INFLUENCE OF SELF-EFFICACY OF LIBRARY AND INFORMATION SCIENCE STUDENTS ON LEARNING OUTCOMES IN TERTIARY INSTITUTIONS AT OSUN STATE, NIGERIA

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Abstract

The learning outcomes of Library and Information Science (LIS) students in tertiary institutions in Osun State serve as key indicators of educational quality and professional preparedness. However, initial investigations reveal a decline in students' practical competencies, particularly in organizing information, leading to challenges in employability and professional performance. As a result, some LIS graduates remain unemployed, while others struggle to manage Information and Communication Libraries effectively. This deficiency has prompted some institutions to hire non-professional digital librarians, potentially affecting the integrity of the LIS field. Despite extensive research on learning outcomes and self-efficacy, there remains a gap in understanding the specific impact of self-efficacy on LIS students' learning outcomes in Osun State. This study employed a descriptive survey research design, targeting 3,500 LIS students across four universities and three polytechnics in Osun State. A sample of 346 students was selected, and data was collected using a structured questionnaire. Descriptive statistics were used to interpret the results, including frequency distribution, percentage, and mean analysis. Findings indicate a significant positive relationship between self-efficacy and learning outcomes. Additionally, students' ability to initiate, select, and formulate information during the search process significantly influenced their academic performance. The study recommends that LIS students enhance their self-efficacy to improve their professional competence and employability. Lecturers and policymakers should prioritise strategies that foster self-efficacy, while curriculum revisions should emphasise practical training. Employers should also recognise the potential of LIS graduates to mitigate biases affecting hiring practices. These efforts will collectively improve learning outcomes and the professional standing of LIS graduates.

Keywords: Learning Outcomes, Self-efficacy, LIS students, Tertiary Institutions, Osun State

Introduction

Learning outcomes are a critical concern in higher education, as they serve as key indicators of the effectiveness and success of academic programs. The value and attainment of any educational program are ultimately determined by the quality of its graduates, which is directly linked to the learning outcomes they achieve. These outcomes are reflected in the knowledge, skills, and competencies that students acquire and demonstrate throughout their academic journey. Fundamentally, learning outcomes encapsulate changes in students' behaviour and understanding as a result of their learning experiences. They represent measurable indicators of knowledge, skills, and attitudes that students are expected to develop and exhibit upon completing a course or program. Ideally, students should be able to demonstrate concrete evidence of their acquired skills and competencies, which should translate into observable behavioural changes.

In contemporary education, learning outcomes have become central to assessing the quality and effectiveness of academic programs. A well-structured and functional educational system is evaluated based on the calibre of its graduates, whose performance can be measured through learning outcomes and academic achievements (Li et al., 2020). Learning outcomes are typically categorised into three domains**: cognitive, affective, and psychomotor skills. Cognitive learning outcomes** pertaining to the ability to acquire, recognise, and apply knowledge while developing intellectual skills and reasoning abilities (Ekpentong et al., 2023). **Affective and psychomotor learning outcomes,** classified as non-cognitive, focus on aspects such as changes in attitude, critical thinking, problem-solving abilities, creativity, and the demonstration of practical competencies (Ikhsan, 2019).

In Library and Information Science (LIS) education, learning outcomes refer to undergraduate students' ability to apply and express the knowledge and skills they have acquired during their academic training. This encompasses their competence, capabilities, and achievements, which should be evident both during and after their learning experiences.

Self-efficacy plays a crucial role in shaping students' learning experiences and academic performance. Awotola and Olowolagba (2018) describe self-efficacy as a key psychological mechanism that influences the interaction between internal cognitive processes and external environmental stimuli, ultimately affecting human behaviour. Individuals with a strong sense of self-efficacy tend to exert greater effort and persistence, leading to successful outcomes, such as improved academic performance and the ability to effectively access and utilise electronic information resources.

