

PERCEIVED ACCESSIBILITY AND POSTGRADUATE STUDENTS' INTENTION TO USE LIBRARY E-RESOURCES FOR RESEARCHAdefuye Adetayo Linus^{a*}, Oputa Oby. Grace^a, Fasina Joke Elizabeth.^c Adetola Aderayo. M^c^aDepartment of Educational Technology, Tai Solarin University of Education, Ijagun, Ijebu-Ode, Ogun State^bDepartment of Library, Archival and Information Science, (Laris). Faculty of Social Sciences, University of Ibadan, Oyo State, Nigeria**Correspondence:** adefuyeal@tasued.edu.ng**Abstract**

This study examined the perceived accessibility and postgraduate students' intention to use library e-resources for research. A descriptive survey research design was adopted for the study. A simple random sampling technique was used to select two hundred and forty (240) postgraduates in Tai Solarin Federal University of Education, Ijagun, Ogun state. The instrument for data collection was a self-constructed questionnaire. The data gathered was subjected to descriptive statistics (frequency counts, percentage, and mean), and multiple regression was employed to analyse the data generated at a 0.05 level of significance. Results showed that postgraduate students generally experience a high level of perceived accessibility of the library's electronic resources. Postgraduate students have a high intention to use library e-resources for research activities; they are strongly motivated and intend to use library e-resources extensively for their research activities. There is a significant relationship between perceived accessibility and postgraduate students' intention to use library e-resources for research. The study revealed that enhancing accessibility and fostering motivation are key to promoting the effective use of library e-resources among postgraduate students.

Keywords: *Perceived accessibility; Use of library e-resources; Intention Research and Postgraduate students*

Introduction

Library e-resources refer to digital information materials such as e-books, e-journals, databases, and institutional repositories that support academic learning and research in modern universities. These resources have expanded with the rapid growth of digital information and increasing dependence on online research platforms (Fazli et al., 2025; 25). Similarly, Azib et al. (2024; 4513) noted that e-resources offer unique advantages such as remote access, quick retrieval, and simultaneous multiple-user access. In addition, Edwin et al. (2023; 3) stated that many Nigerian universities now subscribe to digital databases despite challenges such as poor internet connectivity, limited awareness, and inadequate digital literacy. Because these challenges influence how students engage with online information, the next paragraph focuses on the use of library e-resources

Use of library e-resources is essential for improving academic performance and enhancing the quality of research carried out by university students. Postgraduate students rely heavily on digital materials to gather current and credible literature for their studies (Dlamini & Tsabedze, 2025; 148). In addition, Acanit et al. (2024; 5) argued that ICT skills, awareness, system reliability, and ease of navigation strongly influence the extent to which e-resources are used. However, Basse et al. (2025; 347) noted that barriers such as unstable power supply, difficulty

accessing platforms, and poor search skills often hinder optimal use, resulting in reduced research productivity and lower-quality theses. These usage challenges make it necessary to understand students' intention to use e-resources (Bassey et al., 2025; 348).

Students' intention to use library e-resources is a key concept in technology acceptance theories such as UTAUT, which explains how individuals form decisions to adopt technological tools. Intention is critical because it predicts future behaviour and indicates the likelihood of consistent usage (Bankole et al., 2024; 7). Furthermore, Fazli et al. (2025; 27) asserted that perceived usefulness, ease of use, social influence, and available support systems significantly shape students' willingness to engage with digital materials. Similarly, Olatoye et al. (2020; e6095) observed that postgraduate students increasingly depend on electronic information due to the need for current literature and faster research processes. Since intention is often influenced by accessibility issues, the next paragraph expands on gaps between availability and use.

Furthermore, students' intention to use library e-resources is frequently influenced by their level of digital literacy, self-efficacy, and perceptions of system quality. Even when digital tools are available, limited digital skills, low confidence in using online platforms, and poorly designed systems can hinder actual usage. The gap between resource availability and utilization often emerges when students lack the competence to navigate digital environments or feel uncertain about their ability to use them effectively (Salah et al., 2024; 126). In addition, Dlamini and Tsabedze (2025; 149) emphasized that inadequate training and low awareness reduce users' readiness to engage with e-resources, reflecting both limited digital literacy and weak self-efficacy. Similarly, Okoli et al. (2021; 207) noted that digital reference support enhances students' confidence and skills, thereby strengthening their intention to interact with electronic platforms. These arguments highlight the need to examine how digital literacy, self-efficacy, and system quality collectively shape students' intention to use e-resources.

