Vol. 14(4), pp. 242-253, August 2026
https://doi.org/10.14662/ijalis2026500

ISSN: 2360-7858
http://www.academicresearchjournals.org/IJALIS/Index.htm

*International Journal of Academic Library and Information Science*

*Full Length Research*

# Influence of Personal Factors and Information Literacy Skills on the Use of Digital Information Resources by Undergraduate Students in Private Universities in Oyo State

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Accepted 8 August 2026

The adoption of digital technologies in higher education has expanded access to digital information resources for teaching, learning, and research. This study examined the influence of personal factors and information literacy skills on the use of digital information resources among undergraduate students in selected private universities in Oyo State, Nigeria. A descriptive survey research design was adopted. The study involved 121 undergraduate students enrolled in Library and Information Science programmes at Ajayi Crowther University, Lead City University, and KolaDaisi University. The total enumeration sampling technique was used due to the small population size. Data were collected through a questionnaire and analysed using descriptive statistics, Pearson Product-Moment Correlation, and multiple regression analysis at the 0.05 level of significance. The findings revealed that confidence in using computers (mean = 3.32), motivation to use digital resources regularly (mean = 3.29), prior experience with computers (mean = 3.28), enjoyment of using digital technologies (mean = 3.26), and ability to evaluate online information credibility (mean = 3.20) were the major personal factors influencing students' use of digital information resources. Respondents demonstrated a high level of information literacy skills (grand mean = 3.24), with understanding of the need for information resources in research (mean = 3.32) rated highest, while search engines (78), Google Scholar (74), general internet resources (71), e-lecture notes (67), and educational websites (63) were the most frequently utilised digital information resources on a daily basis. Significant positive relationships were found between personal factors and digital information resource use ($r = 0.486$, $p < 0.05$) and between information literacy skills and digital information resource use ($r = 0.572$, $p < 0.05$). Multiple regression analysis further revealed a significant joint influence of the two variables on digital information resource use ($R = 0.641$, Adjusted $R^2 = 0.401$, $p < 0.05$), accounting for approximately 40.1% of the variance. The study concludes that strengthening information literacy skills and fostering positive personal attributes such as confidence and motivation are essential for improving undergraduate students' effective use of digital information resources.

**Keywords**: Personal factors; information literacy skills; digital information resources; undergraduate students; private universities.

**Cite This Article As: OLA, AR., OJEDOKUN, AA (2026).** Influence of Personal Factors and Information Literacy Skills on the Use of Digital Information Resources by Undergraduate Students in Private Universities in Oyo State. Inter. J. Acad. Lib. Info. Sci. 14(4): 242-253

## Introduction

The rapid growth of Information and Communication Technologies (ICTs) has transformed the way information is created, stored, accessed and utilised within higher education institutions. Traditionally, undergraduate students depended largely on printed books, journals and physical library collections to obtain academic information. However, advances in digital technology have introduced diverse electronic platforms through which scholarly information can be accessed more conveniently and efficiently. Consequently, universities now provide a wide range of digital information resources, including electronic books, online journals, academic databases, institutional repositories, and other internet-based resources that support teaching, learning, and research activities. These digital resources enable students to access vast amounts of scholarly information within a relatively short period and from different locations, thereby creating a more flexible academic environment that requires students to possess the competencies needed to locate, evaluate and utilise information effectively for academic purposes. (Aina, 2021; Okiki & Asiru, 2021).

Digital information resources have become indispensable components of modern academic libraries because they provide timely access to current scholarly materials beyond the limitations of traditional print collections. Their ability to facilitate remote access to electronic journals, online databases, and other digital repositories has significantly improved the accessibility of academic information for undergraduate students. In addition to enhancing independent learning and research, these resources expose students to current global scholarship and diverse perspectives across various disciplines. Despite these advantages and the considerable investments made by universities in digital library systems and electronic information services, effective utilisation of digital information resources remains a challenge. Access to digital resources alone does not necessarily translate into meaningful utilisation, as students must possess the ability to navigate digital information systems and retrieve relevant scholarly materials efficiently (Baro, 2022).

Similarly, among the factors influencing students' utilisation of digital information resources are personal factors, which comprise the individual characteristics that shape behaviour, learning and interaction with digital information systems. These characteristics include motivation, attitude towards technology, previous experience with computers, confidence in using digital tools, age, gender and academic level. Students enter universities with varying educational and socio-economic backgrounds, resulting in differences in their exposure to digital technologies and their ability to adapt to technology-driven learning environments. Students who demonstrate positive attitudes towards technology and possess greater confidence in using digital tools are generally more willing to explore electronic information resources, whereas those with limited technological experience or lower confidence often experience challenges in using available digital information systems effectively (Dwivedi, 2020; Okiki & Asiru, 2021; Baro, 2022; Issa, Amusan, & Daura, 2022).

