The Impact of Gender and Teaching Experience on Lecturers' Competence in the Use of Learning Management Systems in Higher Education in Nigeria

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ABSTRACT

Learning management systems emerged as a direct result of advances in information technology. These platforms have enabled educational institutions to take advantage of a wide range of new opportunities for teaching and learning (T&L). The goal is to combine the best aspects of the traditional classroom environment with the technological breakthroughs that students and lecturers have come to expect in the twenty-first century. Despite the fact that there are several benefits to using learning management systems in teaching and learning, many lecturers are hesitant to utilise them. The current study explored the impact of gender and teaching experience on lecturers' competence in the use of learning management systems in higher education. A stratified sampling technique was chosen to select 341 lecturers from two universities in Nigeria. A researcher-designed questionnaire was used to obtain information from the participants. The data collected were analysed using both descriptive and inferential statistics. Research questions were answered using mean and standard deviation. The study's findings revealed that teaching experience significantly influence lecturers' competence in the use of learning management systems (LMS) in the classroom, while gender does not influence their competence in the use of LMS.

Keywords
Gender; Teaching Experience; Competence; LMS

Introduction

Quality education is a fundamental goal, and in Nigeria, ensuring equal educational opportunities remains a key priority. With the rise of digital learning, higher institutions must integrate Learning Management Systems (LMS) such as Canvas, Moodle, and Blackboard into their teaching methods (Almogren, 2022). Lecturers play a crucial role in achieving educational goals, and their ability to integrate technology significantly impacts learning outcomes. The adoption of Learning Management Systems (LMS) has proven essential in ensuring the continuity of education in developed nations, particularly during the COVID-19 pandemic (Ziraba et al., 2020; Cavus et al., 2021). However, in Nigeria, limited LMS adoption forced many universities to halt academic activities during the pandemic. Challenges such as inadequate training, resistance to change, and infrastructural limitations hinder adoption (Almogren, 2022). When LMS adoption fails, both students and lecturers may lose confidence in its relevance, leading to decreased engagement in digital learning environments.

The success of LMS in higher education depends on lecturers' competency to integrate these systems, which directly impacts student learning and institutional progress. These competencies include instructional design proficiency; assessment and evaluation skills such as the capacity to set quizzes, assignments, and discussion forums; communication and interaction skills; adaptability and continuous learning; and data management and analytics (Al-Fraihat et al., 2020; Bervell & Umar, 2018; Finedo, Pyke, & Anwar, 2018; Mtebe & Raisamo, 2014; and Teo, 2011).

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Literature Review

The educational landscape has undergone a significant transformation due to the integration of Learning Management Systems (LMS) in classrooms. This study focused on the impact of gender and teaching experience on lecturers' competence in the use of learning management systems in higher education. The study undertook an empirical literature analysis to support or challenge the principles of learning management systems, focusing on lecturers' gender and teaching experience in the use of LMSs within the classroom.

Learning Management System

Learning management systems (LMSs) have become a crucial component of higher education, enhancing the teaching and learning experience. These platforms serve as e-learning tools designed to complement traditional instructional methods within educational technology. LMSs have bridged geographical gaps and addressed challenges associated with conventional knowledge acquisition, as Ali (2016) stated that LMS has made teaching and learning more practical, exciting, and innovative in educational institutions. Many universities worldwide have adopted LMS platforms such as Blackboard, Moodle, Desire2Learn, Google Classroom, Canvas, Schoology, and Edmodo to facilitate teaching and learning (Almogren, 2022). These systems enable lecturers to share information in real time while allowing students to learn at their own pace. By improving access to quality education, LMSs contribute significantly to achieving 21st-century educational goals. An LMS is characterised by using multiple media, different languages, and resources, enabling alternative technologies, and presenting information in an organised manner to fulfil its main purpose, which is the construction of learning through interaction (Paul, Cristiano, & Marina, 2016). Learning Management Systems (LMS) provide a variety of features aimed to help with online education. Wimmer and Böcker (2019) stated that many current LMS systems, such as Blackboard and Moodle, are mobile-friendly, allowing students to access course materials and engage in activities from anywhere. Some LMSs use adaptive learning technology to adjust material and speed based on individual student achievement and learning styles (Chen & Wang 2019). LMSs include discussion boards and collaboration areas where students and instructors may engage in asynchronous discussions, share ideas, and collaborate on projects (Harasim, 2017). LMS is concerned with class scheduling, catalogue creation, registration processes, accessibility of learning materials, and learner tracking (Sejzi & Aris, 2013). Wichadee (2015) categorised the features of Learning Management Systems (LMS) into three primary types: study skills tools, communication tools, and productivity tools. One of the primary functions of the LMS at academic institutions is to facilitate connections and interactions between students, professors, and content (Holmes & Prieto-Rodriguez, 2018).