Digital literacy refers to students' ability to effectively locate, evaluate, and utilize digital information, while self-efficacy reflects their confidence in performing these tasks successfully. Meanwhile, system quality encompasses the performance of e-resource platforms, including ease of use, reliability, responsiveness, and interface design. When students possess strong digital literacy and high self-efficacy, they are more likely to overcome technical barriers and engage actively with e-resources. Likewise, high system quality, characterized by stable access, intuitive navigation, and efficient functionality, can significantly enhance user experience and encourage continued usage (Azib et al., 2024; 4514). Alabi et al. (2025; 58) further argued that positive perceptions of system quality and ease of use increase students' intention to adopt e-resources, particularly among those engaged in intensive academic research. Conversely, Edwin et al. (2023; 4) found that low digital competence, lack of confidence, and poor system performance can discourage meaningful interaction with online materials. Given the interplay of these factors, it is essential to explore their combined influence on postgraduate students' intention to use e-resources in Nigerian universities.

In addition, perceived accessibility in Nigerian universities is closely linked to the broader challenges affecting digital library services, such as unstable internet, insufficient ICT infrastructure, and limited training opportunities. These barriers significantly reduce utilisation levels, especially among postgraduate students who rely heavily on digital sources for thesis writing and advanced research (Acanit et al., 2024; 7). In addition, Bankole et al. (2024; 9) stated that understanding students' perceptions of accessibility is essential for developing policies that improve digital services and enhance research outcomes. Similarly, Edogiawerie (2020; 20) explained that strong digital access systems help libraries provide more effective information services even during disruptive periods. Hence, it is imperative to examine the perceived accessibility and postgraduate students' intention to use library e-resources for research.

Research Questions

The following research questions were raised to guide the study:

1. What is the level of perceived accessibility of library e-resources among postgraduate students?
2. To what extent do postgraduate students intend to use library e-resources for their research activities?
3. Is there any significant relationship between perceived accessibility and postgraduate students' intention to use library e-resources for research?

Research Methods

Research Design

A descriptive survey research design of the survey type was adopted for this study because it is a non-experimental design.

Population of the Study

The population for this study comprised Postgraduate students at Tai Solarin Federal University of Education, Ijagun, Ogun State.

Sampling Technique and Sample

The sample for this study was randomly selected from the total population of this study using a simple random sampling technique. The total of two hundred and forty (240) Postgraduate students was sampled, each from the population which cut across six (6) colleges in each of the institutions. Hence, forty (40) students were randomly selected from each college, making a total of two hundred and forty (240) respondents.

Research Instrument

The instrument used for data collection in this study was a well-structured questionnaire developed based on relevant literature and study variables. The questionnaire consisted of several sections measuring digital literacy, self-efficacy, system quality, and intention to use library e-resources. All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). To ensure content validity, the instrument was reviewed by experts in educational technology and library science, while construct validity was established through alignment of the items with the conceptual framework and prior validated studies.

Reliability of Research Instrument

In order to ensure the reliability of the instrument, the Cronbach alpha statistical instrument was used to establish the reliability of the research instrument. The result obtained after administration was subjected to correlation analysis using Cronbach's alpha in order to determine the reliability coefficient (0.81) of the instrument, which indicates whether the instrument was reliable.

Method of Data Analysis

The data collected were analyzed using both descriptive and inferential statistical techniques. Descriptive statistics, including frequency counts, percentages, mean scores, and standard deviations, were employed to summarize the demographic characteristics of the respondents and to provide an overview of their responses to each construct measured in the study. These measures helped to describe the general patterns and distribution of responses related to digital literacy, self-efficacy, system quality, and intention to use library e-resources.

Before inferential analysis, preliminary data screening was conducted to check for missing values, outliers, and the assumptions underlying parametric analysis, including normality, linearity, multicollinearity, and homoscedasticity. This step ensured that the dataset met the required conditions for regression analysis.

