



Assessment of Awareness, Utilisation and Adoption of Referencing Softwares for Research Purpose Among Post-Graduates in Faculty of Education Ahmadu Bello University, Zaria

Sani Fatima Yakubu¹, Surajo Zainab Dabo^{2*}, Ibrahim Bilkisu Zubairu³

^{1,2}Ahmadu Bello University, Zaria

³Federal University of Education, Zaria

Corresponding Author: Surajo Zainab Dabo; zs.dabo940211@gmail.com

ARTICLE INFO

Keywords: *Adoption, Awareness, Utilisation, Reference Software, Research*

Received : 5 January

Revised : 23 February

Accepted: 23 March

©2026 Yakubu, Dabo, Zubairu: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This study examined the awareness, utilization and adoption of referencing software among postgraduates in the faculty of Education, Ahmadu Bello University Zaria. The study was guided with 5 objectives, along with corresponding research questions and hypotheses. These includes: To assess the level of awareness, to identify the types of referencing software used, to ascertain the frequency usage to identify the challenges encounter and to examine the differences in the utilization among gender. Descriptive statistics such as frequency, mean and percentages were used for data analysis and a chi- square was to test the null hypotheses at a 0.05 significance level using SPSS software. Findings revealed the most postgraduates are aware of popular referencing software such as Mendeley and EndNote, which also recorded the highest levels of utilization (28.99% and 26.09% respectively). Zotero and RefWorks and citavi showed moderate usage, while Bitext and others had minimal usages. Major barriers identified included lack of adequate training, limited awareness of features, software complexity, and instructional preferences. The study concludes that although awareness levels are relatively high, actual utilization and challenges encounter remain moderate due to skill gaps and insufficient institutional support. It is recommended that the faculty of Education organize regular training workshops on citation management tools, integrate referencing software tutorial into research method courses and encourage supervisors to model consistent use of referencing software

INTRODUCTION

The increasing digitisation of higher education has fundamentally reshaped research practices, particularly at the postgraduate level, where scholarly writing and information management are central to academic success. As universities worldwide integrate digital technologies into teaching and research activities, the demand for efficient and accurate referencing tools has grown substantially (Maxwell, 2019; Bashir et al., 2024). Referencing is not merely a technical requirement but a core element of academic integrity, ensuring transparency, intellectual honesty, and the credibility of scholarly work (Peterson & Davies, 2020). Accurate citation practices enable researchers to acknowledge prior scholarship, avoid plagiarism, and situate their studies within existing bodies of knowledge. However, the growing complexity of academic research and the multiplicity of citation styles across disciplines have rendered manual referencing increasingly tedious, time-consuming, and error-prone. In response to these challenges, referencing software has emerged as a critical component of contemporary research practice, automating citation and bibliography management while supporting widely used styles such as APA, MLA, Chicago, Harvard, and Vancouver (Chen & Zhao, 2021).

Referencing software packages such as EndNote, Mendeley, Zotero, and RefWorks have significantly transformed how researchers manage scholarly sources, offering functionalities that enhance efficiency, accuracy, organisation, and collaboration. These tools allow users to store and categorise references, insert citations directly into manuscripts, and generate bibliographies automatically, thereby reducing the cognitive and technical burden associated with manual referencing. Empirical studies have consistently shown that the use of digital referencing tools improves research productivity, supports effective literature management, and enhances students' confidence in scholarly writing (Jones & Brown, 2018; Mitchell, 2021). Despite these advantages, concerns remain regarding the extent to which postgraduate students are aware of, utilise, and fully adopt referencing software in their academic work. Awareness and digital literacy are widely recognised as prerequisites for the effective integration of technological tools in research workflows, and deficiencies in these areas may limit the benefits such tools are designed to provide (Bello et al., 2023).

Within the Nigerian higher education context, Ahmadu Bello University, Zaria, represents a particularly relevant setting for examining these issues. As one of Nigeria's foremost and research-intensive universities, the institution hosts a large and diverse postgraduate population engaged in rigorous academic inquiry across multiple disciplines. The university's emphasis on research excellence underscores the importance of sound referencing practices in maintaining scholarly standards. Nevertheless, there is limited empirical evidence on how postgraduate students at Ahmadu Bello University navigate the referencing landscape, particularly with respect to digital citation tools. While international studies have documented the positive impact of referencing software on research efficiency and information management (Smith, 2019), similar evidence within Nigerian universities remains sparse. Contextual factors such as varying levels of digital literacy, access to technology, institutional

support, and prior research experience may significantly influence students' awareness, utilisation, and adoption of referencing software, thereby necessitating institution-specific investigation.

