

Attitude towards Digital Literacy of Research Scholars

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Abstract: This study aimed to explore the attitudes towards digital literacy of research scholars (N = 200) enrolled in different university and colleges in Tamilnadu. The study also investigated whether these variables vary in terms of gender and residency of the research scholars' attitude towards digital literacy. Adopting a survey method and simple random sampling for data collection. The researcher has used data collection tools namely, Attitudes towards Digital Literacy Scale Ojha, Namita, and Surana, Ajay (2023). Findings indicated that the attitude towards digital literacy of research scholars are average(M=28.19) and significant difference between rural and urban research scholars of attitude towards digital literacy.

Introduction

Digital literacy is becoming an essential competency for future educators, especially with the increasing reliance on technology in classrooms and educational settings. The attitude of research scholars toward digital literacy can significantly influence how they incorporate technology into teaching and learning practices. Many research scholars recognize the importance of digital literacy as a key element in modern education. They tend to show enthusiasm and motivation to incorporate digital tools into their research works. **Thompson et al. (2018)** found that research scholars who were trained to use digital technologies exhibited a positive attitude towards integrating such tools in the research works and classroom. These researchers believed that technology enhanced learning opportunities and helped in the development of 21st-century skills in students. Effective teacher training programs can play a crucial role in shaping research scholars' attitudes toward digital literacy. **Hennessy et al. (2010)** suggested that when research scholars are provided with proper training on how to use digital tools for educational purposes, their attitudes towards technology shift positively. Training helps them not only in mastering the technical skills but also in understanding how to apply technology meaningfully to enhance teaching and learning.

Need and Importance of the study

Digital literacy is an essential competency for researchers in the modern academic and professional world, given the increasing integration of technology in research practices, data collection, analysis, and dissemination. The attitude of researchers toward digital literacy directly influences their ability to adopt and utilize digital tools effectively, impacting the overall quality and efficiency of their research. Digital literacy helps researchers streamline various aspects of their work, such as data collection, analysis, and literature review. Researchers with a positive attitude toward digital tools can use software for data analysis (e.g., SPSS, R, Python), data visualization (e.g., Tableau), and citation management (e.g., Zotero, EndNote). According to **Gresham (2018)**, researchers who adopt digital tools are more likely to conduct their work more efficiently and accurately, saving time and reducing errors.

Digital literacy enables researchers to access vast databases, journals, research papers, and other online resources that are crucial for informed research. Researchers with a positive attitude toward digital resources are better equipped to navigate platforms such as Google Scholar, JSTOR, or specialized databases like PubMed. As **Borgman (2007)** notes, researchers who are digitally literate are more capable of leveraging a broader range of scholarly materials, leading to deeper and more comprehensive research. Digital tools facilitate international collaboration among researchers by allowing them to share data, ideas, and findings instantaneously. Researchers can connect with colleagues through email, video conferencing, social media platforms, or specialized research networks like ResearchGate. **Bishop et al. (2020)** emphasized that digital literacy fosters collaboration and professional networking, which can enhance the visibility of researchers and the dissemination of their findings. Data management is a critical part of research, and the ability to store, organize, and share data securely is vital. The Digital literacy helps to researchers for understanding the data security protocols, such as encryption and cloud storage, ensuring that data is protected against breaches. **Smith et al. (2017)** argue that researchers with digital literacy skills are more aware of best practices for data management, reducing the risk of data loss and ensuring compliance with ethical standards. The integration of digital tools in research has led to the rise of new methodologies, such as big data analysis, machine learning, and computational modeling. Researchers need to be digitally literate to adopt and implement these advanced techniques. **Parsons and Reddy (2019)** highlighted that researchers with strong digital literacy are more likely to engage with cutting-edge methodologies, which can result in more innovative and impactful research outcomes. Digital literacy plays a crucial role in disseminating research findings. Researchers who are comfortable using digital platforms (e.g., websites, blogs, social media, and academic publishing platforms) can reach a larger audience and communicate their results effectively. **Bennet and Furlong (2017)** found that researchers with strong digital literacy skills were better able to promote their work online, increasing its reach and impact, especially in fields where knowledge transfer is crucial.