Numerous empirical studies have been undertaken in the field of learning management systems, highlighting technical issues, technological access, insufficient training on LMS utilisation, age, instructional difficulties, e-content generation, and geographical distribution as additional reasons impeding lecturers' usage of LMS in teaching and learning (Noreen, 2020; Dlalisa & Govender, 2020). The studies by Obi & Nwankwo (2022), Ali & Salami (2021), Yusuf & Ekong (2023), and Adedeji & Alabi (2021) explore learning management system adoption in Nigerian universities, focusing on technological readiness, effectiveness, interactive features, and student satisfaction. The key findings indicate that technological readiness and system functionality significantly impact student engagement. Obi & Nwankwo (2022) found that user satisfaction directly influences LMS usage trends, while Ali & Salami (2021) highlighted LMS effectiveness in content delivery but noted challenges in communication and interaction. Yusuf & Ekong (2023) showed that interactive features enhance student satisfaction and academic achievement, and Adedeji & Alabi (2021) identified system functionality and ease of use as primary predictors of student satisfaction. Methodologically, stratified sampling (Ali & Salami, 2021; Adedeji & Alabi, 2021) provided diverse representation, while ANOVA (Obi & Nwankwo, 2022) and SEM (Adedeji & Alabi, 2021) allowed for in-depth statistical analysis. However, all studies lacked lecturer perspectives and did not consider infrastructure challenges (e.g., internet access, power supply), and did not track LMS adoption over time. While student satisfaction is well explored, lecturer adoption remains under-researched, apart from Olusola & Wale (2022). Olusola & Wale (2022) examined LMS adoption among lecturers, using the Technology Acceptance Model (TAM). They found that perceived ease of use and usefulness significantly influence adoption. Their use of stratified sampling enhanced generalisability, but the study did not cover Rivers State.

Iyiola and Ekom (2021) study found that performance expectancy and facilitating conditions were the strongest predictors of acceptance of LMS. The result of Iyiola and Ekom (2021) is supported by Alharbi et al.'s (2021) investigation on the critical factors affecting students' acceptance of LMS in Saudi Arabia using the Unified Theory of Acceptance and Use of Technology. The findings revealed that effort expectancy, performance

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expectancy, perceived functionality, facilitating condition, social influence, behavioural intention to use, and usage behaviour factors were significant and directly influenced students' behavioural intention in Blackboard. Igwe and Olagunji's (2021) study examines structural and cultural barriers to Learning Management System (LMS) adoption in Nigerian public schools. It highlights key issues such as inadequate infrastructure, faculty resistance, and limited training. The research is methodologically strong, using purposive sampling to select relevant participants. However, its limited sample size (250 participants from ten institutions) reduces generalisability across Nigeria's 170 public universities, where challenges vary based on funding, location, and faculty composition.