Information literacy skills constitute another critical determinant of effective utilisation of digital information resources. These skills encompass the ability to recognise information needs, identify appropriate information sources, retrieve relevant information efficiently, evaluate the credibility and relevance of retrieved information, and use information ethically. Within higher education, undergraduate students are expected to undertake independent learning, complete research assignments and engage in critical thinking, all of which require effective information literacy competencies. Students who possess these skills are better able to formulate search strategies, navigate academic databases, evaluate scholarly sources and distinguish credible academic materials from unreliable online information. Consequently, information literacy skills remain fundamental to students' effective utilisation of digital information resources in contemporary universities (UNESCO, 2021; Igbinovia, 2022; Aina, 2021; Ojedokun, 2007; Igbinovia & Igere, 2023; Head, Fister, & MacMillan, 2022; Issa, Amusan, & Daura, 2022).

The interaction between personal factors, information literacy skills, and digital information resources has attracted increasing scholarly attention because these variables collectively influence students' academic information-seeking behaviour. Students who possess positive personal characteristics together with strong information literacy competencies are more likely to identify relevant information needs, search academic databases efficiently, evaluate retrieved information critically, and utilise scholarly resources appropriately for academic activities. Conversely, inadequate information literacy skills and unfavourable personal characteristics may discourage students from using digital academic resources despite their availability, thereby limiting the educational benefits expected from investments in digital information infrastructure.

## Literature Review

Several studies have been conducted on the subject of this study. Al-Emran et al. (2021) investigated the factors influencing students' adoption of digital learning technologies in higher education institutions. The study specifically examined how motivation, perceived usefulness, digital self-efficacy, and technological confidence influence students' utilisation of digital academic resources. The researchers adopted a quantitative survey research design for the study.

The population comprised undergraduate students from selected higher education institutions offering digital learning programmes. Using purposive and random sampling techniques, a sample of 470 undergraduate students was selected from participating universities. Data were collected through structured questionnaires administered physically and electronically to the respondents to obtain information relating to students' attitudes towards digital learning technologies and academic resource utilisation. The data collected were analysed using descriptive statistics, correlation analysis, and structural equation modelling techniques.

Similarly, Schunk and DiBenedetto (2021) investigated the relationship between self-efficacy and students' academic technology use in higher education institutions. The study examined how students' confidence levels affect their willingness to engage with digital learning systems and electronic academic resources. The researchers adopted a descriptive survey research design involving undergraduate students from universities. The population of the study consisted of students from different academic disciplines within selected universities. Using a random sampling technique, a sample of 385 undergraduate students was selected for the study. Data were collected using self-efficacy and technology utilisation questionnaires administered to the respondents during classroom sessions and online learning activities. The data collected were analysed using regression analysis, mean scores, and descriptive statistical techniques. The findings revealed that students with high academic self-efficacy demonstrated greater willingness to interact with digital learning technologies and online academic platforms. The study further established that self-confidence significantly improved students' ability to search academic databases, retrieve electronic materials, and utilise digital platforms effectively for academic purposes. The researchers therefore concluded that digital confidence and self-efficacy significantly influence students' use of digital information resources and recommended technology training programmes capable of improving students' confidence in using digital systems.

Furthermore, Bruce (2021) investigated the contribution of information literacy skills to students' independent learning and critical thinking in higher education institutions. The study examined how information literacy competence influences students' engagement with academic databases and scholarly materials. The researcher adopted a qualitative research approach involving undergraduate students and academic librarians selected from universities. The author used a purposive sampling technique in selecting a sample of 210 participants for the study. Data were collected using interviews and focus group discussions conducted among the respondents. The data collected were analysed using thematic analysis techniques and descriptive interpretation methods. The findings revealed that students who possessed strong information literacy competencies demonstrated improved critical thinking abilities, stronger engagement with academic databases, and better independent learning capacities. The study further established that information literacy competence enhanced students' ability to evaluate information critically and utilise scholarly materials effectively for academic purposes. The researcher therefore concluded that information literacy education remains essential for strengthening students' academic development and digital learning competence.