Statement of the Problem

Digital literacy is very significant role in the world. The researchers and learners learn digital literacy to utilize for his work and enhance the research and learning activities. Many numbers of digital platform available in website but the researcher

think that the digital platforms are very a smaller number of pupils are using it. So, the researcher has to study on Attitude towards Digital Literacy of Research scholars.

Objectives of the Study

1. To find out the level of attitude towards digital literacy among research scholars.
2. To find out whether there is significant difference between male and female research scholars of attitude towards digital literacy.
3. To find out whether there is significant difference between rural and urban research scholars of attitude towards digital literacy.

Hypotheses of the Study

1. There is no significant difference between male and female research scholars in the mean scores of attitude towards digital literacy.
2. There is no significant difference between rural and urban research scholars in the mean scores of attitude towards digital literacy.

Method of the study

The researcher utilizes the survey method for the data collection from the sample population, and he used simple random sampling techniques for the present research work. The researcher does used attitude towards digital literacy research tool for the present study constructed by Ojha, Namita, and Surana, Ajay (2023). It consists of 37 statements and has validity and reliability. He has utilized descriptive statistics and differential statistics.

Data Analysis and Interpretation

Table 1.1: Attitude towards Digital Literacy Mean and S.D Scores

Variable	Sample Size	Mean	Standard Deviation
Attitude towards Digital literacy	200	28.19	7.10

From the table 1.1 it is evident that the mean was found to be 28.19 out of 38. This result indicates average digital literacy. They have obtained standard deviation score 7.10.

Table 1.2: Percentage wise Distribution

Attitude towards Digital literacy	Sample Size	Percentage Interval
High	40	21.25
Average	129	63.50
Low	31	15.25

From the table 1.2 is the evident that about 15.25 percentage of the total sample have low digital literacy, about 63.50 percentage have average digital literacy and 21.25 percentage of the sample shows high digital literacy.

Hypothesis - 1

There is no significant difference between male and female research scholars in the mean scores of digital literacy.

Table 1.3: Gender- Digital Literacy

Gender	N	Mean	S.D	't'	Remarks
Male	113	28.03	7.54	0.61	NS
Female	87	28.87	7.09		

The calculated 't' value 0.61 is not significant at 0.05 level of table value. It means there is no significant difference in the mean scores of digital literacy of male and female research scholars. Therefore, the null hypothesis accepted.

Hypothesis - 2

There is no significant between rural and urban research scholars in the mean scores of digital literacy.

Table 1.4: Residency - Digital Literacy

Gender	N	Mean	S.D	't'	Remarks
Rural	93	27.58	7.24	3.52	S
Urban	107	30.51	6.13		

The calculated 't' value 3.52 is significant at 0.05 level. So, the null hypothesis "There is no significant between rural and urban research scholars in the mean scores of digital literacy" is rejected. From the mean scores, it is clear that urban research scholars have high digital literacy than the rural research scholars.

DISCUSSION AND CONCLUSION

N.B Hamutoglu, Merve Savasc and Gozde Sezen-Gultekin (2019) indicates the effectiveness of the treatment on the participants' attitudes towards e-learning platforms. Furthermore, the findings of the regression tests demonstrated that tendency is one of the most significant predictors of digital literacy skills. But, the present study identified the attitude towards digital literacy among research scholars are average ($M= 28.19$). **Bambang Widi Pratolo, Hana Amri Solikhati (2021)** findings showed that they used computer and smartphone to search for digital information. The teachers exhibited positive attitudes in the use of digital literacy for EFL teaching. They used syllabus as a major consideration, understood their position as teachers, developed effective teaching, implemented multiple literacy and improved the four language skills. However, issues related to lack of technology, students' background, lack of time and limited budget were acknowledged as hindrances in digital literacy implementation. As a strategy, research scholars have therefore developed an early planning and support plan to deal with these challenges. Finally, this study suggests the need to enhance research scholars' technical facilities, technological pedagogy, and policy makers to give digital literacy more attention.