Gender Influence

Studies have been conducted on gender differences in regard to the use of learning management systems and other technological tools in teaching, which has been a concern in education (Cai et al., 2017). In another study conducted by Al-Azawei (2019) on the moderating effect of gender differences on LMS acceptance using a convenience sampling technique to sample 302 participants. The findings revealed that male lecturers have a stronger impact than the female lecturers regarding their self-efficacy and attitude in the use of LMS in teaching and learning. The findings in the study of Baek, Zhang and Yun (2017) on teachers' attitude towards mobile learning based on gender in South Korea with a sample size of 140 teachers using independent t-test to compare the mean of male and female teachers. The result revealed that females have a more positive attitude towards technology than their male counterparts. The disputing results of Baek, Zhang & Yun (2017) by Azawei (2019) studies may be a result of social belief and acceptance of technological devices; however, there is a need for further study to ascertain the results, as the present study will focus on university lecturers in Nigeria. Gender variations in LMS utilisation were measured using Nwosu and Adedokun's (2021) stratified random selection of 200 lecturers, which was representative of many fields and gender groupings. Stratified sampling reduces bias and improves generalisability across academic disciplines. The findings revealed that male academics utilised LMS more than female lecturers, mostly because female lecturers lacked technology confidence. Ojo and Adeoye (2020) conducted a study on the impact of gender on the adoption and usage of learning management systems in Nigerian universities, involving 150 lecturers from three universities, selected through stratified random sampling to ensure gender balance. The results indicated that male lecturers were more frequent users of LMS, with higher comfort levels and positive attitudes towards its use. Female lecturers reported encountering more barriers, including limited technical skills and institutional support. However, the small sample size may not fully represent the broader population of lecturers across Nigeria, and the study's generalisability may be limited due to different contexts, such as public versus private or urban versus rural.

The study of gender differences in the usage of learning management systems among lecturers in Malaysian higher education institutions was explored by Tan and Zainal (2020). A total of 350 lecturers from 10 universities across Malaysia participated in the study. The research employed both quantitative and qualitative methods. Descriptive statistics and inferential analysis (ANOVA) were used to analyse the survey data. The findings showed that male lecturers were more likely to use LMS for content creation and communication with students, whereas female lecturers were more focused on using the system for administrative purposes such as posting grades and materials. Additionally, female lecturers reported facing greater challenges in adapting to the system due to perceived technical difficulties and lack of support. This study offers insightful analysis of gender differences in LMS acceptance and use. Combining quantitative analysis with qualitative depth in the mixed-methods approach helps the study to be stronger. ANOVA makes statistical confirmation of gender variations possible. The study did not, however, examine closely for underlying cultural, institutional, or educational causes of these differences. More research might have been done on elements like past technological experience, allocation of teaching burden, and gender expectations in academia. The studies undertaken in Zimbabwe (Ndlovu & Chikozho, 2023), South Asia (Ahmed & Iqbal, 2020), Europe (Schmidt & Weber, 2022), and North America (Hall & Richards, 2021) indicate gender differences in learning management system utilisation among university lecturers. Across all locations, male lecturers utilised LMS more actively for interactive teaching and student engagement, whereas female lecturers focused on administrative responsibilities such as grading and uploading resources. Female lecturers faced significant challenges such as insufficient technical support, scheduling restrictions, and a lack of institutional aid. Ahmed and Iqbal (2020) adopted a mixed-methods approach, combining surveys and interviews to provide comprehensive knowledge, whereas Hall and Richards (2021) employed logistic regression to ensure excellent statistical validity. Schmidt & Weber (2022) used thematic analysis to capture qualitative insights, however they depended on convenience sampling, which limited generalisation. Among the research, Hall & Richards (2021) conduct the most thorough statistical analysis, whereas Ahmed & Iqbal (2020) provide the most

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qualitative insights. However, all studies were done outside of Nigeria, which remains an important topic for further study.

Influence of Teaching Experience

The contemporary issues facing the use of LMS in Nigerian universities from realising its full potential lie in the hands of lecturers, students, and other stakeholders in the educational system. The high level of competency in LMS use is essential for improving the quality of education (Coban & Atasoy, 2019). Lecturers' skills and knowledge in the use of technology in teaching is a concern in Nigerian institutions (Opeyemi et al., 2022). As a result, a lack of competency will lead to a loss of enthusiasm on the part of the lecturer, which will negatively impact efforts to use information resources. The influence of years of teaching experience has been identified as a factor influencing the use of the learning management system in teaching and learning among university lecturers despite the technological facilities available in the schools (Adedeji & Onuoha, 2022; Chukwu & Olubiyi, 2021; Aluko & Okeke, 2023; Kent & Giles, 2017; and Yushau & Nannim, 2020).