Marchionini (2022) also investigated students' information-seeking behaviour and the role of technological confidence in the utilisation of digital academic resources in higher education institutions. The study focused on how students' confidence in navigating digital environments influences their access to scholarly databases and online learning systems. The researcher adopted a mixed-method research design involving undergraduate students selected through purposive and random sampling techniques from participating universities. The population comprised undergraduate students from higher education institutions, while a sample of 460 respondents was selected for the study. Data were collected using questionnaires, interviews, and observation methods administered among the respondents. The data collected were analysed using descriptive statistical methods and thematic analytical procedures. The findings revealed that students with strong technological confidence and information-searching skills demonstrated greater efficiency in accessing academic databases, retrieving electronic materials, and utilising digital learning platforms effectively. The study further established that students who lacked technological confidence experienced difficulties in navigating digital systems and locating relevant academic information. The researcher therefore concluded that technological confidence and effective information-searching competence significantly influence students' utilisation of digital information resources in higher education institutions.

**Statement of the Problem**

The increasing integration of digital technologies into higher education has made digital information resources essential to teaching, learning and research. In Nigeria, private universities have made substantial investments in electronic libraries, online databases, institutional repositories, learning management systems and internet connectivity to improve students' access to scholarly information. These investments are expected to enable undergraduate students to locate relevant academic materials, conduct effective research and improve the quality of their academic work. However, despite the growing availability of these resources, there are concerns about the extent to which undergraduate students

effectively utilise them. Many students still experience difficulties in identifying appropriate academic databases, navigating digital library systems, developing suitable search strategies and retrieving relevant scholarly materials. Consequently, students may depend heavily on general search engines and non-academic websites because they are easier to access and navigate, even when more credible scholarly resources are available through their universities. This situation raises concerns about whether the substantial investments made by private universities in digital information resources are translating into effective utilisation and improved academic learning and research practices.

Effective utilisation of digital information resources may depend not only on their availability and accessibility but also on students' personal factors and information literacy skills. Personal factors such as motivation, previous experience with digital technologies, confidence and willingness to use electronic resources may influence students' engagement with available digital information sources. Similarly, information literacy skills, including the ability to identify information needs, formulate appropriate search strategies, locate relevant information, evaluate the credibility of sources and use information appropriately, are important for effective utilisation of digital academic resources. Although previous studies have examined digital information resources, personal factors and information literacy skills, most have investigated these variables independently. Existing literature has focused predominantly on the availability and accessibility of digital resources or students' information literacy skills without adequately establishing how personal factors and information literacy skills jointly influence the utilisation of digital information resources, particularly among undergraduate students in private universities. This gap is important because private universities continue to invest substantially in digital infrastructure, yet difficulties associated with identifying, accessing, evaluating and effectively using scholarly electronic resources persist among students. Consequently, empirical understanding of the combined influence of personal factors and information literacy skills on students' utilisation of digital information resources remains limited.

Against this background, there is a need to establish the extent to which personal factors and information literacy skills independently and jointly influence the use of digital information resources among undergraduate students in private universities. Addressing this problem is particularly necessary within the context of private universities in Oyo State, Nigeria, where considerable investment in digital information infrastructure requires corresponding evidence of effective student utilisation. Therefore, this study examined the influence of personal factors and information literacy skills on the use of digital information resources among undergraduate students in selected private universities in Oyo State, Nigeria. By investigating these variables collectively, the study provides empirical evidence on the factors influencing students' utilisation of digital information resources and offers insights that may assist university management, librarians and other relevant stakeholders in strengthening information literacy programmes, improving digital library services and promoting more effective use of digital information resources for teaching, learning and research.

**Objectives of the Study**

The main aim of this study is to investigate the influence of personal factors and information literacy skills on the use of digital information resources among undergraduate students in private universities. Specifically, the study seeks to:

1. Identify the personal factors of undergraduate students influencing the use of digital information resources in private universities.
2. Establish the level of information literacy skills of undergraduate students in private universities.
3. Identify the digital information resources regularly used by undergraduate students and the frequency of use in private universities.

**Research questions**

1. What are the personal factors influencing the use of digital information resources among undergraduate students in private universities?
2. What is the level of information literacy skills of undergraduate students in private universities?
3. What digital information resources are regularly used by undergraduate students in private universities, and how frequently are they used?

**Research Hypotheses**

The following null hypotheses will guide the study at a 0.05% level of significance:

**$H_{01}$:** There is no significant relationship between personal factors and the use of digital information resources by undergraduate students in private universities in Oyo State, Nigeria.

**$H_{02}$:** There is no significant relationship between information literacy skills and the use of digital information resources by undergraduate students in private universities in Oyo State, Nigeria.

**$H_{03}$:** There is no significant joint influence of personal factors and information literacy skills on the use of digital information resources by undergraduate students in private universities in Oyo State, Nigeria.

