of students can install and operate the Mendeley application

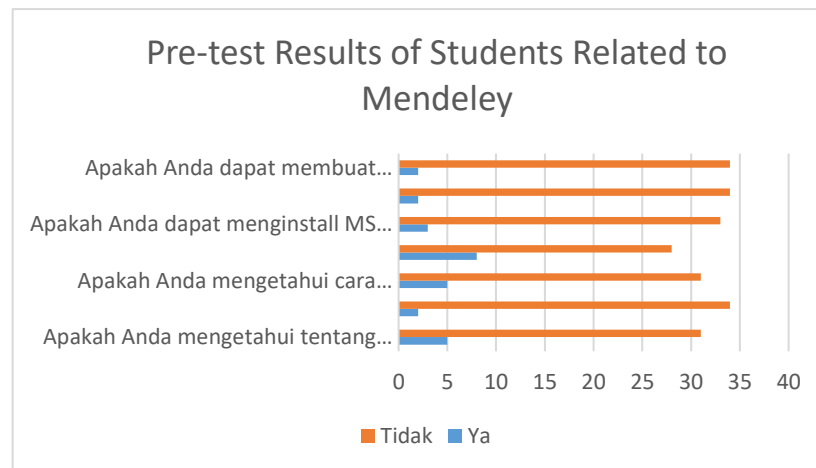
### Evaluation Method

The evaluation method for this service activity is to use the *post test* method to find out how many students have been able to use the Mendeley application properly and correctly.

### RESULT AND DISCUSSION

Based on the schedule of service activities that have been determined, this activity was opened by the moderator. The opening by the moderator was carried out for approximately 15 minutes and ran smoothly. After that, the participants were given a pre-test for 10 minutes. The

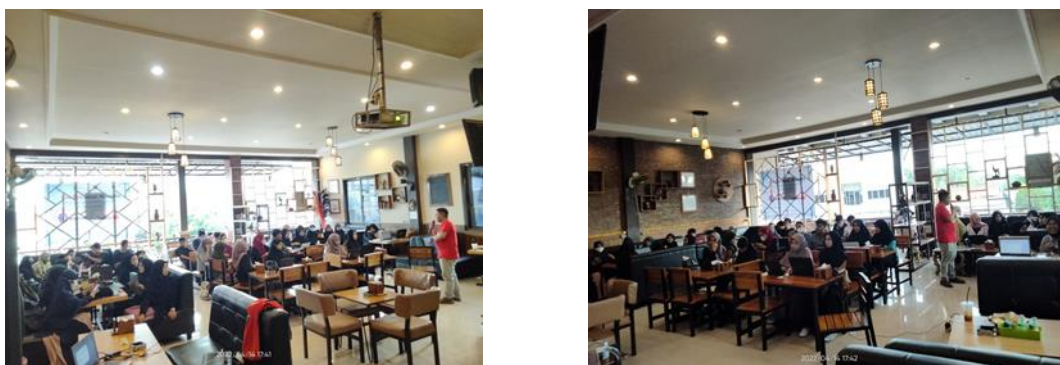
PKM team would like to thank the 4th and 6th semester students of UNIM Bone Mathematics Education Study Program for their good response to participate in this training activity. Giving a *pre-test* to see the student's initial knowledge about the Mendeley application. Pre-test questions were given by the PKM team to students consisting of 7 question items. The results of the student *pre-test* related to the Mendeley application



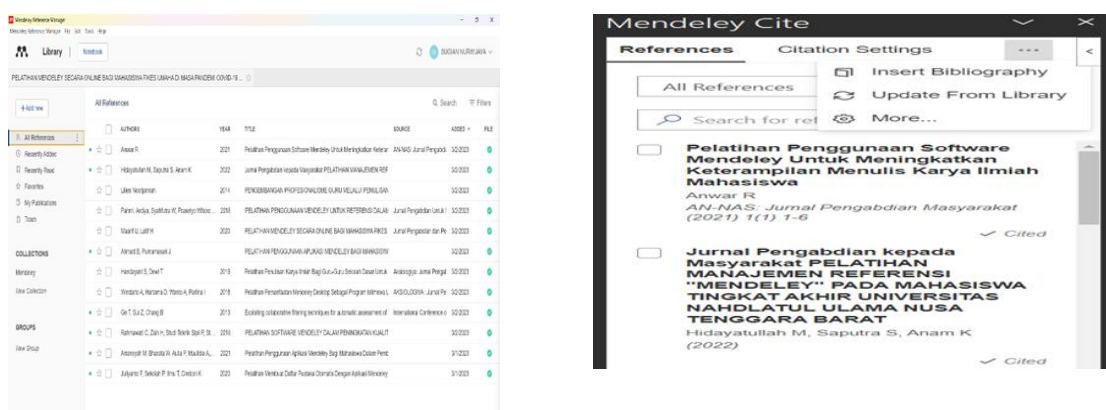
**Figure 1.** Pre-test results of Students related to Mendeley

Figure 1 shows the results of the student *pre-test* related to Mendeley that on average more than 90% of students do not know and understand the Mendeley application while the rest already know and understand the Mendeley application. This was obtained before students were given material about the Mendeley application, and how it operates. There are even still students who have difficulty in connecting and Mendeley into MS Word. Therefore, this activity can help students in installing Mendeley and using it in citation management.