Bandura's (1986) **social learning theory** positions self-efficacy as a fundamental concept, defining it as an individual's capacity to cope with and overcome challenges encountered while performing tasks. This belief in one's ability to succeed significantly impacts motivation, perseverance, and overall achievement. Dinther et al. (2011) further describe self-efficacy as a person's confidence in their ability to accomplish specific actions necessary to achieve a goal. Similarly, Stajkovic and Sergent (2019) emphasise that self-efficacy is shaped by personal evaluation of one's ability to carry out tasks successfully, which in turn influences behaviour and performance. Students who possess high self-efficacy exhibit greater confidence in their ability to complete academic assignments. This belief system plays a significant role in shaping students' attitudes toward learning and technology adoption in educational settings. Self-efficacy is closely tied to perceptions of mastery, as well as the perceived usefulness and ease of use of learning tools and technologies (Shea & Bidjerano, 2010). Students with strong self-efficacy beliefs regarding the use of technology are more likely to perceive themselves as competent in effectively integrating digital tools into their learning processes. Moreover, self-efficacy is instrumental in shaping individuals' ability to drive change and make informed decisions in new or challenging situations, including the adoption of technology in education (Bandura, 2006).

The field of Library and Information Science is experiencing significant transformation due to rapid advancements in technology, the proliferation of digital resources, and the evolving needs of information users. These changes necessitate that LIS students cultivate new skills, competencies, and attitudes conducive to lifelong learning. Research in educational psychology highlights the importance of student attitudes encompassing beliefs, emotions, and behavioural intentions as key predictors of learning outcomes. A positive attitude toward learning fosters greater engagement, improved knowledge retention, and enhanced perseverance in the face of challenges.

Like many other regions worldwide, Osun State, Nigeria, recognises the pivotal role of higher education in socio-economic development. Universities and polytechnics play a crucial role in equipping students with the necessary knowledge and skills to contribute meaningfully to national progress. However, concerns persist regarding the quality of LIS education in Nigerian tertiary institutions, particularly in Osun State. There is growing concern over the ability of LIS programs to produce graduates who meet the expected learning outcomes, as the quality of undergraduates being produced annually appears to be declining.

Some LIS students exhibit avoidance behaviours, which hinder their ability to engage fully with academic content and professional training. Addressing these challenges requires a **student-**

centred approach to education, one that promotes active learning, skill acquisition, and practical application of knowledge. By integrating self-efficacy-enhancing strategies into LIS curricula, educators can help students develop the confidence and competence needed to excel in their academic and professional pursuits.

Targeted interventions are necessary for LIS programs in Osun State to achieve their intended learning outcomes. These may include curriculum enhancements, the integration of digital literacy training, and pedagogical strategies designed to boost student engagement and motivation. By addressing the existing challenges and fostering a culture of self-efficacy and continuous learning, LIS education can better prepare students for the demands of the information profession while contributing to the broader goal of national development.

Statement of the Problem

Learning outcomes of Library and Information Science students are significant pointers of value in tertiary institutions in Osun State. Initial investigations revealed that the demonstration of practical skills in the organization of information by studies were conducted on factors influencing the learning outcomes of students and the influence of self-efficacy in Library and InformationScience students is receding, indicating a deficiency in the attainment of required learning outcomes. Due to this, some students of Library and Information Science stayed unemployedfor years after graduation, and the few employed ones cannot competently manage Information Communication Libraries, causing some libraries to employ non-professional digital librarians. This, if abandoned, negatively affects the image of the Library and Information Science. Several studies have been carried out on learning outcomes and their influences. Such on learning outcomes (Tadesse & Edo, 2020). Nevertheless, there seemsto be a gap in the literature concerning studies on the influence of Self-efficacy of Library and Information Science students. Hence, the study seeks to address the influence of self-efficacy on the learning outcomes of library and information science students in tertiary institutions at Osun State, Nigeria.