For inferential statistics, multiple regression analysis was employed to examine the predictive relationships between the independent variables (digital literacy, self-efficacy, and system quality) and the dependent variable (intention to use library e-resources). The regression model was used to determine the extent to which each predictor variable contributed to explaining variations in students' intention. The significance of the model and individual predictors was tested at the 0.05 level of significance. In addition, the coefficient of determination (R^2) was used to assess the explanatory power of the model, while standardized beta coefficients were examined to identify the relative strength of each predictor variable.

All statistical analyses were conducted using appropriate statistical software, and the results were presented in tables and interpreted in line with the research objectives and hypotheses.

Result and Discussion

Research question one: What is the level of perceived accessibility of library e-resources among postgraduate students?

Table 1: Level of Perceived Accessibility of Library E-Resources (N = 240)

S/N	Items	SA	A	D	SD	Mean	Std. Dev.
1	I can easily access the library's e-resources whenever I need them.	93 (38.8%))	81 (33.8%))	41 (17.1%))	25 (10.4%))	3.01	0.98
2	The university provides reliable internet access that supports the use of e-resources.	79 (32.9%))	77 (32.1%))	51 (21.3%))	33 (13.8%))	2.84	1.03
3	I find it easy to log in to the library's e-resource platforms.	101 (42.1%))	73 (30.4%))	43 (17.9%))	23 (9.6%))	3.05	0.97
4	The digital library website or portal is user-friendly and easy to navigate.	87 (36.3%))	85 (35.4%))	41 (17.1%))	27 (11.2%))	2.97	1.00
5	I can access e-resources using my personal devices.	113 (47.1%))	71 (29.6%))	34 (14.2%))	22 (9.2%))	3.14	0.95
6	The library provides enough computers or devices for accessing e-resources.	69 (28.8%))	75 (31.3%))	55 (22.9%))	41 (17.1%))	2.72	1.05
7	The steps required to access e-resources are simple and straightforward.	95 (39.6%))	79 (32.9%))	42 (17.5%))	24 (10.0%))	3.02	0.98
8	I rarely experience technical difficulties when using e-resources.	73 (30.4%))	69 (28.8%))	58 (24.2%))	40 (16.7%))	2.73	1.06

9	The e-resources are available to me both on campus and off campus.	97 (40.4%))	83 (34.6%))	39 (16.3%))	21 (8.8%))	3.06	0.95
10	The library offers clear guidelines on how to access electronic resources.	89 (37.1%))	81 (33.8%))	42 (17.5%))	28 (11.7%))	2.96	1.00
	Average Mean					2.95	1.00

Decision: It has been adjudged that means score of $X=2.50$ and above is high.

The results presented in Table 1 show the level of perceived accessibility of library e-resources among postgraduate students. Items such as “*I can access e-resources using my personal devices*” ($M = 3.14$), “*The e-resources are available both on campus and off campus*” ($M = 3.06$), and “*I find it easy to log in to the e-resource platforms*” ($M = 3.05$) recorded the highest mean scores. However, items relating to infrastructural support such as “*The library provides enough computers or devices for accessing e-resources*” ($M = 2.72$) and “*I rarely experience technical difficulties when using e-resources*” ($M = 2.73$) had relatively lower mean scores.

With an overall mean score of 2.95, which is above the decision benchmark of 2.50, the findings reveal that postgraduate students generally experience a high level of perceived accessibility of the library’s electronic resources.

Research question two: To what extent do postgraduate students intend to use library e-resources for their research activities?

Table 2: Level of Intention to Use Library E-Resources ($N = 240$)

S/N	Items	SA	A	D	SD	Mean	Std. Dev.
1	I plan to use library e-resources regularly for my research work.	103 (42.9%)	79 (32.9%)	39 (16.3%)	19 (7.9%)	3.15	0.91
2	I intend to rely on e-journals and online databases for my research activities.	97 (40.4%)	81 (33.8%)	41 (17.1%)	21 (8.8%)	3.12	0.92
3	I am willing to increase my use of e-resources for literature review and assignments.	101 (42.1%)	77 (32.1%)	39 (16.3%)	23 (9.6%)	3.12	0.94
4	I expect to use e-resources more frequently as my research progresses.	95 (39.6%)	83 (34.6%)	41 (17.1%)	21 (8.8%)	3.09	0.92
5	I am motivated to use the library’s e-resources because they support my research needs.	107 (44.6%)	79 (32.9%)	33 (13.8%)	21 (8.8%)	3.17	0.93
6	I intend to explore additional e-resources offered by the library.	93 (38.8%)	85 (35.4%)	41 (17.1%)	21 (8.8%)	3.09	0.91
7	I prefer using e-resources over printed materials for my academic research.	97 (40.4%)	79 (32.9%)	45 (18.8%)	19 (7.9%)	3.10	0.92