Adedeji & Onuoha (2022) investigated the impact of teaching experience on LMS adoption in Nigerian universities using a mixed-methods approach. A sample of 150 lecturers from five universities participated in the study, with data collected through questionnaires and semi-structured interviews. Descriptive and inferential statistics were used for analysis. Findings indicate that lecturers with more than 10 years of teaching experience are more likely to adopt LMS, while less-experienced lecturers struggle due to insufficient training and limited familiarity with technology. This contrasts with most studies on LMS adoption and age, which typically suggest that younger lecturers engage more with LMS. The study suggests that teaching experience, rather than age, influences digital adoption in some academic contexts. The mixed-methods design strengthens the study, providing both statistical insights and qualitative perspectives. However, the relatively small sample size (150 lecturers) and limited institutional coverage (five universities) may restrict generalisability. The study recommends specialised LMS training for less-experienced lecturers, fostering an inclusive environment for digital learning, and workshops for experienced lecturers to enhance technical proficiency.

Chukwu and Olubiyi (2021) conducted a comparative study that investigated the relationship between lecturers' teaching experience and the adoption of Learning Management Systems (LMS) in Nigerian and South African universities. The study included both quantitative and qualitative methods, which enriched the findings by providing numerical data along with deeper insights from interviews. More so, the use of stratified random sampling, ensuring a balanced representation from both countries and disciplines, enhanced the study's generalisability. However, a limitation is the relatively small sample size (200 lecturers), which may not capture the full diversity of experiences across these countries, potentially limiting the breadth of the findings. Additionally, while the study highlights the importance of institutional support, it lacks a detailed examination of specific support mechanisms or institutional strategies, making it unclear how recommendations can be practically implemented. Similarly, Aluko and Okeke (2023) investigated the impact of lecturers' teaching experience on the integration of Learning Management Systems (LMS) in tertiary institutions across Nigeria. Using a correlational research design, the study surveyed 250 lecturers from 10 public universities in Nigeria. A simple random sampling technique was employed. The findings indicated a positive relationship between teaching experience and the frequency of LMS usage, with more experienced lecturers being more likely to integrate LMS into their teaching practices. However, the study also identified a significant gap in training opportunities for lecturers, especially those with less than 5 years of experience. The study recommended that universities provide regular, tailored LMS training sessions and incentivise experienced lecturers to mentor newer faculty members on best practices for LMS integration. Adebayo and Gimba (2022) examined how teaching experience affects LMS use in Nigerian private institutions. The survey included 180 lecturers from 10 private institutions to assess teaching experience and LMS usage. Adebayo and Gimba's stratified random sample guaranteed a diversified disciplinary representation, improving the study's generalisability across institutions. Another benefit of the study is the explicit identification of LMS use hurdles, including inadequate training and institutional support, which helps lecturers identify their issues. However, the study solely examined private universities, which may not completely represent public university lecturers' experiences, limiting its application.

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Objective of the Study

The purpose of the study explored the impact of gender and teaching experience on lecturers' competence in the use of learning management systems in higher education in Nigeria.

Research Questions

1. Does gender influence lecturers' competence in the use of LMS in higher education?
2. To what extent do years of teaching experience influence lecturers' competence in the use of LMS in higher education?

Research Hypotheses

HO1: Gender does not significantly influence lecturers' competence in the use of LMS in higher education.

HO2: Years of teaching experience do not significantly influence lecturers' competence in the use of LMS in higher education.

Methodology

The methodology of this study was a quantitative method. The study adopted Ex-post Facto design, also referred to as causal-comparative design. The population of this study consisted of all lecturers in two universities in Rivers State: Ignatius Ajuru University of Education, Port Harcourt (state-owned university), and University of Port Harcourt, Choba (federal university). However, the population of lecturers in the two universities in Rivers State as of the time of this study was 2107. A total number of 341 lecturers participated in the study using a stratified random sampling technique.

The study was carried out in two phases. Phase one comprised the early stage of the research, which involved educational technologist professionals scrutinising the instrument before administering it to the respondents. A pilot study was first conducted by the researcher, and a Cronbach Alpha was used to determine its reliability coefficient, which yielded 0.73. This is in line with an acceptable value of 0.7 according to Nwankwo (2013). The data collected were analysed using both descriptive and inferential statistics. The research questions were answered using mean and standard deviation. While the hypotheses were tested using independent t-test statistics. Data was subjected to analysis by Statistical Package for Social Sciences (SPSS) version 20.0 at 0.05 level of significance.