Objectives of the Study

This study aims to investigate the influence of Self-efficacy on the learning outcomes of Library and Information Science students in tertiary institutions in Osun State. The objectives of this study are to:

1. identify the level of learning outcomes of Library and Information Science students in tertiaryinstitutions at Osun state;

2. assess the levels of Self-efficacy of Library and Information Science students in tertiary institutions at Osun State;
3. determine the influence of Self-efficacy on learning outcomes of Library and Information Science students in tertiary institutions in Osun State;

Research Questions

1. What is the level of learning outcomes of Library and InformationScience students in tertiary institutions at Osun State?
2. What is the level of self-efficacy of library and information science students in tertiary institutions at Osun State?

Hypothesis

Ho1 – There will be no significant influence of Self–efficacy on the learning outcomes of library and information science students in tertiary institutions at Osun State.

Literature Review

The concept of learning outcomes originates from outcomes-based education, a framework that emphasises the clear definition, articulation, and assessment of student learning (Ekpentong et al., 2023). According to Li et al. (2020), learning outcomes emerge from a combination of personal and environmental experiences that shape, enhance, or modify an individual's knowledge, skills, values, behaviours, and perspectives. In essence, learning outcomes represent the abilities, competencies, and attitudes acquired after an educational experience, reflecting a learner's proficiency in knowledge, skills, and behavioural transformation.

Furthermore, learning outcomes serve as concrete descriptions of the specific knowledge, expertise, and skills that students are expected to acquire from an academic program. They focus on the tangible achievements resulting from learning experiences, highlighting students' ability to demonstrate and validate their educational progress (Tadesse & Edo, 2020). For Library and Information Science (LIS) undergraduate students, learning outcomes denote the competencies gained rather than the mere instructional intent of their institutions. Essentially, learning outcomes represent the actual results of learning, whether intended or incidental, and can be observed, demonstrated, and measured (Ekpentong et al., 2023).

Learning outcomes can be broadly classified into cognitive and non-cognitive domains. Cognitive learning outcomes involve knowledge recall, recognition, and the development of

intellectual skills. These range from subject-specific knowledge to higher-order reasoning and problem-solving abilities (Ikhsan et al., 2019). A standard method of assessing these outcomes involves self-evaluation, where students reflect on their competencies across various dimensions, including knowledge acquisition, general competence, and applied skills.

According to Bloom (2020), effective learning outcomes are assessed across three dimensions: knowledge, skills, and behavioural attitudes. In outcomes-based education, curricula are structured around well-defined student outcome statements. This model emphasises students' engagement with learning opportunities provided by universities. Unlike cognitive learning, non-cognitive learning, outcomes such as values, attitudes, and beliefs—is more complex to measure since their direct correlation with observable behaviour is not always clear (Amini et al., 2019). While there is limited empirical evidence linking values and beliefs to measurable behaviour, educational researchers continue to explore ways to quantify these aspects.

Additionally, Patel and Sharma (2021) suggest that learning outcomes are influenced by the approach's students adopt in their studies. A surface learning approach focuses on the retention of vast amounts of information that may soon be forgotten. In contrast, a deep learning approach fosters critical thinking and the ability to apply knowledge in broader contexts. Deep learning is closely linked to qualitative learning outcomes, which emphasise conceptual understanding over rote memorisation (Amini et al., 2019). In this sense, learning outcomes highlight essential and transferable skills that are assessed within academic programs. They play a crucial role in shaping the attributes of an ideal graduate and are influenced by the disciplinary contexts in which they are applied.

Self-Efficacy

Self-efficacy refers to an individual's belief in their ability to perform specific tasks or handle particular situations. It is defined as one's confidence in organizing and executing actions necessary to achieve a desired outcome (Khan & Niazi, 2023). Self-efficacy influences a person's choices, level of effort, persistence, and overall achievement. It plays a crucial role in how individuals approach tasks, set goals, and overcome challenges. The concept of self-efficacy was first studied in therapeutic contexts, particularly in cases of extreme fears such as snake phobias. Over time, its application has expanded across various fields, including education, psychology, and technology adoption (Khan & Niazi, 2023; Badran & Sayed, 2022; Patel & Sharma, 2021).

