

تصور الطلاب ومواقفهم تجاه فعالية نظام إدارة التعلم في جامعة ولاية أوسون

Students' Perception and Attitudes Towards the Effectiveness of Learning Management System in Osun State University

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الملخص

بحثت الدراسة في فعالية نظام إدارة التعلم (LMS) للتعلم بين طلاب المرحلة الجامعية في جامعة ولاية أوسون خلال جائحة كوفيد-١٩. تُعد الدراسة وصفية، وشملت عينة عددها ٢٧٠ مشاركًا. تم استخدام أداة لجمع البيانات تم إعدادها من قبل الباحث، وبلغ مستوى موثوقيتها ٠,٧٥. تم تحليل البيانات باستخدام الإحصاءات الوصفية، وتحديدًا المتوسط الحسابي، والانحراف المعياري، وعدد التكرارات، ومعامل ارتباط بيرسون (PPCM).

كشفت نتائج الدراسة أن نظام إدارة التعلم وقر للطلاب مرونة في الوقت والمكان أثناء جائحة كوفيد-١٩. كما شجّعهم على الدراسة بشكل متكرر نظرًا لتوفر المواد التعليمية عبر الإنترنت. أظهر النظام ميزة تنافسية في تعزيز اهتمام الطلاب بالتعلم خلال الجائحة، حيث مكّنهم من

التعلم الذاتي دون الحاجة إلى حضور المحاضرات، وساهم في تحسين جودة التعليم، وتم استخدامه بكفاءة من قبل الطلاب والمحاضرين. عزز النظام أيضًا التعلم الفردي.

كما أظهرت الدراسة عدم وجود فروق ذات دلالة إحصائية في تصورات الطلاب ومواقفهم تجاه استخدام نظام إدارة التعلم بناءً على النوع الاجتماعي. بناءً على هذه النتائج، يمكن لهذه الدراسة أن تعزز الأدبيات المتعلقة بأنظمة إدارة التعلم. وأوصت الدراسة بالبحث عن متغيرات مختلفة أو تحديد العلامة التجارية لنظام إدارة التعلم، مثل Google Classroom ، و Moodle ، و Edmodo ، و Schoology ، وغيرها، للتحقق من تأثيراتها من خلال تجارب أو دراسات ارتباطية على عملية التعليم والتعلم.

ABSTRACT

The study investigated the Effectiveness of Learning Management System (LMS) For Learning among Undergraduates in Osun State University as Occasioned by Covid-19 Pandemic. The study is a descriptive study; a total number of 270 respondents were used. The instrument for data collections was inventory and was structured by the researcher for data collection and reliability level was 0.75. Data collected were analyzed using descriptive statistics specifically mean, standard deviation, frequency counts and Person Product Moment Correlation (PPCM). The findings of the study revealed that LMS provide students with time and place flexibility during COVID-19, LMS make students to study often due to the availabilities of the materials online, LMS has a complete advantage on the interest of students towards learning during COVID-19, LMS make student to learn on their own without attending lecture, LMS improve quality education during COVID-19, Student-lectures used LMS efficiently, LMS promotes individual learning and others. Also, the study has revealed that if there is no significant difference in students' perception and attitude towards the use LMS for learning based on gender of the effectiveness of LMS for learning based on gender. As a result of the findings in this study, this can strengthen the literatures of LMS. It is strongly suggested to find different variables or specified the brand of LMS such as Google Classroom, Moodle, Edmodo, Schoology, and etc. So, it can be checked through the experiments or correlation or impacts of LMS in teaching-learning process.