Data Analysis and Findings

The result in Table 1 shows that the overall mean scores of male lecturers is 2.75 and that of female lecturers is 2.64. This means that the competence of male and female lecturers enhances the use of LMS in teaching because their overall mean scores are above 2.50 which is the criterion mean. Thus, gender is not a strong factor when considering how lecturers' competence influences the use of LMS in teaching.

Table 1. Mean and Standard Deviation on how gender influences lecturers' competence in the use of LMS in teaching.

S/N	Questionnaire Items	Gender	n	mean	S.D.
1	How effective are you in exploring new technologies or updates within the learning management system to enhance your teaching methods?	Male	181	2.83	1.54
		Female	160	2.55	1.42
2	How can you rate **your** strength with features of the learning management system such as creating assignments, posting course materials, engaging students in discussions?	Male	181	2.59	1.49
		Female	160	2.58	1.53

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3	How effective are you in customising or personalising the learning management system to suit your teaching style?	Male	181	2.64	1.74
		Female	160	2.52	1.61
4	What is your level of familiarity with the interface/navigation of our current learning management system?	Male	181	2.71	1.62
		Female	160	2.59	1.76
5	How would you rate your ability to integrate external resources (websites, articles, etc.) seamlessly into the learning management system?	Male	181	2.80	1.75
		Female	160	2.58	1.87
6	Do you feel adequately supported in terms of resources or training to use the learning management system effectively?	Male	181	2.75	1.86
		Female	160	2.71	1.73
7	Do you feel the current training/support offered adequately prepares you for utilising advanced features of the learning management system?	Male	181	2.78	1.72
		Female	160	2.51	1.49
8	How confident are you in ensuring data privacy and security when utilising the learning management system for your courses?	Male	181	2.64	1.96
		Female	160	2.51	1.86
9	How much has your experience influenced your perception of the LMS's role in fostering student engagement and participation?	Male	181	2.80	1.86
		Female	160	2.64	1.62
10	How would you rate your willingness to experiment with different tools or applications integrated into the learning management system for enhancing student learning?	Male	181	2.89	1.76
		Female	160	2.81	1.88
11	How receptive are you to feedback from students regarding the learning management system's usability in your courses?	Male	181	2.82	1.74
		Female	160	2.51	1.87
12	To what extent does your experience contribute to your confidence in managing and organising course materials using the LMS?	Male	181	2.81	1.61
		Female	160	2.59	1.87
13	How would you rate your comfort level in adapting to changes or updates in the learning management system interface or functionalities?	Male	181	2.65	1.74
		Female	160	2.86	1.71
15	How can you rate your comfort level in facilitating student engagement through interactive features of the learning management system (quizzes, discussion forums, etc.)?	Male	181	2.80	1.90
		Female	160	2.76	1.85
16	What is your level of proficiency in incorporating multimedia elements (videos, images, etc.) into your courses through the learning management system?	Male	181	2.66	1.81
		Female	160	2.59	1.89
17	To what extent do you believe your experience influences your ability to navigate and employ the features of the LMS?	Male	181	2.80	1.59
		Female	160	2.76	1.47
18	How has your years of experience impacted your ability to adapt and innovate while using the LMS for teaching purposes?	Male	181	2.80	1.53
		Female	160	2.58	1.61

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19	What is your level of confidence in the ability of a learning management system to facilitate better organisation and management of course materials?	Male	181	2.65	1.96
		Female	160	2.85	1.71
20	How effective does the training or support you've received regarding the use of technology for teaching purposes impacted your confidence in using these tools?	Male	181	2.81	1.58
		Female	160	2.59	1.57
	Overall mean score	Male		**2.75**	
	Criterion mean: 2.50	Female		**2.64**	

Table 2. Mean and Standard Deviation on how lecturers' competence enhances the use of LMS in teaching based on years of teaching experience