Despite theoretical advancements in Library and Information Science (LIS), there is ongoing debate about its practical relevance. Some researchers argue that the utility of LIS remains

limited in both theoretical and practical applications. A key criticism is whether LIS is genuinely distinct from self-esteem or whether it significantly influences self-efficacy. Some studies have suggested that LIS measures have little to no direct correlation with self-efficacy beliefs in specific academic disciplines. Bandura's social cognitive theory explains this gap through specificity matching, indicating that self-efficacy beliefs are most predictive when measured in a highly specific context (Meyer & Lichtenstein, 2022).

Among self-efficacy measures, the academic self-efficacy scale is particularly relevant in educational settings. It assesses students' confidence in their academic abilities and their belief in their capacity to succeed in learning tasks. Research suggests that students with high academic self-efficacy set ambitious learning goals, exert greater effort, and demonstrate persistence in overcoming challenges. In the field of LIS, self-efficacy influences students' ability to adopt effective learning strategies, seek feedback, and engage in deep learning processes. These behaviours ultimately lead to better academic performance, enhanced problem-solving skills, and a more profound understanding of the subject matter.

In an era where technology, digital resources, and changing user needs are reshaping LIS education, developing self-efficacy is crucial. The ability to adapt to new technologies, embrace continuous learning, and apply theoretical knowledge to real-world challenges determines the success of LIS graduates. Research in educational psychology suggests that learner attitudes—comprising beliefs, emotions, and behavioural intentions are key predictors of learning outcomes. Positive attitudes toward learning enhance engagement, information retention, and persistence in the face of academic challenges.

Like many regions worldwide, Osun State, Nigeria, acknowledges the significance of higher education in socio-economic development. Universities and polytechnics play a pivotal role in equipping students with the necessary knowledge, skills, and competencies for national progress. However, concerns persist regarding the quality of LIS education in Nigerian institutions, particularly in Osun State. The performance of LIS undergraduates has raised questions about the effectiveness of current educational strategies in fostering the expected learning outcomes.

Despite the anticipated competencies from LIS students, challenges such as lack of motivation, poor professional competency, and avoidance behaviours have been observed. Some students display a lack of interest in academic excellence and professional development, which hinders their ability to achieve optimal learning outcomes. Addressing these issues requires a

student-centred approach to LIS education, one that prioritizes engagement, skill acquisition, and real-world applicability.

Methodology

The study used a descriptive survey research type. The population of this study consisted of three thousand five hundred (3500) Library and Information Science students of tertiary institutions in Osun State. the study covers four (4) universities and three (3) polytechnics in Osun State, Nigeria, that spent at least two academic semesters in their programme. The sample size for this study was 346 library and information science students in universities and polytechnics in Osun State Nigeria. The questionnaire was the only research instrument used. Descriptive statistics will be used to describe the data in terms of frequency distribution, percentage, and mean of responses about the variables, and was used to answer research questions.

Table 1: Demographic Data

Variable	Categories	Frequency	Percentage
Sex	Male	125	37.4%
	Female	313	62.6%
		338	**100%**
Age	Below 18	10	3.0%
	18-25	212	62.3%
	26- 30	92	27.5%
	Above 30	24	7.2%
		338	**100**
Class Level	200L	105	26.3%
	300L	83	22.2%
	400L	75	20.5%
	ND II	40	11.0%
	HND I	23	10.0%
	HND II	12	10.0%
		338	**100%**
Institution	Obafemi Awolowo University	86	25.4%
	Osun State University Osogbo	96	28.4%
	Adeleke University Ede	10	3.0%
	Federal Polytechnic Ede	50	14.8%
	Osun State Polytechnic Iree	69	17.8%
	University of Ilesha	19	6.0%
	Osun State College of Tech., Esa-Oke	8	4.6%