Introduction

Education is the process by which society deliberately transmits its accumulated knowledge, values, and skills from one generation to another through institutions (Adeniji, 2018). Ogunsola and Aboyade (2015) posited that a sound educational system is therefore prerequisite to achieving progress, from the individual to the society to the economy. Discontinuity in education is a threat to learning in Nigeria and the effect of repeated closures of schools and academic programs on students learning has adverse effects on the students, the parents and the nation as a whole (Afolabi, 2019). Akinlabi (2020) posited that the ongoing discontinuity in education is caused by some global issues that affect almost every continent of the world and as a result led to total lockdown. This discontinuity in education was caused by COVID-19, a newly discovered coronavirus. This discontinuity in education is caused by global issues that affect almost every continent of the world and as a result led to total lockdown (Akinyemi, 2014).

According to the World Health Organization (WHO), corona viruses are a family of viruses that cause illnesses ranging from the common cold to more severe diseases such as Severe Acute Respiratory Syndrome (SARS) and the Middle East Respiratory Syndrome (MERS) (Euba, 2020). These viruses were originally transmitted from animals to people. SARS, for instance, was transmitted from civet cats to humans while MERS moved to humans from a type of camel. Several known corona viruses are circulating in animals that have not yet infected humans (Becta, 2013). The name corona virus comes from the Latin word corona, meaning crown or halo. Under an electron microscope, the looks like it is surrounded by a solar corona. The novel corona virus, identified by Chinese authorities on January 7 and since named SARS-CoV-2. Learning Management System have become key tools in educational methodology and curriculum delivery globally (Smeets, 2015). It has been identified as an indispensable instrument for the development of quality teaching and learning in the education system especially during and post covid-19 era (Becta, 2013).

It appears most universities in Nigeria have taken so much advantage of the Information and Communication Technology (ICT) as Osun State University, (UNIOSUN) During-covid-19 era. The

University combined traditional learning paradigm with visual assisted tools and teaching materials. LMS promote learning by breaking the strong wall of dependence on time and space in acquisition of knowledge in the traditional schooling system. In other word, the technological tools have destroyed the geographical gap through virtual classrooms. Uniosun administers courses through its six campuses, Osogbo, Ejigbo, Ifetedo, Ikire, Okuku and Ipetu-Ijesa, using the LMS tools. The convenience and flexibility of its programmes using LMS have endeared people to Uniosun (Afe, 2021). Several public servants and private individuals who do not have sufficient time to engage in conventional studies made good use of the opportunity of LMS.

Higgison (2021) contends that LMS is actually changing the way universities teach during and During Covid-19 era and the way in which students learn with a view to improving flexibility and quality of learning. Further, LMS provides access to a range of resources and materials which may not otherwise be available or accessible, handing over control to students as to when and where they study. According to Higgison (2021), LMS enables students: to study at their own pace; to have a student-centered learning environment which can be tailored to meet the learning needs of individual students; to have increase communications between staff and students, and amongst students; to get frequent and timely individual feedback, for example through computer assisted assessment.

Zariski and Styles (2020) suggest that students need to become self-directed learners, which require them to be highly self-regulated, be responsible for organizing their learning, and be reflective. Students who are self-directed learners will understand content plus have a positive attitude towards themselves as learners. This will enable them to reflect on their learning and will provide the motivation to continue learning throughout life (Clayton, 2003). Armarego & Roy (2020) argue that by having students complete reflective journals, or some other measure of self-assessment, they have opportunities for reflection and introspection so that they can make sense of the experiences they have gained. A LMS learner must be able to identify and prioritize his or her personal skill gaps and manage the learning experiences, including setting clear goals, establishing specific plans, and securing needed resource (Birch, 2019). Quek and Wong (2020) warn that being successful in the LMS

environment requires that students understand the purpose and function of learning management system (LMS).

Statement of the Problem

The LMS in several countries of Africa, Nigeria inclusive, is still evolving. This is not to say that efforts had not been made to develop ICT policy to facilitate its adoption, usage and full implementation particularly in higher education institutions. In spite of several programmes by Federal Ministry of Education to re-invigorate LMS in higher education, it remains unpopular in conventional universities in Nigeria.