S/N	Questionnaire Items	Years of Experience	n	mean	S.D
1	How effective are you in exploring new technologies or updates within the learning management system to enhance your teaching methods?	Less than 10 years.	154	3.30	2.88
		10 years and above	187	1.75	1.51
2	How can you rate your strength with features of the learning management system, such as creating assignments, posting course materials, engaging students in discussions?	Less than 10 years.	154	3.33	2.14
		10 years and above	187	1.25	1.51
3	How effective are you in customizing or personalizing the learning management system to suit your teaching style?	Less than 10 years.	154	3.58	2.54
		10 years and above	187	1.98	1.01
4	What is your level of familiarity with the interface/navigation of our current learning management system?	Less than 10 years.	154	2.97	2.65
		10 years and above	187	2.35	1.57
5	How would you rate your ability to integrate external resources (websites, articles, etc.) seamlessly into the learning management system?	Less than 10 years.	154	2.60	2.02
		10 years and above	187	2.45	1.59
6	Do you feel adequately supported in terms of resources or training to use the learning management system effectively?	Less than 10 years.	154	3.98	2.12
		10 years and above	187	1.23	1.18
7	Do you feel the current training/support offered adequately prepares you for utilizing advanced features of the learning management system?	Less than 10 years.	154	3.76	2.51
		10 years and above	187	1.47	1.75

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8	How confident are you in ensuring data privacy and security when utilizing the learning management system for your courses?	Less than 10 years.	154	3.00	2.64
		10 years and above	187	1.21	1.58
9	How much has your experience influenced your perception of the LMS's role in fostering student engagement and participation?	Less than 10 years.	154	3.89	2.38
		10 years and above	187	1.54	1.75
10	How would you rate your willingness to experiment with different tools or applications integrated into the learning management system for enhancing student learning?	Less than 10 years.	154	3.70	2.95
		10 years and above	187	1.89	1.32
11	How receptive are you to feedback from students regarding the learning management system's usability in your courses?	Less than 10 years.	154	3.64	2.76
		10 years and above	187	1.54	1.32
12	To what extent does your experience contribute to your confidence in managing and organizing course materials using the LMS?	Less than 10 years.	154	3.76	2.75
		10 years and above	187	1.86	1.84
13	How would you rate your comfort level in adapting to changes or updates in the learning management system interface or functionalities?	Less than 10 years.	154	3.43	2.18
		10 years and above	187	1.42	1.52
15	How can you rate your comfort level in facilitating student engagement through interactive features of the learning management system (quizzes, discussion forums, etc.)?	Less than 10 years.	154	2.65	1.90
		10 years and above	187	2.25	1.51
16	What is your level of proficiency in incorporating multimedia elements (videos, images, etc.) into your courses through the learning management system?	Less than 10 years.	154	3.92	1.88
		10 years and above	187	1.35	1.39
17	To what extent do you believe your experience influences your ability to navigate and employ the features of the LMS?	Less than 10 years.	154	3.43	1.76
		10 years and above	187	1.86	1.38
18	How has your years of experience impacted your ability to adapt and innovate while using the LMS for teaching purposes?	Less than 10 years.	154	3.87	2.98
		10 years and above	187	1.64	1.64
19	What is your level of confidence in the ability of a learning management system to facilitate better organisation and management of course materials?	Less than 10 years.	154	3.32	2.95
		10 years and above	187	1.71	1.82
20	How effective does the training or support you've received regarding the use of technology for	Less than 10 years.	154	3.86	1.98
			187	1.86	1.13

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	teaching purposes impacted your confidence in using these tools?	10 years and above	
	Overall mean score	Less than 10 years.	**3.47**
	Criterion mean: 2.50	10 years and above	**1.71**

The result in Table 2 shows that the overall mean scores for responses on the extent to which years of teaching experience enhances lecturers' competence in the use of LMS in teaching for lecturers with less than 10 years of experience is 3.47, and those with 10 years and above experience is 1.71. This means that lecturers with less than 10 years of teaching experience enhances the use of LMS in teaching than their counterparts because their overall mean score is above 2.50 which is the criterion mean. Thus, the number of years of experience is very important when considering how lecturers' competence enhances the use of LMS in teaching.

Null Hypothesis

Ho1: Gender does not significantly influence lecturers' competence in the use of LMS in teaching.

Table 3. Summary of Independent t-test of lecturers' competence in the use of LMS in teaching based on Gender

Gender	n	Mean	S.D.	p-val.	Decision at .05 Alpha Level
Male	181	53.61	7.26	.094	(S) H_O4 Retained
Female	160	52.24	7.57		

NS= Not Significant at .05 alpha level

In Table 3, the p-value for the hypothesis which states that gender does not significantly influence lecturers' competence in the use of LMS in teaching is .094. This p-value of .094 is greater than .05 alpha level in which the decision is based. This indicates that gender does not significantly influence lecturers' competence in the use of LMS in teaching. Therefore, the formulated null hypothesis is retained based on decision rule.