## Methodology

This study adopted a descriptive survey research design to investigate the influence of personal factors and information literacy skills on the use of digital information resources among undergraduate students in selected private universities in Oyo State, Nigeria. The design was considered appropriate because it enabled the collection of quantitative data from respondents and facilitated the examination of the relationships among the variables under investigation. The population of the study comprised 121 undergraduate students enrolled in Library and Information Science programmes in three selected private universities in Oyo State, namely Ajayi Crowther University, Oyo; Lead City University, Ibadan; and KolaDaisi University, Ibadan. Since the population was relatively small and manageable, the total enumeration sampling technique was adopted, thereby involving all 121 undergraduate students in the study. This approach ensured that every member of the target population had the opportunity to participate. Data were collected using a structured questionnaire developed by the researcher based on the objectives of the study and insights from the reviewed literature. The instrument consisted of sections designed to obtain information on respondents' demographic characteristics, personal factors, information literacy skills, and the use of digital information resources. To ensure the validity of the instrument, it was subjected to expert scrutiny by specialists in Library and Information Science and research methodology, whose observations guided the necessary revisions before administration. The reliability of the instrument was established through a pilot study conducted among undergraduate students outside the selected universities but with similar characteristics to the study population. The responses obtained were analysed using Cronbach's alpha, and the coefficient confirmed that the instrument possessed satisfactory internal consistency for the study.

The questionnaires were administered personally by the researcher with the assistance of designated contacts in the selected universities, resulting in a high response rate. Data collected were analysed using descriptive and inferential statistics with the aid of the Statistical Package for the Social Sciences (SPSS). Frequency counts, percentages, mean, and standard deviation were used to answer the research questions, while Pearson Product-Moment Correlation (PPMC) was employed to test the relationships between the variables. Multiple regression analysis was further used to determine the joint influence of personal factors and information literacy skills on the use of digital information resources. All hypotheses were tested at the 0.05 level of significance

## Results Discussion

### Personal Factors Influencing the Use of Digital Information Resources

Table 1 presents the personal factors influencing the use of digital information resources among undergraduate students in selected private universities in Oyo State.

**Table 1:** Personal Factors Influencing the Use of Digital Information Resources

| S/N | Personal Factors | Mean | Decision |
|---|---|---|---|
| 1 | Motivated to use digital resources regularly | 3.29 | Accepted |
| 2 | Prior experience with computers | 3.28 | Accepted |
| 3 | Introduced to digital learning before university | 3.15 | Accepted |
| 4 | Confidence in using computers | 3.32 | Accepted |
| 5 | Ability to navigate digital libraries independently | 3.19 | Accepted |
| 6 | Enjoy using digital technologies | 3.26 | Accepted |
| 7 | Preference for digital resources over print | 3.07 | Accepted |
| 8 | Ability to identify relevant digital sources | 3.18 | Accepted |
| 9 | Ability to use search strategies | 3.15 | Accepted |
| 10 | Ability to evaluate online information credibility | 3.20 | Accepted |

Source: Field Survey (2026).

Table 1 shows that all the identified personal factors recorded mean scores above the acceptance benchmark, indicating that respondents generally agreed that these factors influence their use of digital information resources. Confidence in using computers recorded the highest mean score (Mean = 3.32), followed by motivation to use digital resources regularly (Mean = 3.29) and prior experience with computers (Mean = 3.28). This indicates that students' confidence in using computers, their motivation to engage with digital resources, and their previous exposure to computers were the most influential personal factors affecting the use of digital information resources. In contrast, preference for digital resources over print materials recorded the lowest mean score (Mean = 3.07), although it remained above the acceptance criterion, suggesting that respondents generally favoured digital information resources despite some continued preference for printed materials. The findings indicate that positive personal characteristics contribute to the effective utilisation of digital information resources among undergraduate students in the selected private universities.

**Information Literacy Skills of Undergraduate Students**

Table 2 presents the level of information literacy skills possessed by undergraduate students in the selected private universities.

**Table 2:** Information Literacy Skills of Undergraduate Students

| S/N | Information Literacy Skills | Mean | Decision |
|---|---|---|---|
| 1 | Ability to identify information needs | 3.27 | Accepted |
| 2 | Ability to locate relevant information sources | 3.28 | Accepted |
| 3 | Ability to develop effective search strategies | 3.14 | Accepted |
| 4 | Ability to evaluate credibility of information | 3.27 | Accepted |
| 5 | Ability to distinguish scholarly sources | 3.14 | Accepted |
| 6 | Ability to use library databases effectively | 3.19 | Accepted |
| 7 | Understanding of citation and referencing | 3.28 | Accepted |
| 8 | Ability to organise information logically | 3.20 | Accepted |
| 9 | Ability to use digital tools to manage information | 3.24 | Accepted |
| 10 | Understanding the need for information resources in research | 3.32 | Accepted |
| 11 | Ability to recognise need for additional information | 3.23 | Accepted |

Source: Field Survey (2026).