Table 1 shows the demographic data of respondents. The analysis of the data reveals key demographic insights about the respondents based on sex, age, class level, and institution. In terms

of sex distribution, the majority of the respondents are female (62.6%), while males make up 37.4%. This suggests that more females are enrolled in the study area, indicating a higher female participation in library and information science programs. Looking at age distribution, the largest group of respondents falls within the 18-25 age range (62.3%), which is typical for undergraduate students. A significant proportion, 27.5%, falls within the 26-30 age range, suggesting that a good number of students are either pursuing further studies or may have had a delayed entry into tertiary education. Additionally, 7.2% of respondents are above 30 years old, indicating the presence of mature students, while a small fraction (3.0%) is below 18, likely representing early entrants.

Regarding class level, the distribution shows a fairly balanced representation across different levels of study. The highest percentage of respondents are in the 200-level (26.3%), followed by the 300-level (22.2%) and 400-level (20.5%), indicating that the study has a strong undergraduate representation. Among polytechnic students, ND II makes up 11.0%, while HND I and HND II each constitute 10.0%, reflecting a relatively smaller group of students at the higher diploma level.

When considering institutional representation, Osun State University Osogbo (28.4%) has the highest number of respondents, followed closely by Obafemi Awolowo University (25.4%). Other notable institutions include Osun State Polytechnic Iree (17.8%) and Federal Polytechnic Ede (14.8%), indicating strong participation from polytechnic students. In contrast, Adeleke University Ede (3.0%), University of Ilesha (6.0%), and Osun State College of Technology Esa-Oke (4.6%) have the lowest representation, suggesting fewer respondents from private and specialized institutions.

Overall, the findings indicate that the majority of respondents are young, female, and predominantly from universities, particularly Osun State University Osogbo and Obafemi Awolowo University. The balanced distribution across class levels suggests that students at various stages of study participated in the survey, providing diverse perspectives on the subject matter.

Research Question One: What is the level of learning outcomes (knowledge and skills) in library and information science students in tertiary institutions in Osun State Nigeria?

Table 2: Level of Learning Outcomes of Library and Information Science Studentsin Tertiary Institutions in Osun State Nigeria.

S/N	Items	Frequency (%)				Mean	SD
		VH	H	L	VL		
	Knowledge experience	**4**	**3**	**2**	**1**		
1	I can explain classification scheme	113(35)	140(41.4)	43(13)	42(12.4)	2.80	0.899
2	I usually volunteer to explain concept of library tools to my peers.	112(30)	125(37)	35(10.4)	34(10.1)	2.68	0.902
3	I feel I have learnt a lot to be professionally competent	120(31.0)	115(34)	51(15)	49(14.5)	2.65	0.805
4	I understand the use of library Database	134(40)	132(39)	44(11.3)	28(8.3)	2.72	0.770
5	I can explain vividly the process of acquisition and selection process	115(34)	134(40)	45(13.3)	44(13.0)	2.86	0.888
6	I understand the process of carrying out reference services in the library	125(37)	130(34)	42(12.4)	41(12.1)	2.96	0.839
7	I know how to evaluate and weed out obsolete resources in the library	114(34)	126(37.2)	48(14.2)	49(15)	2.50	0.961
9	I understand the rules and ethics guiding the use of library	150(44.4)	137(41)	25(7.4)	24(6.2)	2.59	0.811
10	I understand the process of charging out library resources to users	151(44.5)	123(32)	34(10.1)	33(9.8)	2.95	0.712
	Skills/Competence						
11	I can catalogue books using library management software	101 (30)	149(44.1)	49(15)	48(14.2)	2.92	0.777
12	I can create a worksheet for bibliographic description	115(34)	134(40)	46(14)	43(13)	2.75	0.845
13	I can effectively apply all the library tools for example DDC,AACR2 and library of congress classification scheme	127(38)	141 (42)	34 (10.1)	35 (10.4)	2.76	0.919

14	I can effectively carryout library resources borrowing system to library users	134(40)	132(39)	44(11.3)	28(8.3)	2.87	0.788
15	I can produce error free catalogue cards for the academic library	101(30)	149(44.0)	49(14.5)	47(14)	2.50	0.890

Table 2 above shows the level of library and information science students' knowledge experience, and competence in their learning outcomes in universities and polytechnics in Osun state, Nigeria. The analysis of the data reveals that respondents generally have a **moderate level of competence** in various library-related skills, with their confidence varying across different areas. The mean values range between **2.50 and 2.96,** indicating that while some aspects are well understood, others require further improvement.