Despite the growing relevance of referencing software, anecdotal and empirical observations suggest that postgraduate referencing practices at Ahmadu Bello University remain largely manual, relying heavily on handwritten notes, basic word-processing functions, or online citation generators that often produce inconsistent and inaccurate outputs (Jones & Brown, 2018). Many students continue to struggle with the correct application of citation styles such as APA, MLA, and Harvard, resulting in formatting errors and increased risks of unintentional plagiarism (Taylor & Clark, 2017). The problem is further compounded by limited awareness of advanced referencing tools, irregular utilisation due to inadequate training, and challenges in selecting appropriate software that aligns with individual research needs. Financial constraints, restricted access to proprietary software, technical difficulties, and the absence of structured institutional training programmes have also been identified as barriers to effective adoption (Mitchell, 2021). This situation reflects a misalignment between evolving technological demands and the support structures available to postgraduate students, with implications for research quality and efficiency.

Against this backdrop, the significance of assessing the awareness, utilisation, and adoption of referencing software among postgraduate students in the Faculty of Education at Ahmadu Bello University becomes evident. Awareness constitutes the foundational stage of technology adoption, as students must first understand the existence, functionality, and potential benefits of referencing software before meaningful utilisation can occur (Smith et al., 2019). Equally important is an examination of utilisation patterns, including frequency of use, features employed, and perceived efficiency gains, as these provide insight into how such tools are integrated into actual research practices (Bello et al., 2025). Furthermore, understanding the factors influencing students' choice of referencing software such as ease of use, peer influence, institutional requirements, and availability of support offers valuable perspectives on adoption behaviour (Chen et al., 2021). Exploring both the perceived benefits and challenges associated with these tools is essential for developing targeted interventions that promote effective and sustained use.

This study is therefore significant in several respects. The findings are expected to inform university administrators, faculty members, and policymakers on existing gaps in digital literacy and research support, thereby guiding the development of training programmes, institutional policies, and infrastructural investments that enhance postgraduate research capacity. Ultimately, by focusing on referencing software as a critical research tool, this study seeks to promote more efficient, ethical, and technologically aligned research practices among postgraduate students at Ahmadu Bello University, Zaria.

Objectives of the Study

The following research objectives guide this study to:

1. Assess the level of awareness of postgraduates on referencing softwares for research purposes in the faculty of education, Ahmadu Bello University, Zaria.
2. Identify the types of referencing softwares used for research purposes by postgraduates in the faculty of education, Ahmadu Bello University, Zaria.
3. Ascertain the frequency of use of referencing softwares by postgraduates for research purposes in Ahmadu Bello University, Zaria.

LITERATURE REVIEW

Reference Software

Referencing software comprises digital tools developed to support researchers in managing, organising, and formatting citations and bibliographies accurately and efficiently, thereby ensuring compliance with established citation styles such as APA, MLA, and Chicago (Coffin, 2019). These tools are generally classified into standalone applications, such as EndNote, which offer advanced reference management features and database integration, and web-based platforms like Mendeley, Zotero, and RefWorks, which provide cloud access, cross-device usability, and collaborative functionalities (Harris & Williams, 2020; Smith & Johnson, 2021). Beyond automating citation formatting, referencing software plays a vital role in promoting academic integrity, reducing citation errors, and streamlining the research and writing process through seamless integration with word processors (Brown, 2022; Davis et al., 2018). Widely adopted tools differ in functionality and user appeal, with EndNote valued for its comprehensive citation capabilities, Mendeley for its collaborative and user-friendly interface, Zotero for its open-source flexibility, and RefWorks for its institutional and group research support (Smith & Johnson, 2021). Collectively, these features underscore the importance of referencing software in enhancing research productivity, accuracy, and overall scholarly workflow.

Impact of Referencing Software on Research Quality

Referencing software has a substantial impact on research quality by enhancing the accuracy, efficiency, and integrity of scholarly work across disciplines. Tools such as EndNote, Mendeley, and Zotero automate citation management and bibliography generation, enabling researchers to concentrate on the substantive dimensions of their studies while reducing citation-related errors that can undermine academic credibility (Smith & Johnson, 2021). By ensuring consistent and correctly formatted citations, these tools address common challenges associated with manual referencing, particularly when managing large volumes of sources, thereby strengthening scholarly rigour (Chen et al., 2021). Referencing software also supports more systematic and comprehensive literature reviews by allowing researchers to efficiently import, organise, and annotate sources, which enhances the depth, relevance, and originality of research outcomes (Wilson, 2021). Furthermore, the collaborative features embedded in many referencing tools facilitate shared access to reference libraries and notes, promoting coherence and accuracy in multi-author and interdisciplinary research projects (Nguyen & Nguyen, 2021). Collectively, these

benefits underscore the critical role of referencing software in improving overall research quality.