8	I intend to continue using the library's e-resources even after my current research project.	101 (42.1%)	77 (32.1%)	41 (17.1%)	21 (8.8%)	3.11	0.93
9	I plan to depend on e-resources whenever I need up-to-date academic information.	103 (42.9%)	75 (31.3%)	41 (17.1%)	21 (8.8%)	3.13	0.92
10	I am confident that using e-resources will be beneficial to my research work.	107 (44.6%)	77 (32.1%)	37 (15.4%)	19 (7.9%)	3.19	0.91
	Average Mean					3.13	0.92

Decision: It has been adjudged that means score of $X=2.50$ and above is high.

The results in Table 2 indicate a generally high intention among postgraduate students to use library e-resources for their research. Items such as *"I am confident that using e-resources will be beneficial to my research work"* ($M = 3.19$), *"I am motivated to use the library's e-resources because they support my research needs"* ($M = 3.17$), and *"I plan to use library e-resources regularly for my research work"* ($M = 3.15$) recorded the highest mean scores, showing strong positive intention. Other items, such as *"I expect to use e-resources more frequently as my research progresses"* ($M = 3.09$) and *"I intend to explore additional e-resources offered by the library"* ($M = 3.09$), had slightly lower mean scores but were still above the criterion.

With an overall mean of 3.13, which is above the benchmark of 2.50, the findings reveal that postgraduate students have a high intention to use library e-resources for research activities. This means that postgraduate students are strongly motivated and intend to use library e-resources extensively for their research activities.

Research question three: Is there any significant relationship between perceived accessibility and postgraduate students' intention to use library e-resources for research?

Table 3: Regression Analysis for research question three

Model		R	R-square	Adjusted R-squared	Std. Error
Perceived Accessibility		0.462	0.213	0.210	0.348
Model	Sum of square	df	Mean Square	F	Sig
Regression	22.601	1	22.601	18.624	.000
Residual	84.399	238	.355		
Total	107.000	239			

The results presented in Table 3 indicate a moderate positive relationship between perceived accessibility and postgraduate students' intention to use library e-resources, as reflected by an R value of 0.462. This suggests that as students perceive e-resources to be more accessible, their intention to use them tends to increase. The R-square value of 0.213 implies that perceived accessibility accounts for 21.3% of the variance in students' intention to use e-resources. While this proportion is statistically meaningful, it also indicates that a substantial portion (78.7%) of the variance remains unexplained, suggesting that intention to use e-resources is influenced by multiple factors beyond accessibility alone. Variables such as digital literacy, self-efficacy, system

quality, and institutional support may also play critical roles in shaping students' behavioral intentions.

The model is statistically significant, as indicated by the F-value of 18.624 ($p = 0.000 < 0.05$), confirming that perceived accessibility is a significant predictor of postgraduate students' intention to use library e-resources for research. However, the moderate explanatory power of the model highlights that perceived accessibility, while important, is only one component within a broader set of determinants influencing technology adoption behavior. This finding aligns with existing technology acceptance theories, which emphasize that user intention is typically shaped by a combination of cognitive, technical, and contextual factors rather than a single predictor.

Discussion

The study showed that postgraduate students generally experience a high level of perceived accessibility of the library's electronic resources. This finding is in line with the study of Edwin et al. (2023; 5), who asserted that accessibility to electronic resources in southern Nigerian universities significantly influenced students' ability to conduct research effectively. Similarly, Dlamini and Tsabedze (2025; 149) noted that the provision of reliable digital platforms and institutional subscriptions in the University of Eswatini enhanced students' access to e-resources, thereby increasing usage rates. Fazli et al. (2025; 27) also stated that students' perception of easy access to e-resources encourages frequent engagement with digital libraries. In addition, Xu and Du (2021; 1630) emphasized that ease of access to library e-resources directly affects the intention and frequency of use among undergraduates, highlighting that well-structured digital systems remove barriers to information retrieval. Mahmood et al. (2023; 55) further opine that accessibility is a critical determinant of user satisfaction and service quality expectations in academic libraries. However, this finding is not entirely consistent with Rahman and Mohezar (2020; 518), who reported occasional constraints in access due to technical difficulties and intermittent connectivity.