Purpose of the Study

The main objective of this study was to investigate the effectiveness of Learning Management System (LMS) for learning among undergraduates in Osun State University as occasioned by Covid-19 pandemic. The specific purposes of the study were to:

1. investigate students' perception of the effectiveness of LMS for learning in Osun State University.
2. find out students' attitude towards the use of LMS for learning in Osun State University.
3. determine if the effectiveness of LMS for learning differs significantly based on students' gender.

Research Question

This study was guided by the following research questions:

1. What are students' perception of the effectiveness of LMS for learning in Osun State University?
2. What are students' attitudes towards the use of LMS for learning in Osun State University?
3. Does students' perception of the effectiveness of LMS for learning differs significantly based on students' gender?

Research Hypotheses

H₀₁: There is no significant difference in students' perception of the effectiveness of LMS for learning based on students' gender.

H₀₂: There is no significant difference in students' attitude towards the use of LMS for learning differs based on students' gender.

Research Design

Descriptive survey research was adopted for this study because it involves collecting and analyzing data gathered from a sample considered to be representative of the population, and generalizing the findings. This research design helped the researcher to describe trends about response pattern to questions and to test research questions.

Population of the study

The population for this research comprised all undergraduates in Osun State University.

Sample and Sampling Technique

There are six campuses in Osun State University, the researcher employed purposively sampling technique to select three campuses in Osun State University (Osogbo, Ikire and Ipetu-Ijesa Campuses). Ninety (90) students were randomly selected from each of the campuses making a total of two hundred and seventy students (270) respondents.

Research Instrument

A Validated Inventory was used for the study titled "Effectiveness of Learning Management System (LMS) for Learning among Undergraduates in Osun State University as Occasioned by Covid-19 Pandemic (ELMSLUOSU)". The instrument was divided into two sections. Section A elicit responses on the demographic data of the respondents such as name of the campus, gender, and others while section B sub- divided into three with relevant items that were used to elicit relevant responses from the respondents in line with the research questions. The questionnaire was scored according to a five-point likert

scale, ranging from 1= Strongly Disagree; 2 =Disagree; 3 = Undecided; 4= Agree; 5= Strongly Agree.

Items number One to Ten measured students' perceptions on the effectiveness of LMS for learning, while items number Eleven to Twenty measured students attitude towards the use of LMS for learning. Items number Twenty One to Twenty Five extracted responses on students' perceptions on the effectiveness of LMS for learning based on students' gender, while items number Twenty Six to Thirty was used to elicit responses on students' attitude towards the use of LMS for learning based on students' gender.

Validity of the Instrument

The questionnaire was validated by an expert in Learning Management System and an expert in test construction. This was to determine the effectiveness and the appropriateness of the instrument, to reduce ambiguity in the contents and structures of the sentences used, and in order to establish construct validity. The corrections and modifications were used to improve the quality of the instrument.

Reliability of the Instrument

The instrument was subjected to test-retest method for a period of two weeks to ascertain the internal consistency of the instrument. It was administered on twenty (20) respondents who were not part of the study sample after which the instrument was subjected to Person Product Moment Correlation (PPMC) analysis to establish the reality of the instrument.

Procedure for Data Collection

The questionnaires were administered by the researcher on the respondents. The researcher assured them of confidentiality for the information provided. The researcher gave them the questionnaires to fill in and collect them immediately on completion. This was to increase confidence among the respondents that school administrators will use none of the information against them.

Method of Data Analyses

Data collected was subjected to descriptive statistics specifically mean, standard deviation and frequency counts, percentage and t-test.

Results

Table 1: Respondent Distribution by Gender
(N = 270)

	F	%
Male	95	35.2
Female	175	64.8
Total	270	100.0

Table 1 presents the gender distribution of respondent. It shows that 35.2% are male while 64.8% are female.

Analysis of Research Question

Research Question 1: What are students perception of the effectiveness of LSM for learning in Osun State University?