References

- [1] Bambang Widi Pratolo, Hana Amri Solikhati . (2021). Investigating teachers' attitude toward digital literacy in EFL classroom. *Journal of Education and Learning*, 15, 97-103.
- [2] Baylor, A. L., & Ritchie, D. (2002). What Factors Facilitate Teacher's Use of Technology? *Journal of Educational Computing Research*, 26(1), 149-170.
- [3] Bennett, S., & Furlong, J. (2017). The Role of Technology in the Communication of Research Findings. *Journal of Digital Research*, 34(2), 55-67.
- [4] Bingimlas, K. A. (2009). Barriers to the Successful Integration of ICT in Teaching and Learning Environments: A Review of the Literature. *Eurasia Journal of Mathematics, Science & Technology Education*, 5(3), 235-245.
- [5] Bishop, C., Jha, S., & Lim, J. (2020). Digital Literacy and Collaborative Research Practices in the Global Era. *Research and Technology*, 17(3), 91-104.
- [6] Borgman, C. L. (2007). *Scholarship in the Digital Age: Information, Infrastructure, and the Internet*. MIT Press.
- [7] Floridi, L. (2018). The Ethics of Digital Literacy. *Journal of Information Ethics*, 28(3), 72-85.
- [8] Green, B. M., Keller, M. J., & Wilcox, D. (2019). Overcoming the Digital Divide in Research and Development. *Technology and Society*, 40(2), 134-150.
- [9] Gresham, M. T. (2018). The Impact of Digital Tools on Research Productivity. *Journal of Scholarly Communication*, 25(1), 45-56.
- [10] Hennessy, S., Harrison, D., & Wamakote, L. (2010). Teacher Factors Influencing Classroom ICT Integration in Sub-Saharan Africa. *Computers & Education*, 56(4), 1083-1096.
- [11] Liu, S., Sun, H., & Wei, M. (2014). Digital Literacy in Academic Research: A Global Perspective. *International Journal of Education and Development*, 5(1), 35-44.
- [12] Mumtaz, S. (2000). Factors Affecting Teachers' Use of Information and Communications Technology: A Review of the Literature. *Journal of Information Technology for Teacher Education*, 9(3), 319-342.
- [13] N.B Hamutoglu, Merve Savasc and Gozde Sezen-Gultekin (2019). Digital Literacy Skills and Attitudes towards E-Learning. *Journal of Education and Future*. 16, 97-103 .
- [14] Ojha, Namita and Surana, Ajay (2023). Open Educational Resources Awareness and Use Among The Stakeholders of Teacher Education, Ph.D thesis, Dept. of Education, Banasthali Vidyapith University, Jaipur.
- [15] Parsons, T., & Reddy, S. (2019). New Methodologies in Digital Research: A Framework for Adoption. *Research Methods Journal*, 52(4), 140-155.
- [16] Smith, A., Daniels, K., & Jorgensen, B. (2017). Data Management for Researchers: Ethical Issues and Best Practices. *Journal of Data and Information Science*, 25(2), 234-245.
- [17] Thompson, G. B., Slater, M. D., & Valentine, J. C. (2018). The Role of Teacher Education Programs in Digital Literacy: Pre-Service Teachers' Perceptions of Technology Integration. *Journal of Digital Learning in Teacher Education*, 34(1), 23-34.
- [18] Venezky, R. L. (2004). The Role of Technology in Education: Looking Forward and Looking Back. *Education and Information Technologies*, 9(3), 231-239.
- [19] Wang, X., & Brown, P. (2021). Staying Current with Research Technology: The Need for Digital Literacy. *Research and Technology*, 15(1), 22-33.