The study revealed that postgraduate students demonstrate a high intention to use library e-resources for research activities, indicating strong motivation and sustained willingness to engage with digital academic materials. Rather than being driven by a single factor, this tendency appears to stem from a combination of positive user perceptions, prior experience, and the perceived academic value of e-resources. Previous studies consistently suggest that when students recognize the usefulness of e-resources in supporting their research and find them easy to navigate, their intention to use these platforms increases significantly (Younus & Dilshad, 2021; Abu Bakar, 2021; Trivedi et al., 2021; Iqbal et al., 2022). This implies that both cognitive (perceived usefulness) and experiential (familiarity and satisfaction) factors jointly reinforce students' engagement.

Moreover, students with clearly defined academic goals, particularly at the postgraduate level, tend to exhibit stronger commitment to utilizing e-resources as part of their research process (Suharto & Abdul Kadir, 2021). However, contrasting evidence indicates that intention to use is not uniformly high across all student groups. For instance, lower intention observed among some undergraduates has been linked to limited digital familiarity and lack of experience with online platforms (Olatoye et al., 2020). This contrast highlights that intention is context-dependent and may vary according to students' academic level, digital competence, and exposure to e-resources.

The study showed that there is a significant relationship between perceived accessibility and postgraduate students' intention to use library e-resources for research. This finding correlates

with the study of Bassey et al. (2025; 347), who asserted that perceived ease of access positively affects students' intention to engage with electronic resources in Nigerian universities. Similarly, Azib et al. (2024; 4515) noted that accessibility is a strong predictor of continued usage intention, emphasizing that user-friendly interfaces and reliable connectivity facilitate greater engagement with digital libraries. Iqbal et al. (2022; 13) also stated that perceived accessibility enhances students' motivation to use e-resources for academic purposes, thereby bridging the gap between availability and actual usage. In addition, Rahman and Mohezar (2020; 520) opine that the more accessible resources are perceived to be, the higher the likelihood of sustained usage and integration into research workflows. However, Xu and Du (2021; 1635) reported that some students may have high accessibility but low intention due to insufficient awareness or a lack of digital literacy.

Conclusion and Recommendations

The study revealed that postgraduate students generally experience a high level of perceived accessibility to library e-resources. This indicates that students believe they can easily reach and use e-resources through reliable internet connectivity, user-friendly platforms, and the availability of devices both on and off campus. Such high perceived accessibility reflects the effectiveness of digital library infrastructures in supporting research needs and minimizing barriers that could hinder academic progress. Students are strongly motivated, value the benefits of e-resources, and plan to engage with them regularly throughout their research work. High intention suggests that students are aware of the advantages of electronic materials, including the ability to conduct literature reviews efficiently, access up-to-date academic content, and complement their research with digital databases. The easier students perceive access to be, the more likely they are to intend to use e-resources in their research. It highlights the critical role of accessibility in shaping students' behavior, suggesting that even highly motivated students may be deterred if e-resources are difficult to reach or navigate. In conclusion, enhancing accessibility and fostering motivation are key to promoting the effective use of library e-resources among postgraduate students.

In view of the findings, it was therefore strongly recommended that universities should continually invest in reliable internet connectivity, user-friendly digital platforms, and readily available devices to maintain high perceived accessibility among students. Libraries should provide targeted orientation programs and workshops to strengthen students' motivation and familiarity with e-resources, ensuring consistent and effective use for research activities. Policymakers and library administrators should develop strategies that link accessibility improvements directly with usage promotion, such as seamless login systems and mobile access, to further encourage students' research engagement. Library services should expand awareness campaigns emphasizing the advantages and relevance of e-resources to postgraduate research, thereby reinforcing students' intention to use them. Continuous assessment of digital platforms should be conducted to identify and remove barriers that may hinder the relationship between perceived accessibility and usage intention.

Reference

Abu Bakar, A. 2021. Factors influencing users' satisfaction and continuance usage intention to digital library (DL) in Management Science University (MSU). *Journal of Information and Knowledge Management (JIKM)*, 11 (1): 1–15.