Challenges Faced by Students in Utilizing Referencing Software

Despite the documented benefits of referencing software, students encounter several challenges that hinder its effective utilisation in academic work. Common technical difficulties include software compatibility issues, problems importing references from academic databases, and challenges in customising citation styles to meet specific formatting requirements (Hassan & Williams, 2021). Additionally, the complexity of some referencing tools presents a steep learning curve, particularly for students with limited technological proficiency, which often discourages consistent use and encourages reliance on manual citation methods (Smith & Johnson, 2020). Concerns have also been raised about inconsistent or inaccurate citation outputs generated by some software, requiring time-consuming manual corrections and reducing user confidence in these tools (Ahmed & Musa, 2019). These challenges are further compounded by limited institutional support, such as inadequate training and lack of access to learning resources, which restrict students' ability to fully exploit the functionalities of referencing software and contribute to its underutilisation even among those who are aware of its existence (Thompson & Davis, 2020).

Challenges Faced by Postgraduate in Adopting Referencing Software for Research Purposes

The adoption of referencing software by postgraduate students is constrained by multiple interrelated challenges that limit effective and sustained use despite the recognised benefits of these tools. A major barrier is the lack of adequate training and structured institutional support, as many students are introduced to referencing software without formal instruction, leaving them overwhelmed by technical requirements and leading to underutilisation or misuse (Wang & Lund, 2021). Technical difficulties, including software compatibility issues, frequent updates, and poor integration with word processors, further contribute to user frustration and discourage consistent adoption (Green & Bowen, 2023). Low levels of digital literacy also impede effective use, as students with limited technological skills tend to avoid advanced features and rely on manual citation methods (Hernandez & Li, 2020). In addition, the perceived complexity and steep learning curve of referencing software foster resistance, particularly among students with prior negative experiences with digital tools, who often fear making citation errors (Gilmour & Cobus, 2016). Institutional factors, such as limited promotion of referencing software, restricted access, and weak faculty guidance, further reduce adoption rates (Roberts & Dickson, 2022), while financial constraints restrict access to premium tools perceived as more effective (Stevenson & Cole, 2018). Finally, the wide range of available software options can overwhelm students and lead to suboptimal choices based on convenience rather than suitability for research needs (Mitchell & Farahani, 2022). Collectively, these challenges highlight the need for comprehensive training, stronger institutional support, and improved access to ensure effective adoption of referencing software among postgraduate students.

METHODOLOGY

Research Design

Descriptive survey research design was adopted for this study. This research design is considered most appropriate for the study because the researcher is interested in collecting original data for describing a population too large to observe directly. It also allow the researcher to collect information on a wide range from different respondent within a short period of time including facts, personal attitude, past experience (Sani, 2017).

Population of the Study

The population of this study comprises all postgraduates in the Faculty of Education, Ahmadu Bello University, Zaria. This includes students enrolled in PGD, M.Ed, M.Phil, and PhD programs across various departments. The total population is 793, with 39 PGD students, 508 M.Ed students, 8 M.Phil students and 238 PhD students. The distribution is detailed in Table 1.

Table 1. Distribution of Population

S/N	Programmes	Number of Postgraduate
1	PGD	39
2	M.Ed	508
3	Mphil	8
4	PhD	238
	Total	793

Source: Record Unit from postgraduate college (2023/2024)

Sample and Sampling Technique

The sample size for this study consists of 259 postgraduates selected from a total population of 793 in the Faculty of Education, Ahmadu Bello University, Zaria, as shown in Table 1. The sample size was determined using Krejcie and Morgan's (1970) table, which provides an appropriate representation of the population. A proportionate stratified random sampling technique was adopted to ensure that each postgraduate program PGD, M.Ed, M.Phil, and PhD is fairly represented in the study. Table 2 shows the samples for the study.

Table 2. Sample for the Study

S/N	Programmes	Sample size
1	PGD	14
2	M.ed	170
3	Mphil	1
4	PhD	74
	Total	259

Source: Record Unit from postgraduate college (2023/2024)

Instrumentation

Questionnaire was used as the instrument for data collection for this study. The questionnaire is self-developed with the assistance of the researcher's supervisors. The close-ended questionnaire was divided into four (4) sections (A - D). Section A: Demographic information, Section B: Awareness of Referencing Software Section C: Types of Referencing Software. Section D: How frequency do postgraduates use referencing software. The instrument was validated and pilot tested among postgraduate student from the Department of Chemistry, Faculty of Physical Sciences, Ahmadu Bello University, Zaria. The questionnaire was shared in soft copy using Google Forms, and responses were collected electronically. The data was analysed using Spearman brown rank order through slit half method, with a reliability threshold of 0.70 or higher considered acceptable. Adjustments were be made to enhance reliability if the coefficient falls below this standard.