Among the areas where respondents feel **most confident,** understanding **the process of carrying out reference services in the library** has the highest mean score **(2.96),** followed closely by their ability to **charge out library resources to users (2.95)** and **effectively carry out the borrowing system for library users (2.87).** Additionally, skills such as **cataloging books using library management software (2.92)** and **explaining the acquisition and selection process (2.86)** are also among the higher-rated competencies. These results suggest that respondents are relatively comfortable with technical and procedural aspects of library management.

On the other hand, **some competencies show moderate confidence levels.** Understanding the **classification scheme (2.80), the use of library databases (2.72), and applying library tools like DDC and AACR2 (2.76)** indicate that while respondents have some grasp of these skills, further training could enhance their proficiency. Similarly, the ability to **create a worksheet for bibliographic descriptions (2.75)** falls within this category, suggesting room for improvement.

However, there are **notable areas where respondents feel less confident.** Their ability to **evaluate and weed out obsolete resources (2.50)** and **produce error-free catalog cards (2.50)** are among the lowest-rated skills, suggesting that these areas require additional learning and practice. Additionally, respondents do not feel strongly about their **professional competence (2.65)** or their willingness to **volunteer to explain library tools to peers (2.68),** highlighting a potential gap in confidence or experience.

Overall, the findings indicate that while respondents possess a **reasonable understanding of library processes,** they could benefit from additional training and hands-on experience, particularly in **evaluation, cataloging accuracy, and professional confidence.** Strengthening

these areas through targeted learning interventions could enhance their overall competency and preparedness for professional library roles.

Research Question Two: What is the level of self-efficacy of Library and Information Science students in tertiary institutions in Osun state Nigeria?

Table 3: Self-efficacy of Library and Information Science Students on Learning Outcomes in Tertiary Institutions in Osun State, Nigeria

S/N	Items	Frequency (%)				Mean	SD
		VH	H	L	VL		
	Magnitude of Strength	**4**	**3**	**2**	**1**		
1	I have the confidence using libraryOPAC to access library resources	155(40)	172(44.3)	6(1.8)	5(1.5)	2.99	0.657
2	I am not discouragedcouldn't when I find library needed materials	143 (44.3)	159(47.0)	18(5.3)	16(4.7)	2.71	0.762
3	I am not nervous anytime I use thelibrary database	135(35)	141(36)	31(9.2)	29(8.6)	2.80	0.741
4	I am aware and motivated accessingthe library of digital content.	118(35)	132 (39)	44(13.0)	43 (13)	2.55	0.843
5	I am confident in my ability to use electronic documents available inthe library.	115(34)	148(38.1)	38(11.2)	36(9.5)	2.84	0.712
	Strength of Self-efficacy						
6	Despite discouragement from mypeers I enjoy using library OPAC to access information.	164(49)	146(43.2)	14(4.1)	13(4)	2.71	0.762
7	In spite of the complexity in carrying out indexing and abstracting I still maintain my efforts.	118(35)		136(40.2)	42(12.4) 40(12)	2.60	0.772
8	Regardless of the obstacle in a cataloguing and classification process	102 (30.2)	151(45)	38(11.2)	36(11)	2.75	0.706

9	I consistently figure out how to perform the most complex library task.	112(30)	125(37)	35(10.4)	33(10.1)	2.57	0.873
10	I persistently work hard to master allthe library daily routine.	106 (31.4)		153(45.2) 27(8.0)	29(7.4)	2.82	0.724

Decision rule: 1.00-1.75= very low, 1.76-2.50= low, 2.51-3.25= high and 3.25-4.00= very high

Table 3 shows the Level of self-efficacy of library and information science students in tertiary institutions in Osun state. The analysis of the table using the mean reveals insights into the confidence and self-efficacy of respondents in utilizing library resources, particularly the Online Public Access Catalog (OPAC) and digital materials.