The education on the use of Mendeley was carried out offline with 36 students participating. After the remarks of the PKM TEAM leader, the presentation of material related to the Mendeley application by the presenter continued, which in this case was presented by one of the PKM teams. The material presented began with an explanation of plagiarism, a brief explanation of the history and functions of the Mendeley desktop application. Next, the introduction of Mendeley tools, such as add new, file, edit and other tools. Next, it explains how to synchronize Mendeley to MS Word and insert references into the Mendeley library. After that, set up reference files such as changing the author's name, fixing the title, year, volume and issue as well as the publisher. Finally, describe creating automatic Bibliographies using Mendeley. After the demonstration of the installation of Mendeley and its use, then the practice of installation and use of Mendeley by participants while providing assistance to participants who found obstacles in the installation and use of Mendeley.

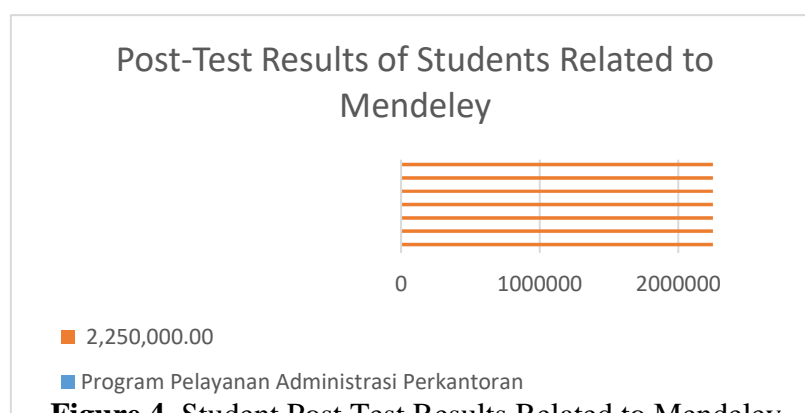


**Figure 2. Delivery of material and Participant Assistance**



**Figure 3. Introduction to Mendeley Tools and Citation**

After the presentation of the material and demonstration of the use of Mendeley, it was carried out *post test* to see the knowledge of students and find out the success of this service activity. The results *post test* students related to the Mendeley application. Pre-test is used before teaching the material to measure the target's understanding of the material to be taught. The test must be closely related to the material to be studied. Post-test is carried out after the learning process of a material to measure the target's understanding of the material and the core of the material that has been studied (Matondang, 2009).



**Figure 4. Student Post Test Results Related to Mendeley**

Figure 4 shows that more than 90% of students have understood and operated the Mendeley application, and the rest still have difficulties in installing Mendeley due to problematic laptops and difficulties in making citations. The results of the *post-test* above show

that there is an increase in student knowledge related to the use of Mendeley in conducting citation management. The majority of students have been able to apply and use Mendeley in making citations and bibliographies effectively. Of course, with this education, students can prepare their final projects and avoid plagiarism

The success of socializing the use of Mendeley to students can provide many benefits, especially in helping students in writing high-quality scientific papers. Mendeley is one of the reference management software that can assist students in finding, managing, and listing references in their scientific papers. The following are some of the successes that can be achieved through socialization of the use of Mendeley to students.

a. Improve students' understanding of reference management

Through Mendeley education, students will be introduced to Mendeley's features and how to use them, such as adding references, organizing references, automatically creating citations and bibliographies, and highlighting and taking notes on articles. In Mendeley's education, students will also learn about the ethics of scientific writing and the importance of maintaining academic integrity through good reference management. In the long run, Mendeley's education can help students produce more quality academic writing. Good reference management can help students avoid plagiarism and create accurate and reliable reference sources. This is, of course, very useful in the academic and professional world in the future. In addition, Mendeley's education can also assist students in improving their information technology and information literacy skills. Students can take advantage of Mendeley's features to obtain relevant and accurate information for their studies and research. Mendeley has the benefit of enriching research reference materials and facilitating the preparation of research by using citation and citation procedures that follow the rules (Rafli dkk., 2022).

b. Improve time efficiency in reference management

Mendeley education can improve time efficiency in managing references to scientific works. In a research or scientific paper, reference management is very important. Students must be able to gather reference sources relevant to their research topic, organize those references, and format citations and citations following applicable rules. Mendeley assists students in managing references more effectively and efficiently. By using Mendeley, students can easily collect reference sources through the search feature available in it. Students can also organize their references in one place and create a list of references quickly and easily.