RESULTS AND DISCUSSION

Research Objective One: The level of awareness of referencing software for research purposes among postgraduates in the Faculty of Education, Ahmadu Bello University, Zaria. It was achieved by obtaining the overall mean of the students' responses to the items on awareness in the questionnaire as shown in table 3.

Table 3. Postgraduates' Level of Awareness of Referencing Software for Research Purposes

SN	Items	N	Mean	Std. Deviation	Decision
1.	I am aware of referencing software used for academic writing.	247	3.06	.99	Awarded
2.	I have heard about referencing software from lecturers or supervisors.	247	2.77	1.03	Awarded
3.	I learned about referencing software through online platform or peers.	247	2.76	.96	Awarded
4.	I can identify at least one referencing software by name.	247	2.89	1.05	Awarded
5.	My department promotes the use of referencing software.	247	2.64	.96	Awarded
6.	I have used referencing software in my research work.	247	2.96	1.04	Awarded
7.	I find referencing software easy to use.	247	2.92	.89	Awarded
8.	Using referencing software improves the quality of my research work.	247	3.16	.95	Awarded

9.	Training sessions or workshops on referencing software are available to me.	247	2.65	1.04	Awarded
10.	I would like more training opportunities on referencing software.	247	3.36	.91	Awarded
	Overall Mean	247	2.92	.98	Awarded

Table 3 presents the awareness level of postgraduate students regarding referencing software. The results indicate that students are generally aware of referencing software reason being that their cumulative mean responses of 2.9 is greater than the 2.500 decision threshold mean. Specifically, most asserted that they would like more training opportunities on referencing software as this view had the highest mean of 3.4. in summary, the overall mean score of 3.0 (SD = 1.0) suggests that postgraduate students in the Faculty of Education, Ahmadu Bello University, Zaria, possess a moderate level of awareness of referencing software for research purposes.

Research Objective Two: The types of referencing software are used by postgraduates in the Faculty of Education, Ahmadu Bello University, Zaria, for research purposes.

The aim of this was to identify the various types of referencing software utilized by postgraduate students in carrying out their research work. The data were obtained from their responses on the questionnaire which listed common referencing software packages in figure 1.

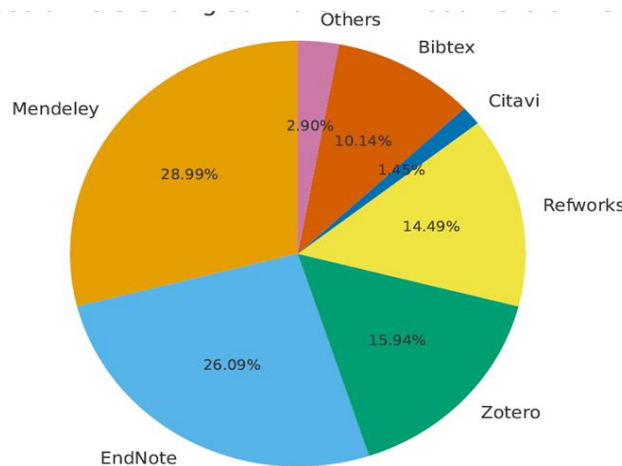


Figure 1. Referencing software use at Ahmadu Bello University Zaria

Figure 1 shows the different referencing software used by postgraduate students in the Faculty of Education. The results reveal that Mendeley is the most widely used referencing software, accounting for 28.99% of the responses. This suggests that a considerable number of students rely on Mendeley for organizing references and citations in their research work. The second most commonly used referencing software is EndNote, with 26.09% usage, indicating that it is also a popular choice among the respondents. Following these, Zotero recorded

15.94%, showing a moderate level of preference among postgraduate students. RefWorks was also reported with 14.49%, suggesting a fairly similar level of usage. On the other hand, BibTeX, which is often used in LaTeX-based academic writing, accounted for 10.14%, representing a smaller proportion of users. Citavi had the least usage among the listed software, with only 1.45%, indicating that it is not commonly used by the respondents. Additionally, 2.90% of the students reported using other referencing software outside the options listed in the questionnaire.