In terms of the **magnitude of strength,** respondents exhibit the highest confidence in using the OPAC system to access library resources, as reflected in the mean score of **2.99.** This suggests that most users are comfortable navigating the system to locate materials. However, awareness and motivation in accessing digital content appear to be lower, with a mean score of **2.55,** indicating a need for improved digital literacy and engagement strategies. Other aspects, such as the ability to use electronic documents and confidence in finding library materials, show moderate mean values ranging between **2.71 and 2.84,** suggesting that while users feel somewhat capable, there is room for further improvement.

When considering **self-efficacy**, respondents demonstrate the strongest persistence in mastering daily library routines, as seen in the highest mean score of **2.82.** This suggests a commitment to improving their skills and efficiency in handling library tasks. However, the lowest mean score in this category (**2.57**) relates to the ability to perform complex library tasks, indicating that respondents may face difficulties with more advanced processes such as cataloguing and classification. Other self-efficacy measures, including overcoming obstacles in indexing and abstracting, maintaining effort despite challenges, and enjoying the use of OPAC despite discouragement, fall within a moderate range of **2.60 to 2.75,** demonstrating a fair level of persistence but also highlighting areas that require additional support.

Overall, the findings suggest that while respondents have a reasonable degree of confidence and determination in using library resources, they clearly need to enhance their skills in accessing digital content and performing complex library tasks. Providing targeted training and support could help bridge these gaps and improve overall efficiency and engagement with library systems.

$H_0$1: There will be no significant influence of self-efficacy by library and informationscience students on learning outcomes in tertiary institutions in Osun State Nigeria.

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.749	1	3.50	425.281	.000
Residual	.562	338	5.62		
Total	27.21	337			

Table 4 presentsthe analysis of variance in the influence of self-efficacy of library and information science students in tertiary institutions in Osun State, Nigeria. The values presented in the table show that self-efficacy has a significant influence on the learning outcomes of library and information science students in tertiary institutions in Osun State, Nigeria (F (425.281) = 69.54, p-value= 0.00 ≤ 0.05). Therefore, based on the result shown by the regression analysis, the null hypothesis was rejected, and we conclude that self-efficacy has a significant influence on the learning outcomes of library and information science students in tertiary institutions libraries in Osun State, Nigeria.

Discussion of Findings

The findings reveal that LIS students in Osun State universities and polytechnics possess moderate competence in various library-related skills, with confidence levels varying across different areas. Students demonstrated higher confidence in performing reference services, charging out library resources, and managing the borrowing system. Additionally, cataloguing books using library management software and explaining the acquisition and selection process were among the higher-rated skills. These results indicate that students are relatively proficient in technical and procedural aspects of library operations, aligning with prior studies emphasizing hands-on learning in LIS education (Ekpenyong et al., 2023; Bawden & Robinson, 2020).

However, moderate confidence levels were observed in classification schemes, using library databases, and applying cataloguing tools like DDC and AACR2, suggesting a need for more hands-on practice. Areas of lower confidence included evaluating and weeding out obsolete resources and producing error-free catalogue cards, indicating gaps in essential collection management skills. Furthermore, students' professional confidence and willingness to explain library tools to peers were relatively low, highlighting the need for initiatives that boost self-efficacy and professional engagement. Research suggests that internships, mentorship programs, and peer-led learning can improve confidence and practical competence in LIS students (Ikhsan, 2019; Kumar & Singh, 2021).