Table 2: Analysis to know the students perception of the effectiveness of LSM for learning in Osun State University (N = 270)

S/N	ITEMS	RESPONSE									
		Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
		F	%	F	%	F	%	F	%	f	%
1	LMS provide students with time and place flexibility during COVID-19	147	54.4%	68	25.2%	21	7.8%	25	9.3%	9	3.3%

2	LMS make students to study often due to the availabilities of the materials online	84 31.1%	117 43.3%	31 11.5%	29 10.7%	9 3.3%
3	LMS has a complete advantage on the interest of students towards learning during COVID-19	112 41.5%	93 34.4%	34 12.6%	27 10.0%	4 1.5%
4	LMS make student to learn on their own without attending lecture	106 39.3%	107 39.6%	37 13.7%	18 6.7%	2 0.7%
5	LMS improve quality education during COVID-19	109 40.4%	99 36.7%	35 13.0%	19 7.0%	8 3.0%
6	Student-lectures	97 35.9%	109 40.4%	34 12.6%	26 9.6%	4 1.5%

	used LMS efficiently					
7	Students are lazy to study as a result of availability of materials online	108 40.0%	92 34.1%	40 14.8%	26 9.6%	4 1.5%
8	LMS promotes individual learning	112 41.5%	103 38.1%	29 10.7%	22 8.1%	4 1.5%
9	I used LMS to store, send, manipulate and read information	124 45.9%	72 26.7%	32 11.9%	27 10.0%	15 5.6%
110	LMS have significant impact on increasing students' interest towards leaning during pre and post COVID-19	75 27.8%	123 45.6%	31 11.5%	32 11.9%	9 3.3%

Table 2: Analysis to know the students perception of the effectiveness of LSM for learning in Osun State University. The items the respondents agreed with were; LMS provide students with time and place flexibility during COVID-19 (79.6%), LMS make students to study often due to the

availabilities of the materials online (74.4%), LMS has a complete advantage on the interest of students towards learning during COVID-19 (75.9%), LMS make student to learn on their own without attending lecture (78.9%), LMS improve quality education during COVID-19 (77.1%), Student-lectures used LMS efficiently (76.3%), Student are lazy to study as a result of availability of materials online (74.1%), LMS promotes individual learning (79.6%) they used LMS to store, send, manipulate and read information (72.6%), LMS have significant impact on increasing students' interest towards leaning during pre and post COVID-19 (73.4%).

Research Question 2: What are students attitude towards the use of LMS for learning in Osun State University?

Table 3: Analysis to know the students' attitude towards the use of LMS for learning in Osun State University (N = 270)

S/N	ITEMS	RESPONSE									
		Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
		F	%	F	%	F	%	F	%	f	%
1	Availability of online materials encourages students use of LMS for learning	124	45.9%	72	26.7%	32	11.9%	27	10.0%	15	5.6%
2	LMS is too expensive and cumbersome for learning	75	27.8%	123	45.6%	31	11.5%	32	11.9%	9	3.3%

3	Speedy network encourages students use of LMS	96 35.6%	84 31.1%	45 16.7%	36 13.3%	9 3.3%
4	Free Wi-Fi make student access to LMS and encourage its usage	111 41.1%	85 31.5%	31 11.5%	31 11.5%	12 4.4%
5	Availability of ICT center on campus makes students has access to LMS	114 42.2%	89 33.0%	37 13.7%	23 8.5%	7 2.6%
6	LMS usage make student to learn on their own without attending lecture	103 38.1%	82 30.4%	31 11.5%	39 14.4%	15 5.6%
7	Student solve assignment through the use of LMS	109 40.4%	99 36.7%	35 13.0%	19 7.0%	8 3.0%
8	Student update	97	109	34	26	4

	educational materials through the use of LMS	35.9%	40.4%	12.6%	9.6%	1.5%
9	LMS encourages individual learning	108 40.0%	92 34.1%	40 14.8%	26 9.6%	4 1.5%
10	Student prefer lecturer note that LMS	112 41.5%	103 38.1%	29 10.7%	22 8.1%	4 1.5%