Overall, the findings indicate that Mendeley and EndNote are the most prominent referencing software tools adopted by postgraduate students in the Faculty of Education, Ahmadu Bello University, Zaria, while Zotero, RefWorks, and BibTeX are moderately used. Citavi and other less common tools have very limited application. This distribution suggests that students gravitate more towards widely known and user-friendly referencing software, while specialized or less-promoted software options remain underutilized.

Research Objective Three: Ascertain the frequency of use of referencing softwares by postgraduates for research purposes in Ahmadu Bello University, Zaria. This question was asked to determine how often postgraduate students employ referencing software in the course of their research activities. It was achieved by analysing the frequency of use based on the responses provided in the questionnaire as shown table 4.

Table 4: Often Usage of Referencing Software for Research Purpose

SN	Items	N	Mean	Std. Deviation	Decision
1.	How often do you use referencing software for research or assignments?	247	2.88	.91	Agreed
2.	How frequently do you insert citations using referencing software while writing?	247	2.93	.98	Agreed
3.	How often do you use referencing software to generate or format your bibliography/references list?	247	3.07	.95	Agreed
4.	How often do you add toimport new references in to your reference library?	247	3.11	.95	Agreed
5.	How frequently do you update your referencing software or synchronize your online account?	247	2.92	1.03	Agreed
6.	How often do you use referencing software to organize PDFs or research materials?	247	3.08	1.02	Agreed
7.	How frequently do you check for citations using referencing software?	247	2.89	1.02	Agreed

8.	How often do you use referencing software when collaborating or sharing references with colleagues?	247	3.11	.97	Agreed
9.	How regularly do you explore different referencing styles (APA, MLA, Chicago e t c) using the software?	247	3.25	.93	Agreed
10.	How often do you use referencing software for thesis or dissertation - relayed writing?	247	3.17	1.00	Agreed
	Overall Mean	247	3.04	.98	Agreed

Table 4 presents the frequency of which postgraduate students use referencing software for academic and research-related purposes is moderate reason being that their cumulative mean responses of 3.0 is greater than the 2.500 decision threshold mean. Notably, exploring different referencing styles attract most (Mean = 3.3; SD = 1.0). in summary the overall mean score of 3.0 (SD = 1.0) indicates that postgraduate students in the Faculty of Education, Ahmadu Bello University, Zaria, use referencing software with most frequency.

Discussion of the Findings

The findings from research objective one revealed that postgraduate students in the Faculty of Education demonstrated a moderate level of awareness of referencing software, with an overall mean score of 2.92 (SD = 0.98). This suggests that although students were fairly familiar with the existence and usefulness of referencing tools, their level of awareness was not high. This outcome implies that while awareness exists, it is not widespread enough to guarantee optimal adoption and utilization among the postgraduate population. This finding aligns with that of Adewale and Yusuf (2020), who discovered that postgraduate students' awareness of referencing software was significantly improved when institutions organized targeted workshops. Their study emphasized that awareness levels without intervention tend to remain moderate. Similarly, Okeke and Nwachukwu (2019) reported that awareness among Humanities postgraduate students was considerably lower compared to STEM counterparts, underscoring that not all groups attain high awareness naturally. These alignments indicate that disciplinary orientation and institutional interventions play critical roles in shaping awareness levels.

Furthermore, the finding is supported by Bello and Mohammed (2021), who established a strong correlation between digital literacy and awareness of referencing software. They revealed that moderate awareness is often associated with limited digital literacy, thereby restricting the ability of students to fully explore software functionalities. In the same vein, Eze and Afolabi (2021) found that postgraduate students were generally aware of referencing software but had very low awareness of advanced features, which confirms that students' familiarity often remains at a basic level. However, the finding contrasts with Musa and Okeke (2019), who noted that when institutional support and digital

resources are adequately provided, postgraduate students tend to report high levels of awareness and subsequent adoption. Similarly, Ibrahim and Adeyemi (2020) demonstrated that peer recommendations can substantially raise awareness, suggesting that under certain peer-driven environments, awareness may surpass the moderate level observed in this study. Therefore, the moderate awareness recorded in this research underscores the need for structured interventions, such as workshops, peer mentoring, and integration of digital literacy training into postgraduate curricula, in order to elevate students' knowledge and ensure that awareness translates into sustained adoption and proficient use of referencing software.