Table 2 shows that respondents possessed a high level of information literacy skills, as all the items recorded mean scores above the acceptance benchmark. The highest-rated skill was the ability to use information ethically and avoid plagiarism (Mean = 3.32), followed by the ability to locate relevant information sources (Mean = 3.28), as well as the ability to identify information needs and evaluate the credibility of information (Mean = 3.27 each). The ability to develop effective search strategies recorded the lowest mean score (Mean = 3.14), although it also exceeded the acceptance criterion. The grand mean of 3.24 indicates that respondents generally possessed the information literacy competencies required to identify, access, evaluate and utilise digital information resources for academic purposes.

**Table 3.**Types of digital information resources used by undergraduate students and the frequency of use.

| S/N | Digital Information Resources | Daily | Weekly | Occasionally | Rarely | Never |
|---|---|---|---|---|---|---|
| 1 | E-journals | 42 | 39 | 26 | 10 | 4 |
| 2 | E-books | 48 | 37 | 24 | 9 | 3 |
| 3 | Online databases | 35 | 41 | 29 | 11 | 5 |
| 4 | Search engines | 78 | 29 | 10 | 3 | 1 |
| 5 | CD-ROM databases | 12 | 18 | 30 | 35 | 26 |
| 6 | General Internet resources | 71 | 33 | 11 | 4 | 2 |
| 7 | E-theses and dissertations | 29 | 36 | 34 | 16 | 6 |
| 8 | E-lecture notes | 67 | 34 | 13 | 5 | 2 |
| 9 | E-newspapers and magazines | 31 | 39 | 29 | 15 | 7 |
| 10 | Virtual Library of Nigeria | 18 | 27 | 36 | 24 | 16 |
| 11 | Institutional repositories | 26 | 38 | 31 | 18 | 8 |
| 12 | E-conference proceedings | 20 | 29 | 37 | 24 | 11 |

**Table 3. Continuation**

| | | | | | | |
|---|---|---|---|---|---|---|
| 13 | Academic social networks | 46 | 40 | 21 | 10 | 4 |
| 14 | Online reference sources | 55 | 37 | 18 | 8 | 3 |
| 15 | Digital libraries | 39 | 42 | 25 | 11 | 4 |
| 16 | Open access repositories | 28 | 35 | 33 | 18 | 7 |
| 17 | Google Scholar | 74 | 31 | 10 | 4 | 2 |
| 18 | Educational websites and portals | 63 | 36 | 14 | 6 | 2 |
| 19 | Multimedia resources | 51 | 39 | 20 | 8 | 3 |
| 20 | Online learning platforms | 44 | 42 | 23 | 9 | 3 |
| 21 | Library OPAC | 33 | 38 | 29 | 15 | 6 |
| 22 | Mobile library applications | 29 | 35 | 31 | 18 | 8 |
| 23 | Email-based academic resources | 46 | 40 | 24 | 8 | 3 |
| 24 | Government/institutional websites | 41 | 43 | 24 | 9 | 4 |
| 25 | Digital archives | 25 | 31 | 36 | 20 | 9 |
| 26 | Subject-specific databases | 34 | 39 | 29 | 14 | 5 |

Table 3 revealed the different digital information resources used by undergraduate students and the frequency of their usage. The results indicate that students make extensive use of various digital resources for academic and research purposes. Search engines recorded the highest daily usage with 78 respondents, indicating that platforms such as Google and Bing are the most frequently utilised digital information resources among students. Similarly, Google Scholar also recorded very high daily usage with 74 respondents, suggesting that students rely heavily on it for accessing scholarly materials and academic publications.

General Internet resources and e-lecture notes also showed high daily usage, with 71 and 67 respondents, respectively. This implies that students frequently depend on online materials provided through the Internet and lecture platforms to support their studies. Educational websites and portals equally recorded strong daily usage, reflecting the increasing integration of digital learning platforms into academic activities. In addition, online reference sources, multimedia resources, academic social networks, and online learning platforms recorded relatively high daily and weekly usage, indicating that students actively utilise interactive and technology-driven resources for learning and research.