Table 3: Analysis to know the students' attitude towards the use of LMS for learning in Osun State University. The items the respondents agreed with were; Availability of online materials encourages students use of LMS for learning (72.6%), LMS is too expensive and cumbersome for learning (73.4%), Speedy network encourage students use of LMS (66.7%), Free Wi-Fi make student access to LMS and encourage its usage (72.6%), Availability of ICT center on campus makes students has access to LMS (75.2%), LMS usage make student to learn on their own without attending lecture (68.5%), Student solve assignment through the use of LMS (77.1%), Student update educational materials through the use of LMS (76.3%), LMS encourages individual learning (74.1%), Student prefer lecturer note that LMS (79.6%).

Analysis of Research Hypotheses

Hypothesis 1: There is no significant different in students' perception of the effectiveness of LMS for learning based on gender.

Table 4: Summary of t-test Analysis to know if there is significant difference in students perception of the effectiveness of LMS for learning based on gender

	N	Mean	S.D	T	Df	Sig. (2- tailed)	Remark
Male	95	37.02	8.28	0.312	268	0.91	Not Significant
Female	175	37.77	7.89				

Table 4 presents the analysis to know if there is significant difference in students' perception of the effectiveness of LMS for learning based on gender. The result reveals that there is no significant difference in students' perception of the effectiveness of LMS for learning based on gender ($t = 0.312$, $df = 268$, $p > 0.05$). This implies that what male students' perception of the effectiveness of LMS for learning is the same with that of female students.

Hypothesis 2: There is no significant different in students' attitude towards the use LMS for learning based on gender.

Table 5: Summary of t-test Analysis to know if there is significant difference in students' attitude towards the use LMS for learning based on gender

	N	Mean	S. D	T	Df	Sig. (2- tailed)	Remark
Male	95	32.07	11.28	0.871	268	0.87	Not Significant
Female	175	33.13	10.89				

Table 5 presents the analysis to know if there is significant difference in students' attitude towards the use LMS for learning based on gender. The result reveals that there is no significant difference in students' attitude towards the use LMS for learning based on gender ($t = 0.871$, $df = 268$,

$p > 0.05$). This implies that what male students' attitude towards the use LMS for learning is the same with that of female students.

Discussions

This research aimed mainly to investigate students' perception of the effectiveness of LMS for learning in Osun State University, find out students' attitude towards the use of LMS for learning in Osun State University, determine if the effectiveness of LMS for learning differs significantly based on student's gender and determine whether if the attitude to LMS for learning differs significantly based on student's gender. In line with the above objectives, the following findings were obtained and discussed.

Research Question one

Results on research question one revealed the students' perception of the effectiveness of LMS for learning in Osun State University was positive. There could be several reasons why students' perception of the effectiveness of LMS for learning in Osun State University was positive was found to be positive. LMS provides students with time and place flexibility during COVID-19 which enhanced students to study often due to the availabilities of the materials online. The results corroborated with Eldeeb (2014) study on Students' Perceptions and Attitude to e-learning and Learning Management System (LMS). In accordance to the study, more than 77% of the participant students found LMS and e-learning easy to use eased the access to the course material and made it available 24/7. Ramadania (2021) study on Students' Perception of Learning Management System (LMS) Utilized in Online English Learning Situation During Covid-19 Pandemic is also in consistent with the result. It is also established that students can easily download the material, and learned it over and over again in LMS has a complete advantage on the interest of students towards learning during COVID-19 which made students to learn on their own without attending lecture. (Ling, Wen, Hazwani, & Lateh, 2019) study on Non-Chinese Students' Perception on E-Learning in Enhancing Chinese Non-Chinese Students' Perception on E-Learning in Enhancing Chinese Language Skills corroborates with this result. It has been discovered that online learning directly benefits students' listening, reading, writing, and speaking abilities, as well as their

learning and motivation. LMS improve quality education during COVID-19 which students-lecturers used efficiently which is in line with the result of Popovici and Mironov (2014). It revealed that that students are deeply aware of the changes brought over by the digital technologies, by their impact on the learning process. Mpungose (2019) conducted a study on lecturers' reflections on their understanding of Moodle (LMS) as a platform to decolonise the university curriculum in the South African context which negates the above results of this finding.