The findings from research objective two revealed that Mendeley (28.99%) and EndNote (26.09%) were the most commonly used referencing software, followed by Zotero (15.94%), RefWorks (14.49%), and BibTeX (10.14%), while Citavi (1.45%) and other tools (2.90%) were the least used. This suggests that postgraduate students preferred referencing software that is user-friendly, widely promoted, and easily accessible. The dominance of Mendeley and EndNote reflects their global popularity, institutional promotion, and compatibility with various academic databases, making them attractive choices for postgraduate research. This finding aligns with that of Okeke and Nwachukwu (2019), who discovered that STEM postgraduate students, in particular, exhibited a strong preference for Mendeley and EndNote compared to their counterparts in the Humanities. Their study emphasized disciplinary differences in software preference but confirmed the widespread use of these two tools. Similarly, Bello and Mohammed (2021) demonstrated that students with higher digital literacy gravitated more toward sophisticated and popular tools like Mendeley, confirming the pattern of preference seen in this study. In support, Eze and Afolabi (2021) observed that while awareness of advanced features was low, students who used Mendeley and EndNote tended to engage more with functionalities such as bibliography formatting and citation management, thereby reinforcing their dominance as the most preferred software. Additionally, Adebayo and Oladipo (2022) linked frequent use of Mendeley and EndNote to high research intensity and better academic output, showing that preference for these tools has practical implications for research productivity.

On the contrary, the low use of tools like Citavi contrasts with the findings of Okonkwo and Ibrahim (2019), who reported that postgraduate students with extensive research experience often explored advanced referencing tools, including Citavi and BibTeX, to leverage their collaborative features. Similarly, the results differ from Adetunji and Okoro (2021), who highlighted socio-cultural influences in Sub-Saharan Africa that sometimes led to the adoption of less mainstream tools depending on localized training and exposure.

Overall, the finding emphasizes that postgraduate students' preferences are shaped by accessibility, institutional promotion, digital literacy, and disciplinary orientation. The dominance of Mendeley and EndNote reflects a global trend, but the low adoption of tools like Citavi and BibTeX underscores the need for targeted training and awareness programs to expose students to

diverse options, especially those with advanced collaborative and formatting capabilities.

The findings from research objective three revealed that postgraduate students demonstrated a most frequency of referencing software usage with an overall mean of 3.0 (SD = 1.0). Students acknowledged that referencing software improved research quality, enhanced citation accuracy, and the quality of generating referencing styles in academic writing. This indicates that while students recognized the benefits of referencing tools, their frequency of usage did not reach an optimal level. The moderate usage suggests that awareness is not fully translating into consistent application, which may be linked to factors such as digital literacy gaps, limited training, or institutional support challenges. This result is consistent with Adebayo and Oladipo (2022), who found that students engaged in high-intensity research projects used referencing software more frequently, which in turn improved their academic output. Their study reinforces the idea that research demands influence usage levels. Similarly, Yusuf and Udo (2020) reported that postgraduate students in research-intensive disciplines, especially in STEM fields, used referencing software more frequently compared to those in less research-intensive disciplines like the Arts and Humanities. These studies confirm that usage patterns vary based on academic context and workload.

The finding also aligns with Bello and Mohammed (2021), who showed that students with higher digital literacy exhibited more frequent and proficient use of referencing software. This suggests that the moderate usage in the present study may reflect varying digital literacy levels among postgraduate students. In addition, Musa and Okeke (2019) found that institutional support significantly influenced adoption and usage frequency, highlighting that inadequate training or lack of resources often results in only moderate engagement. Conversely, the result contrasts with Musa and Okafor (2021), who discovered that postgraduate students in private universities reported higher usage frequency than those in public universities due to better institutional support and access to digital resources. The present study's moderate usage rate may therefore reflect the realities of limited institutional investment in software training and infrastructure. Likewise, the findings diverge from Ibrahim and Adeyemi (2020), who emphasized the powerful influence of peer recommendations in boosting usage. In peer-driven environments, usage often exceeds moderate levels. Therefore, this finding demonstrates that while postgraduate students recognize the usefulness of referencing software, their engagement remains moderate due to contextual and institutional factors. To increase the frequency of usage, universities should provide structured training, peer-support systems, and continuous institutional backing that can bridge the gap between awareness, perception of usefulness, and actual consistent application of referencing tools in academic research.

CONCLUSIONS AND RECOMMENDATIONS

The findings of this study revealed that postgraduate students in the Faculty of Education exhibited a moderate level of awareness of referencing software, suggesting partial familiarity with its existence and usefulness in academic writing. Among the available tools, Mendeley and EndNote were the most frequently used, while Zotero, RefWorks, and BibTeX received moderate attention, and Citavi and other applications recorded minimal usage. The study further indicated that students moderately utilized referencing software, recognizing its contributions to improving research quality, enhancing citation accuracy, and saving time in academic work. Therefore, it is concluded that postgraduate students are moderately aware and utilize referencing software to a reasonable extent.