In addition, Mendeley provides features to make it easier for students to make citations and citations per applicable rules. Students no longer need to spend time manually creating

citations and citations. Mendeley can do this quickly and accurately. By using Mendeley, students can save time and effort in managing references in their scientific work. So, overall, Mendeley's education can improve time efficiency in managing references in scientific papers.

c. Improving the quality of scientific work produced

By making optimal use of Mendeley, students can obtain more accurate and relevant references, improve their ability to manage reference sources, and increase confidence in presenting their scientific papers in a format that is per academic rules. So, overall, Mendeley's education can have a positive impact on the quality of scientific work produced by students. To create quality scientific articles, not only is it necessary to have a good writing structure but also to manage references (Rahmawati dkk., 2018).

d. Raising awareness of academic integrity

Mendeley education can increase awareness of students' academic integrity because Mendeley has a feature to detect plagiarism in scientific works. In the process of managing references, Mendeley helps students to avoid the practice of plagiarism and to cite sources correctly per applicable academic rules. Thus, students will better understand the importance of academic integrity and maintain honesty in producing scientific papers. This will certainly have a positive impact on students' academic careers in the future.

## CONCLUSIONS

Based on the community service activities that have been carried out, it can be concluded that education for citation management for students can increase the understanding of Mendeley's use by more than 90%. Socialization of the use of Mendeley to students can provide many benefits, especially in helping students write high-quality scientific papers. This socialization can help improve students' understanding of reference management, increase time efficiency in reference management, improve the quality of scientific papers produced, and increase awareness of academic integrity. Therefore, socialization of the use of Mendeley needs to be carried out regularly to assist students in producing quality scientific works and strengthening their academic integrity.

## BIBLIOGRAPHY

- Aransyah, F., Bharata, W., Aulia, P. N., Maulidia, A., & Ismaliana R, D. (2021). Pelatihan Penggunaan Aplikasi Mendeley Bagi Mahasiswa Dalam Pembuatan Daftar Pustaka. *PLAKAT (Pelayanan Kepada Masyarakat)*, 3(1), 88. <https://doi.org/10.30872/plakat.v3i1.5848>
- Azwar, M. (2017). Pemanfaatan Jurnal Elektronik Sebagai Sumber Referensi dalam Penulisan Skripsi di Institusi Pertanian Bogor. *Libraria*, 5(1), 1–3.



- Cahnia, Z. A., Darubekti, N., & Samosir, F. T. (2021). Pemanfaatan Mendeley Sebagai Manajemen Referensi Pada Penulisan Skripsi Mahasiswa Program Studi Perpustakaan Dan Sains Informasi Universitas Bengkulu The Use Of Mendeley As Reference Management On Thesis Writing Of Students Of Department Of Library And In. *Palimpsest: Journal of Information and Library Science*, 12(1), 48–54.
- Farmasari, S., Riyanto, A. A., Baharuddin, Elmiana, D. S., & Amalina, A. D. (2022). Mendeley Sebagai Aplikasi Pengolah Pustaka Bagi Mahasiswa Tingkat Akhir di Pulau Lombok. *Jurnal Pengabdian Magister Pendidikan IPA*, 5(3), 209–213. <https://doi.org/10.29303/jpmipi.v5i3.2106>
- Husaini, M. (2014). Pemanfaatan Teknologi Informasi Dalam Audit Investigatif. *Auditing: A Journal of Practice & Theory*, 2(2), 141–147.
- Kosasi, S. (2019). Pemanfaatan Aplikasi Mendeley desktop Mengelola Referensi Publikasi Karya Ilmiah Mahasiswa. *SNPMas: Seminar Nasional Pengabdian pada Masyarakat*, 64–74.
- Matondang, Z. (2009). *Evaluasi Pembelajaran*. Program Sasca Sarjana Unimed.
- Perdana, F. J. (2020). *Pelatihan Membuat Daftar Pustaka Otomatis Dengan Aplikasi Mendeley Desktop Bagi Mahasiswa Dalam Persiapan Penyusunan Tugas Akhir*. 2(1), 75–93.
- Rafli, Z., Setiadi, S., & Zulharby, P. (2022). Pemanfaatan Aplikasi Mendeley sebagai Sistem Manajer Referensi Digital untuk Penulisan Karya Ilmiah bagi Guru Bahasa Arab di Banten. *Jurnal SOLMA*, 10(3), 584–592. <https://doi.org/10.22236/solma.v10i3.7759>
- Rahmawati, C., Zain, H., Studi, P., Sipil, T., Studi, P., Pembangunan, E., Abulyatama, U., & Besar, A. (2018). Pelatihan Software Mendeley dalam Peningkatan Kualitas Artikel Ilmiah Bagi Dosen. *Jurnal Pengabdian Kepada Masyarakat*, 8(1), 30–36.
- Shadiqi, M. A. (2019). Memahami dan Mencegah Perilaku Plagiarisme dalam Menulis Karya Ilmiah. *Buletin Psikologi*, 27(1), 30. <https://doi.org/10.22146/buletinpsikologi.43058>