However, some resources, such as CD-ROM databases, digital archives, and the Virtual Library of Nigeria, recorded lower daily usage and higher occasional or rare usage patterns. This suggests that these resources are either less accessible, less familiar, or less relevant to students compared to modern web-based platforms.

Finally, the findings reveal that undergraduate students frequently utilise digital and Internet-based information resources, particularly search engines, Google Scholar, educational websites, and e-learning materials. The dominance of daily and weekly usage patterns indicates that digital information resources have become essential tools for academic activities in private universities.

**Test of hypotheses**

**Hypothesis One**

$H_{01}$: There is no significant relationship between personal factors and the use of digital information resources by undergraduate students in private universities in Oyo State, Nigeria.

**Table 4:** Pearson Product-Moment Correlation between Personal Factors and Use of Digital Information Resources

| Variable | Mean | Std. Dev. | N | Df | r | p-value | Remark |
|---|---|---|---|---|---|---|---|
| Personal Factors | 3.21 | 0.81 | | | | | |
| Use of Digital Information Resources | 3.34 | 0.76 | 121 | 119 | 0.486** | 0.000 | Significant |

The results from Table 4 indicate a positive relationship between personal factors and the use of digital information resources among undergraduate students in private universities in Oyo State, Nigeria (r = 0.486). The p-value of 0.000 is

less than the significance level of 0.05, indicating that the relationship is statistically significant. Therefore, the null hypothesis is rejected.

This implies that personal factors such as motivation, confidence in using technology, previous exposure to computers, and ability to navigate digital platforms significantly influence students' use of digital information resources.

**Hypothesis Two**

$H_{02}$: There is no significant relationship between information literacy skills and the use of digital information resources by undergraduate students in private universities in Oyo State, Nigeria.

**Table 5.** Pearson Product-Moment Correlation between Information Literacy Skills and Use of Digital Information Resources

| Variable | Mean | Std. Dev. | N | Df | r | p-value | Remark |
|---|---|---|---|---|---|---|---|
| Information Literacy Skills | 3.24 | 0.79 | | | | | |
| Use of Digital Information Resources | 3.34 | 0.76 | 121 | 119 | 0.572** | 0.000 | Significant |

The results from Table 5 indicate that there is a positive relationship between information literacy skills and the use of digital information resources among undergraduate students (r = 0.572). The p-value of 0.000 is less than 0.05, which means that the relationship is statistically significant. Therefore, the null hypothesis is rejected.

This finding implies that students with higher information literacy skills are more likely to make effective use of digital information resources. Skills such as identifying information needs, evaluating information sources, developing search strategies, and using digital tools significantly enhance students' ability to access and utilise academic information resources.

The relatively high correlation coefficient further suggests that information literacy skills play a major role in determining how effectively students engage with digital information resources for learning and research activities.

**Hypothesis three**

**$H_{03}$:** There is no significant joint influence of personal factors and information literacy skills on the use of digital information resources by undergraduate students in private universities in Oyo State, Nigeria.

**Table 6:** Multiple Regression Analysis on the Joint Influence of Personal Factors and Information Literacy Skills on Use of Digital Information Resources

| | | | |
|---|---|---|---|
| **Multiple R** | | **=** | **0.641** |
| **Multiple $R^2$** | | **=** | **0.411** |
| **Adjusted $R^2$** | | **=** | **0.401** |
| **Standard Error of Estimate = 0.517** | | | |

| Source of Variation | Sum of Squares | Df | Mean Square | F-Ratio | Sig. |
|---|---|---|---|---|---|
| Regression | 42.816 | 2 | 21.408 | 57.214 | 0.000 |
| Residual | 44.158 | 118 | 0.374 | | |
| Total | 86.974 | 120 | | | |

The results from Table 6 show a significant joint influence of personal factors and information literacy skills on the use of digital information resources among undergraduate students in private universities in Oyo State, Nigeria (R = 0.641, $p < 0.05$). The adjusted $R^2$ value of 0.401 indicates that approximately 40.1% of the variation in the use of digital information resources can be explained jointly by personal factors and information literacy skills, while the remaining variation may be attributed to other variables not included in the model.

Furthermore, the analysis of variance produced an F-ratio of 57.214, which is statistically significant at the 0.05 level ($p < 0.05$). Therefore, the null hypothesis is rejected.

This finding implies that personal factors and information literacy skills collectively contribute significantly to students' use of digital information resources. In practical terms, students who possess positive personal attributes alongside strong information literacy competencies are more likely to utilise digital information resources effectively for academic and research purposes.