Ho2: Years of teaching experience does not significantly influence lecturers' competence in the use of LMS in higher education.

Table 4. Summary of Independent t-test of lecturers' competence to enhance the use of LMS in teaching based on years of teaching experience

Years of Experience	n	Mean	S.D.	p-val.	Decision at .05 Alpha Level
Less than 10 years	154	64.71	5.93	.000	H_O2 is rejected
10 years and above	187	30.78	3.90		

S = Significant at .05 alpha level

In Table 4, the p-value for the hypothesis, which states that years of experience do not significantly influence lecturers' competence to enhance the use of LMS in teaching is .000 which is less than .05 alpha level in which the decision is based. This indicates that years of teaching experience significantly influence lecturers' competence to enhance the use of LMS in teaching. Therefore, the formulated null hypothesis two is rejected based on decision rule.

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Discussion

Analysis of data on the research question showed that the overall mean score for responses favoured both male and female lecturers, as observed in their mean scores, which are greater than the criterion mean score. Additionally, tests of null hypothesis revealed that gender does not significantly influence lecturers' competence in the use of LMS in teaching. The above finding may arise since emphasis is not placed on gender when recruiting lecturers in public universities in Rivers State in particular. Public universities in Rivers State in the last few years have conducted recruitment exercises with no emphasis on gender rather on the use of LMS in teaching. And at the entry point, all those offered employment are subjected to various programmes in the use of technologies to enhance teaching and learning. All these may have contributed to the outcome of this present study. This present finding lends credence to Onwuagboke et al. (2018), who in their investigation found that there were no significant gender variations in teachers' attitude towards the educational use of ICT in Basic Science and Technology pedagogy. However, this present finding disagrees with the outcome of the studies conducted by Al-Azawei (2019), Nwosu and Adedokun (2021), and Kassem and Saeed (2022), in which it was revealed that male lecturers have stronger impact than the female lecturers regarding the use of LMS in teaching and learning.

The analysis of data on research question two showed that the overall mean scores for responses on the extent to which teaching experience enhance the use of LMS in teaching favoured lecturers with less than 10 years of experience more than their counterparts with 10 years and above experience as observed in their mean scores when compared with the criterion mean score. Thus, the number of years of experience is very important when considering how lecturers' competence enhances the use of LMS in teaching in Rivers State, Nigeria. More so, test of the corresponding null hypotheses two revealed that years of experience significantly influence lecturers' competence to enhance the use of LMS in teaching. This finding is well expected because most lecturers with less than 10 years of experience were employed at a time when public universities in the state considered the use of LMS in teaching very vital for lecturers, and so lecturers were exposed to the practice at their point of entry into the lecturing profession, which in turn shaped their competence in the use of LMS in the teaching. This present study disagrees with Kent and Giles (2017), who in their study revealed that 30% of sampled lecturers in their study felt no confidence in their ability to implement technology in their teaching due to lack of teaching experience and computer experience. The disparity between the findings of this present study and that of Kent and Giles (2017) could be attributed to differences in institutional policies, area of study and population of the study as well as sample and sampling techniques.

Conclusion

Based on the findings of this study, it can be concluded that gender does not play a significant role in lecturers' competence in the use of learning management systems in teaching whereas years of teaching experience influence lecturers' competence in the use of LMS in higher education.

Recommendations

Since gender does not significantly affect LMS use, educational institutions should focus more on teaching experience and other factors such as age and academic disciplines when designing technology integration programmes. Gender-neutral approaches should be adopted in training and support initiatives, ensuring equal access and opportunities for all lecturers regardless of gender.

Suggestions for Further Studies

Further studies in the following areas are necessary:

(i) Exploring the barriers to LMS adoption among lecturers based on academic discipline.

(ii) The effect of lecturers' attitudes and use of LMS on student engagement and academic performance.

(iii) Evaluating the long-term effectiveness of professional development programmes on LMS usage.

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Conflict of Interest

The author(s) declare(s) that there is no conflict of interest regarding the publication of this paper.

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