FURTHER STUDY

Based on the findings of this study, the following recommendations are made:

1. Awareness creation and sensitization: Universities should organize regular workshops, seminars, and orientation programs to increase awareness of referencing software among postgraduate students, emphasizing their importance in research productivity and academic integrity.
2. Training and capacity building: Faculties should provide hands-on training on the installation, navigation, and effective use of referencing tools such as Mendeley, EndNote, and Zotero to enhance students' competence and confidence. The university library and ICT units should integrate referencing software into their services, providing access, technical support, and user manuals to guide postgraduate students.
3. Encouragement of diverse software usage: While Mendeley and EndNote are widely used, students should be encouraged to explore other tools such as Zotero, RefWorks, and BibTeX to broaden their options and choose software that best suits their research needs.

REFERENCES

- Adebayo, K. A., & Oladipo, T. M. (2022). An Analysis of Frequency of Referencing Software Usage Among Postgraduate in Relation to Research Intensity and Academic Output. *Journal of Research in Higher Education*, 24(3), 85-101.
- Adetunji, A. K., & Okoro, B. I. (2021). Exploring Socio-Cultural Factors Affecting the Adoption of Referencing Software Among Postgraduate in Sub-Saharan Africa. *Journal of African Educational Studies*, 18(2), 55-72.
- Adewale, T. A., & Yusuf, O. F. (2020). Evaluating the Impact of Institutional Workshops on Postgraduate ' Awareness of Referencing Software in Nigerian Universities. *Journal of Academic Research*, 12(2), 45-59.
- Ahmed, R., & Musa, F. (2019). Challenges in the Utilization of Referencing Software Among Postgraduate. *International Journal of Research in Education*, 14(2), 50-61.

- Bashir, A., Bello, I. A., Ibrahim, S., & Bello, S. B. (2024). Systematic Review on the Impact of Teaching Machine Learning In Higher Education. *Equity Journal of Innovative Research in Education*, 2(1).
- Bello, K. A., & Mohammed, Z. I. (2021). Exploring the Relationship Between Digital Literacy and Awareness of Referencing Software Among Postgraduate in Developing Countries. *Journal of Digital Education and Information Science*, 18(3), 101-115.
- Bello, S. B., Samaila, K., Bashar, A., & Sani, A. (2023). An Empirical Investigation of Computer Literacy among Students of College of Health Sciences and Technology in Kebbi State. *Journal of Mathematical Sciences & Computational Mathematics (JMSCM)*, 4(3), 311-322.
- Bello, S. B., Samaila, K., Sani, M. A., & Bashar, A. (2025). Assessing Awareness, Usability, and Readiness Towards Using Open Educational Resources (OERs) Among Computer Science Lecturers in Kebbi State Polytechnics in Post Covid-19 Era. *UNIAFRICA Journal of Education*, 4(3), 101-109.
- Brown, J. (2022). The impact of referencing software on research productivity. *Journal of Academic Writing*, 15(3), 45-60.
- Chen, H., Johnson, L., Smith, P., & Lee, K. (2021). Digital tools in academic research: Evaluating referencing software adoption in higher education. *Journal of Information Science*, 47(2), 112-130.
- Chen, H., Johnson, M., Smith, L., Lee, A., & Wang, R. (2021). Advancements in Referencing Software: A Comprehensive Review. *Journal of Educational Technology*, 46(3), 321-340. (2021). Advancements in Referencing Software: A Comprehensive Review. *Journal of Educational Technology*, 46(3), 321-340.
- Chen, L., & Zhao, W. (2021). Disciplinary Differences in the Utilization of Citation Management Software. *Journal of Research Methods*, 28(4), 78-91.
- Coffin, C. (2019). *Managing references: A guide to referencing software*. Academic Press.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (2018). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
- Eze, C. J., & Afolabi, B. M. (2021). Assessing the Knowledge Gap: Postgraduate students' Awareness of Advanced Features in Referencing Software Across Different Academic Disciplines. *Journal of Academic Research and Technology*, 19(2), 112-128.
- Gilmour, R., & Cobus, L. (2016). Academic referencing software: A tool for research efficiency or simply a way to avoid plagiarism? *Research Journal of the Humanities and Social Sciences*, 7(4), 421-428.
- Green, S., & Bowen, T. (2023). Challenges in the adoption of referencing software: Insights from postgraduate students. *Journal of Academic Research*, 45(2), 183-201. <https://doi.org/10.1016/j.acres.2023.01.010>
- Harris, M., & Williams, R. (2020). *An overview of referencing software tools*. Routledge.