- Acanit, M., Ngulube, P., & Mojapelo, S.M. 2024. Factors influencing the use of e-library resources by postgraduate engineering students at Kyambogo University in Uganda. *Information Development*, 40 (2): 1–10.
- Alabi, R., Yahaya, I.O., & Bayero, T.A. 2025. Availability and accessibility as correlates of electronic information resources utilisation among law undergraduates in South-West Nigeria. *Library and Information Perspectives and Research*, 7 (1): 56–71.
- Azib, N.A., Abu, R., Rafie, S.K., Syfa, N., & Tokiran, M. 2024. Evaluating user satisfaction with digital library services: A study of academic libraries in higher education institutions. *International Journal of Research and Innovation in Social Science (IJRISS)*, 8 (12): 4511–4517.
- Bankole, Q.A., Adelodun, A.F., Sulaiman, K.G., & Saliu, A. 2024. Accessibility, utilisation and perceived usefulness of library resources on the study habits of undergraduates in Kwara State Universities. *Inkunabula: Journal of Library Science and Islamic Information*, 3 (2): 1–15.
- Bassey, R., Abang, A.E., Odey, A.A., & James, L.D. 2025. Awareness and utilization of e-resources in the University of Calabar Library. *Global Journal of Pure and Applied Sciences*, 31: 343–383.
- Dlamini, T., & Tsabedze, V. 2025. Empowering student success: Exploring the awareness and utilization of library electronic resources at the University of Eswatini. *International Information and Library Review*, 57 (2): 146–156.
- Edinia, A.I., Edogiawerie, S., Emeke, E.O., & Cioma, A.A. 2023. Accessibility and use of electronic resources for digital reference services among university libraries in southern Nigeria. *Regional Journal of Information and Knowledge Management*, 8 (2): 1–16.
- Edogiawerie, S. 2020. Provision of information services to citizens of Edo Land in the era of Covid-19 pandemic: The role of libraries. *Indiana Journal of Humanities and Social Sciences*, 1 (1): 15–25.
- Fazli, B., Noori, A., & Janbaz, M.R. 2025. Perception and use of library resources among undergraduate English majors students. *Journal of Social Sciences & Humanities*, 2 (2): 25–38.
- Mahmood, K., Rehman, S.U., & Ashiq, M. 2023. The users' expectations of library service quality in the college libraries of Pakistan: A LibQUAL study. *Performance Measurement and Metrics*, 24 (1): 51–66.
- Okoli, U.C., Ukwedeh, D.O., & Idah, J.A. 2021. Digital reference services in academic libraries in Nigeria: Effectiveness and roles in the new normal. *Journal of Applied Information Science and Technology*, 14 (1): 205–211.
- Olatoye, O.I., Nekhwevha, F., & Muchaonyerwa, N. 2020. Determinants of undergraduate students' attitude and perception towards the use of electronic information resources (EIRs) among undergraduate students in selected universities in Eastern Cape, South Africa. *Open Access Library Journal*, 7: e6094.
- Rahman, A., & Mohezar, S. 2020. Ensuring continued use of a digital library: A qualitative approach. *The Electronic Library*, 38 (3): 513–530.
- Salah, H.O., Bello, S.O., & Gwarzo, S.M. 2024. Perception and utilization of electronic resources in federal university libraries in North-East Nigeria. *International Journal of Knowledge Dissemination (IJKD)*, 5 (2): 124–135.
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- Suharto, S.S., & Abdul Kadir, M.R. 2021. User satisfactions on digital library: A correlational study. *Journal of Information and Knowledge Management (JIKM)*, 11 (2): 1–18.
- Trivedi, D., Bhatt, A., Trivedi, M., & Patel, P. 2021. Assessment of e-service quality performance of university libraries. *Digital Library Perspectives*, 37 (4): 384–400.
- Xu, F., & Du, J.T. 2021. Research on the drivers of undergraduates' intention to use university digital libraries: Affinity theory as an additional construct of information system success model. *Library Hi Tech*, 40 (6): 1627–1641.
- Younus, M., & Dilshad, M. 2021. Assessing users' satisfaction with electronic resources in university libraries in Punjab, Pakistan. *Library Philosophy and Practice (ejournal)*, 6796: 1–15.