LMS is used to store, send, manipulate and read information which has significant impact on increasing students' interest towards leaning during pre and post COVID-19. The results corroborated with Srichanyachon (2014) study on the attitudes and perceptions of Bangkok University students toward using Learning Management System (LMS) along with traditional face-to-face learning. Students with high attitudes toward using the Internet as a learning tool express more positive students' perceptions of using LMS than those with low attitudes. However, the levels of attitudes toward using the Internet as a learning tool and their perceptions of using LMS in general are moderate. The students agreed that the Internet is useful for receiving news and communicating with people. Regarding to the finding of this study by (Allo, 2020) on the learners' perception on online learning in the midst of a COVID-19 pandemic, the learners' perception on online learning reveals that it is good in the midst of COVID-19 pandemic. It was proved by the investigation that the learner perceived online learning is very helpful in the middle of pandemic which it corroborates with the result of this finding.

Research Question Two

Results on research question two revealed students' attitude towards the use of LMS for learning in Osun State University was positive. The respondents agreed that LMS gives room for availability of online materials which encourages students to use LMS for learning. LMS is said to be expensive and cumbersome for learning. LMS uses speedy network which encourages students to use LMS and also Free Wi-Fi makes students to have access to LMS and encourages its usage, this negates the study of Eldeeb (2014) on Students' Perceptions and Attitude to e-learning and Learning Management System (LMS). Most of the participant students accessed the LMS without a problem and the

difficulties faced by few of them were related to internet and Wi-Fi connection. However, based on the response on open-ended questionnaire, most of students said the use of LMS is wasteful of quota, and sometimes slow. This could have happened, since the LMS system is requiring an internet connection which is not always good Ramadania, (2021). However, the internet network becomes a boomerang for the students when they didn't get a good signal. Availability of ICT center on campus makes students has ace which negates the result of this finding. LMS and its usage makes student to learn on their own without attending lecture. Students solve assignment through the use of LMS, this is corroborated with the study of Eldeeb (2014) on Students' Perceptions and Attitude to e-learning and Learning Management System (LMS). More than 75% of the participant students appreciated the announcements uploaded on LMS as it kept them on the track of any modifications, quizzes and assignments in the course. Ankita (2013) study supports the result of this finding by pointing out the importance of LMS in connecting learning contents and learners together in a standardized manner. It manages and administers learning progress and keep track on learning performance. Additionally, LMS enable learners to establish their teaching rhythm and to acclimatize the learning process in order suit their personal needs. Furthermore, LMS aid instructors to send learning materials and follow students' evaluation and allow learners to gain access to learning tools for their web-based education Al-Neklawy, (2017). LMS has made students to be lazy which negates Popovici and Mironov (2014) study on Students' perception on using eLearning technologies.

Research Hypothesis One

The study presents the analysis to know if there is significant difference in students' perception of the effectiveness of LMS for learning based on gender. The result reveals that there is no significant difference in students' perception of the effectiveness of LMS for learning based on gender. This implies that what male students' perception of the effectiveness of LMS for learning is the same with that of female students.

Many of these studies had no evidence of statistical differences (Çeliköz, Erdo, 2017; Tay, Ba,saran, S, 2018; Yalman, M.; Ba,saran, B.