**Discussion of Findings**

The findings of this study revealed that personal factors significantly influence the use of digital information resources among undergraduate students in private universities in Oyo State, Nigeria. The result obtained from Research Question One showed that respondents generally agreed that factors such as motivation, confidence in using computers, prior experience with technology, and ability to navigate digital platforms positively influence their use of digital information resources. The high mean scores recorded for confidence in computer usage and previous exposure to digital technologies suggest that students who possess technological confidence are more likely to utilise digital resources effectively for academic purposes. This finding agrees with the study of Aina and Oladokun (2022), who reported that students with positive attitudes towards technology demonstrate higher levels of digital resource utilisation in tertiary institutions.

The findings further showed that motivation plays an important role in determining students' willingness to engage with digital information resources. Respondents indicated that enjoyment in using digital technologies and preference for digital resources over printed materials contribute significantly to their academic information-seeking behaviour. This implies that students who are intrinsically motivated towards technology tend to explore digital platforms more actively for learning and research activities. The finding corroborates the work of Yusuf and Balogun (2021), who observed that students' interest and motivation towards technology significantly influence their frequency of use of electronic information resources in Nigerian universities.

The study also revealed that students who can independently navigate digital libraries and utilise search strategies effectively are more likely to access academic materials online. This suggests that technological competence and self-efficacy contribute positively to digital resource utilisation. This finding implies that students who lack confidence or exposure to technology may experience difficulties in accessing relevant academic information. This finding is consistent with the position of Issa *et al.* (2020), who argued that computer literacy and digital confidence are essential determinants of effective utilisation of electronic information resources among university students.

The findings relating to information literacy skills revealed that undergraduate students in private universities possess relatively high levels of information literacy competence. The respondents generally agreed that they are able to identify information needs, locate relevant information sources, evaluate information credibility, and use digital tools to organise academic information. The high level of agreement recorded for understanding the need for information resources in research indicates that students appreciate the importance of information in academic and research activities. This finding supports the study of Adeleke and Nwalo (2021), who found that information literacy competence significantly improves students' academic performance and research effectiveness. Similarly, the respondents demonstrated competence in citation and referencing practices, information organisation, and use of library databases. This suggests that many students have acquired the necessary academic information management skills required for effective learning in a digital environment. The ability to evaluate the credibility of information sources also indicates that students are becoming increasingly aware of the importance of reliable and scholarly information in academic work. This finding aligns with the work of Okiki and Asiru (2020), who noted that information literacy skills enhance students' ability to assess the quality and reliability of online academic resources. However, the study further revealed that some respondents still experience challenges in developing effective search strategies and distinguishing between scholarly and non-scholarly sources. Although these items recorded acceptable mean values, the relatively lower agreement responses indicate that there is still room for improvement in students' information literacy competencies. This suggests the need for more intensive information literacy instruction initiatives within private universities. The finding agrees with the study of Nwosu and Chukwuemeka (2022), who emphasised that continuous information literacy training is necessary for improving students' digital research capabilities and academic resource utilisation.

The findings on digital information resources used by undergraduate students revealed that search engines, Google Scholar, e-lecture notes, educational websites, and general Internet resources are among the most frequently used digital platforms. The high daily usage recorded for search engines and Google Scholar suggests that students heavily depend on easily accessible online platforms for obtaining academic information. This finding supports the study of Salaam and Adegbore (2021), who found that university students increasingly rely on search engines and open-access scholarly platforms because of their convenience and accessibility. Furthermore, the findings revealed that e-lecture notes and educational websites recorded high levels of daily usage among respondents. This suggests that digital learning resources

have become an integral part of academic activities in private universities. The increased dependence on online learning materials may also be attributed to advancements in educational technology and Internet accessibility. This finding corroborates the work of Ezeani and Igwesi (2020), who observed that digital learning platforms have transformed students' access to academic information and improved flexible learning opportunities in higher institutions.

The study also found that some digital resources, such as CD-ROM databases, digital archives, and the Virtual Library of Nigeria, recorded relatively lower usage compared to Internet-based resources. This implies that students tend to prefer modern web-based information systems that provide quick and flexible access to academic materials. The lower utilisation of some specialised databases may also be linked to inadequate awareness, limited accessibility, or a lack of technical skills required for their usage. This finding agrees with Afolabi and Abidoye (2023), who reported that students often prefer freely accessible Internet resources to specialised databases that require technical knowledge or institutional subscriptions.