- Hassan, N., & Williams, T. (2021). Technical Challenges in the Adoption of Citation Management Tools. *Library and Information Science Journal*, 19(1), 66-79.
- Hernandez, M., & Li, J. (2020). Digital literacy and the frequency of referencing software use among postgraduate students. *Journal of Educational Technology Systems*, 48(3), 391-409. <https://doi.org/10.1177/0047239519887893>
- Ibrahim, M. T., & Adeyemi, S. O. (2020). The Influence of Peer Recommendations on the Adoption of Referencing Software Among Postgraduate in Nigerian Universities. *Journal of Academic Research in Education*, 16(3), 102-118.
- Jones, A., & Brown, B. (2018). Digital Literacy and Technological Integration in Postgraduate Research. *International Journal of Educational Technology*, 18(4), 567-589.
- Maxwell, D. (2019). Technology integration in academic writing: The role of referencing software. *Higher Education Research*, 30(4), 189-204.
- Mitchell, R. (2021). The Impact of Referencing Software on Academic Writing: A Longitudinal Study. *Educational Technology Research and Development*, 56(1), 112-129.
- Mitchell, R., & Farahani, H. (2022). Peer influence and referencing software adoption: How academic communities shape usage patterns. *Research in Higher Education*, 63(4), 527-546. <https://doi.org/10.1007/s11162-021-09654-9>
- Musa, A. L., & Okeke, C. O. (2019). Investigating the Role of Institutional Support and Resources in the Adoption of Referencing Software Among Postgraduate student. *Journal of Library and Information Science Research*, 21(4), 134-150.
- Musa, R. I., & Okafor, N. E. (2021). Postgraduate ' Frequency of Referencing Software Usage: A Comparative Study Between Public and Private Universities. *Journal of Educational Research and Practice*, 19(4), 120-136.
- Nguyen, T., & Nguyen, M. (2021). Factors influencing students' awareness of academic software: A case study. *Educational Technology Journal*, 27(2), 34-47.
- Okeke, U. A., & Nwachukwu, P. O. (2019). Awareness and Usage Patterns of Referencing Software Among Postgraduate in STEM versus Humanities Disciplines. *International Journal of Educational Research*, 15(4), 78-92.
- Okonkwo, E. O., & Ibrahim, A. A. (2019). Correlation Between Research Experience and Awareness of Referencing Software Features Among Postgraduate students. *Journal of Library and Information Science Research*, 22(1), 79-95.
- Peterson, M., & Davies, L. (2020). Academic integrity and the role of citation management software. *Journal of Higher Education Ethics*, 35(2), 77-95.

- Roberts, L., & Dickson, R. (2022). Disciplinary differences in the use of referencing software among postgraduate students. *Library & Information Science Research*, 44(1), 23-31. <https://doi.org/10.1016/j.lisr.2021.101110>
- Sani, M. A. (2017). *Introduction to Research Methodology and Statistics: A Guide for Students & Supervisors*. ABU Press Ltd. Ahmadu Bello University, Zaria.
- Smith, A., & Johnson, K. (2021). Managing citations and references: An overview of software tools. *Library Resources & Technical Services*, 63(2), 102-112.
- Smith, J., et al. (2019). Enhancing Scholarly Writing: The Impact of Referencing Software. *Journal of Educational Technology*, 43(2), 217-235.
- Smith, K., & Johnson, P. (2020). Exploring the Use of Referencing Software Among Postgraduate students: An Empirical Study. *Research in Higher Education*, 35(2), 56-70.
- Stevenson, T., & Cole, G. (2018). Reference management software: Adoption and usage patterns among postgraduate students. *Journal of Information Science*, 44(2), 141-152. <https://doi.org/10.1177/0165551516687670>
- Taylor, M., & Clark, R. (2017). Digital Tools and Academic Success: A Longitudinal Perspective. *Educational Technology Research and Development*, 20(4), 456-478.
- Thompson, J., & Davis, R. (2020). Accessibility and Utilization of Referencing Tools in Academic Institutions. *Journal of Information Management*, 18(4), 49-61.
- Wang, J., & Lund, B. (2021). The impact of training on the frequency of referencing software use among postgraduate students. *Journal of Academic Librarianship*, 47(5), 102369. <https://doi.org/10.1016/j.acalib.2021.102369>
- Wilson, L. (2021). The Impact of Training on the Use of Referencing Software in Academic Writing. *Educational Technology & Society*, 24(2), 93-104
- Yusuf, A. B., & Udo, E. A. (2020). Investigating the Relationship Between Discipline-Specific Research Demands and the Frequency of Referencing Software Use Among Postgraduate students. *International Journal of Educational Technology*, 17(2), 33-49.