The findings indicate that LIS students in Osun State tertiary institutions exhibit varying levels of self-efficacy in utilizing library resources, particularly digital tools such as the Online Public Access Catalog (OPAC). Students demonstrate strong confidence in using OPAC to locate materials, suggesting familiarity with basic digital retrieval processes. However, motivation and awareness in accessing digital content are notably lower, indicating a gap in digital literacy and engagement. Moderate confidence levels in using electronic documents and finding library materials suggest that while students are somewhat capable, further training is needed to enhance their proficiency. These findings align with previous research emphasising the importance of digital literacy in modern LIS education (Adeyinka et al., 2021; Bawden & Robinson, 2020).

Regarding self-efficacy in performing library tasks, respondents show persistence in mastering daily routines, reflecting a commitment to improving their practical skills. However, difficulties in performing complex tasks, such as advanced cataloguing and classification, reinforce concerns about the adequacy of LIS curricula in preparing students for professional challenges (Ikhsan, 2019; Ekpentong et al., 2023). Other measures, such as overcoming indexing and abstracting obstacles and maintaining motivation despite challenges, indicate a fair level of persistence but also highlight areas that require additional support. Research has shown that self-efficacy plays a crucial role in students' ability to overcome learning difficulties and succeed in their academic and professional pursuits (Bandura, 2006; Dinther et al., 2011).

These findings emphasise the need for targeted interventions to enhance LIS students' digital literacy, technical skills, and overall self-efficacy. Institutions should integrate structured training programs, hands-on workshops, and mentorship initiatives to bridge existing skill gaps. By fostering digital confidence and competency in advanced library tasks, LIS education can better equip students to meet the evolving demands of the profession and improve their overall engagement with library systems (Shea & Bidjerano, 2010; Stajkovic & Sergent, 2019).

Conclusion

Achieving the required learning outcomes among Library and Information Science (LIS) students is essential for maintaining the quality of the educational program and ensuring professional competence. This study highlights the significant influence of self-efficacy on students' learning outcomes in tertiary institutions in Osun State, Nigeria. The findings reveal that students with higher self-efficacy demonstrate better academic performance, problem-solving abilities, and confidence in handling library-related tasks. However, gaps remain in practical

competencies, particularly in digital literacy, cataloguing accuracy, and resource evaluation, which need to be addressed to enhance overall proficiency.

The study underscores the importance of fostering self-efficacy among LIS students through targeted interventions, including improved teaching strategies, hands-on training, and curriculum revisions that emphasise practical skill development. Collaboration between academic institutions, policymakers, and employers is crucial in designing educational policies and work experience programs that align with industry demands. Addressing these gaps will not only enhance students' learning experiences but also improve their competitiveness in the job market.

In conclusion, strengthening self-efficacy and practical training in LIS education is vital for improving learning outcomes and professional preparedness. By implementing the study's recommendations, universities and polytechnics can produce graduates who are more confident, skilled, and capable of meeting the evolving demands of the information profession.

Recommendations

Based on the findings and conclusion of this study, it was recommended that:

1. Library and Information Science undergraduate students should redirect efforts towards improving their self-efficacy in order to experience improvement in attainment of very high level of learning outcomes required for professional competence.
2. Both students and lecturers of Library and Information Science should target improving the level of students' self-efficacy for improved learning outcomes to be at competitive advantagein the labour market and to improve the image of Library and Information Science programmein terms of quality.
3. Employers of labour should avoid information-seeking bias regarding the Library and Information Science profession, as such bias negatively affects students' learning outcomes.
4. Policymakers for the Library and Information Science programme, Nigerian Universities and Polytechnics National University Commission (NUC), and National Board for Technical Education (NBTE) should be aware of the influence of students' self-efficacy on learning outcomes and make appropriate decisions and policies to enhance this level.
5. The Student Industrial Work Experience Scheme (SIWES) should restructure the training work exercise to meet the skills of all students to improve learning outcomes.
6. Library schools should collaborate and review the library and information science curriculum to allocate more time to practical training exercises.

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