Gönen, 2018; and Li, Y.; Wang, Q.; Campbell, J, 2015). Meanwhile, (Li, Wang, and Campbell, 2015) found that male students had a significantly higher mean for the frequency of using a course management system than female students which negates the result of this finding. Unfortunately, most of the research regarding this issue conducted t-tests or ANOVAs for statistical methodologies and was limited to identifying structural differences among the sample. In this study, we used the digital divide to figure out structural gender differences in the use of an LMS in a university in Korea. The reason for exploring factorial invariances of the gender divide was to analyze potential inequality in the core aspects of the design and use of e-learning. The significance of the study is that it was conducted in Korea where not much attention has been paid to the gender divide. Our analysis directly addresses this understudied area. A meta-analytical study on gender digital divide showed that research variables on Information and Communications Technology (ICT) general attitudes and satisfaction, ICT confidence, ICT interest and motivation, and actual use of ICT tools and applications were statistically in favor of male students Borokhovski, E.; Tamim, R.M.; Pickup, D.; Rabah, J.; Obukhova, Y. (2019). However, another meta-analysis of the gender differences in students' ICT literacy contrasted previous results in that the gender differences in ICT literacy were significant, were positive, and favored female students (Siddiq, F.; Scherer, R., 2019).

Research Hypothesis Two

Finally, this study presents the analysis to know if there is no significant difference in students' attitude towards the use LMS for learning based on gender. The result reveals that there is no significant difference in students' attitude towards the use LMS for learning based on gender. This implies that what male students' students' attitude towards the use LMS for learning is the same with that of female students. It is against the study builds on previous work investigating gender differences in the interrelationships among LMS behaviors and course performance (Lowes, Lin, P., & Kinghorn 2015) which this negates the result of this finding. This seemed to suggest that on average, what might be considered female diligence in the discussion forums was not rewarded by higher grades. To further investigate these gender differences, we next compared the three interactivity behaviors by final grade and found that the differences by gender were larger for those who

earned lower grades. In other words, females who earned lower grades had higher levels of interactivity than males who earned lower grades, suggesting that their activity is not equally rewarded, at least in terms of final grades, but also that communication with peers may be more important to females than to males. The next question was whether females' posting more also meant that they were writing more. We therefore examined post length, using one course as an example. This showed that females not only viewed and authored more posts than males but that their posts were longer as well. Data visualization over time showed that this was the case in almost every week over the course of the year, indicating that these differences in behaviors are not episodic but are aspects of the gendered approach to this type of learning. Moussa, M.B.; Seraphim, J. (2017) argued that there was little evidence to suggest that new technologies alone enable women to alter male-dominated gender power relations in society which negates the result of this finding. Rai, A. (2019) study negates the outcome of this finding by pointing out that women in some sections in South Asian countries did not have equal status and rarely participated in the decision-making processes at the household level, despite the improved development and use of science and technology.

Conclusion

In this research, a result of the survey of the effectiveness of learning management system (LMS) for learning among undergraduates in Osun state university as occasioned by covid-19 pandemic has been presented and discussed. Based on the findings from this study, it was conducted that learning management system (LMS) has positive effects for learning among undergraduates in Osun state university. Study revealed that LMS provide students with time and place flexibility during COVID-19, LMS make students to study often due to the availabilities of the materials online, LMS has a complete advantage on the interest of students towards learning during COVID-19, LMS make student to learn on their own without attending lecture, LMS improve quality education during COVID-19, Student-lectures used LMS efficiently, LMS promotes individual learning and others. Also, the study has revealed that if there is no significant difference in students' perception and attitude towards the use LMS for learning based on gender of the effectiveness of LMS for learning based on gender. As a result of the

findings in this study, this can strengthen the literatures of LMS. It is strongly suggested to find different variables or specified the brand of LMS such as Google Classroom, Moodle, Edmodo, Schoology, and etc. So, it can be checked through the experiments or correlation or impacts of LMS in teaching-learning process.

Recommendations

Based on the findings related to effectiveness of learning management system (LMS) for learning among undergraduates in Osun state university as occasioned by Covid-19 pandemic, here are some recommendations:

1. Undergraduates should incorporate learning management system (LMS) into their learning channel to enhance their learning outcomes. For instance, it can encourage students to use educational apps, access online learning resources, and participate in class discussions.
2. Lecturers should incorporate learning management system (LMS) into their teaching channel to enhance students learning outcomes.

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