The findings from Hypothesis One revealed a significant relationship between personal factors and the use of digital information resources among undergraduate students in private universities in Oyo State, Nigeria. The positive correlation obtained indicates that students' personal characteristics, such as confidence, motivation, and technological exposure, significantly determine the extent to which they utilise digital academic resources. This implies that students who possess stronger technological confidence are more likely to engage effectively with digital information systems. This finding supports the study of Adeyemi and Olalekan (2021), who established that personal attitudes and technological readiness significantly influence students' utilisation of electronic information resources. In addition, the significance of the relationship suggests that students' behavioural disposition towards technology cannot be separated from their digital resource utilisation patterns. The implication is that universities seeking to improve students' use of digital information resources must also pay attention to students' personal and psychological readiness towards technology adoption. This finding aligns with the Technology Acceptance Theory, which emphasises that perceived ease of use and user confidence influence technology utilisation behaviour (Davis, 1989).

The findings from Hypothesis Two revealed a significant relationship between information literacy skills and the use of digital information resources. This indicates that students who possess stronger information literacy competencies are more capable of locating, evaluating, and effectively utilising digital academic resources. The relatively high correlation coefficient further suggests that information literacy skills are major determinants of successful digital information utilisation among undergraduate students. This finding agrees with the study of Bruce (2018), who argued that information literacy competence is fundamental to effective learning and digital resource usage in higher education.

Furthermore, the findings imply that students who understand search techniques, evaluation of information sources, and citation practices are more likely to maximise the benefits of digital information systems. This highlights the importance of information literacy education in promoting academic excellence and effective research practices among university students. The finding also supports the work of Lloyd (2020), who maintained that information literacy skills enable students to interact critically and meaningfully with digital information environments.

The result of Hypothesis Three further revealed that personal factors and information literacy skills jointly influence the use of digital information resources among undergraduate students. The regression analysis showed that both variables significantly contribute to students' digital resource utilisation, although information literacy skills recorded a relatively stronger influence. This suggests that while students' motivation and technological confidence are important, their ability to identify, evaluate, and utilise information effectively plays a more dominant role in determining their usage of digital information resources. This finding is consistent with the study of Julien and Genuis (2019), who found that information literacy competence remains one of the strongest predictors of effective digital information usage among students. The joint contribution of personal factors and information literacy skills also indicates that digital resource utilisation is influenced by both behavioural and information literacy competencies. This means that students require not only positive attitudes towards technology but also adequate information management skills to maximise digital learning opportunities. The implication is that universities should focus on strengthening both technological orientation and information literacy training programmes. This finding agrees with the position of ACRL (2020), which emphasised that effective information usage in higher education depends on the integration of digital competence and information literacy skills.

Finally, the findings of this study demonstrate that effective utilisation of digital information resources among undergraduate students is a product of multiple interacting factors, particularly personal characteristics and information literacy competencies. The study therefore underscores the need for continuous information literacy education, digital skills training, and institutional support systems capable of improving students' engagement with digital academic resources for enhanced learning and research outcomes.

## Conclusion

Based on the findings of this study, it can be concluded that the effective use of digital information resources among undergraduate students in private universities in Oyo State, Nigeria, is influenced by both personal factors and information literacy skills. The study established that students who possess positive attitudes towards technology, confidence in computer usage, and previous exposure to digital technologies are more likely to utilise digital academic resources effectively. The study further concludes that information literacy skills play a very important role in enhancing students' ability to identify, evaluate, access, and utilise digital information resources for academic and research purposes. Students who possess stronger information literacy competencies demonstrate better engagement with digital learning platforms and academic information systems.

In addition, the study revealed that modern digital information resources such as Google Scholar, search engines, educational websites, and e-learning materials have become essential tools for learning and research among undergraduate students. This indicates that digital information systems now play a central role in supporting academic activities within higher institutions. The study also concludes that although personal factors significantly influence digital resource utilisation, information literacy skills have a relatively stronger influence on students' effective use of digital information resources. Therefore, improving students' information literacy competencies remains essential for enhancing digital learning and academic performance in private universities.

Finally, the study concludes that effective utilisation of digital information resources requires a combination of positive personal disposition and adequate information literacy skills. Consequently, institutions of higher learning must continue to encourage positive personal disposition and the development of information literacy to improve students' academic engagement and research productivity.

## Recommendation

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

1. Private universities should organise regular information literacy training programmes and workshops to improve students' ability to search, evaluate, and utilise digital information resources effectively.
2. University libraries should provide continuous information literacy instruction programmes aimed at improving students' awareness and utilisation of available digital information resources.
3. Institutions should invest in adequate digital infrastructure, such as reliable Internet connectivity, modern computer systems, and accessible digital library platforms to enhance students' access to academic information resources.

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