



Online Learning Attitude and Readiness of Students in Nigeria during the Covid-19 Pandemic: A Case of Undergraduate Accounting Students

Actitud de aprendizaje en línea y preparación de los estudiantes en Nigeria durante la pandemia de Covid-19: un caso de estudiantes de pregrado en contabilidad

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ABSTRACT

The occurrence of corona virus disease in 2019 (Covid-19) pandemic with its negative consequences on various sectors including education up till now has led to the increase in the necessity to use online learning resources and platforms for teaching and learning especially in higher education institutions (HEIs) in various countries. This research paper's major goal was to investigate the online learning attitude and online learning readiness of undergraduate accounting students in Nigerian public HEIs during the Covid-19 pandemic. The research participants consisted of 845 male and female undergraduate accounting students purposively selected from six HEIs. Study data was collected quantitatively with two online learning scales addressing students' online learning attitude and online learning readiness respectively. The study data were analysed with relevant statistical tests in the Statistical Package for the Social Sciences (SPSS, version 22) based on .05 level of significance criteria. The finding demonstrates significantly positive online learning attitude among the undergraduate accounting students from the studied HEIs during the Covid-19 pandemic. Finding also showed that the undergraduate accounting students' online learning attitude significantly related to their online learning readiness during the Covid-19 pandemic. The male and female undergraduate accounting students did not differ in their online learning attitude and online learning readiness. There were no significant differences in online learning attitude and online learning readiness among the undergraduate accounting students from the studied HEIs based on institution type (university, polytechnic and college of education). Nigerian HEIs and accounting departments should provide efficient online learning access and resources to these students and work towards bridging any existing institutional disparities in the availability and use of online learning facilities and resources.

KEYWORDS Covid-19 pandemic; Undergraduate Accounting Students; ICT; Online Learning; Online Learning Attitude; Online Learning Readiness.

RESUMEN

La aparición de la enfermedad del coronavirus en la pandemia de 2019 (Covid-19) con sus consecuencias negativas en varios sectores, incluida la educación, ha llevado al aumento de la necesidad de utilizar recursos y plataformas de aprendizaje en línea para la enseñanza y el aprendizaje, especialmente en Instituciones de Educación Superior (IES) en varios países.

El objetivo principal de este estudio fue investigar la actitud de aprendizaje en línea y la preparación para el aprendizaje en línea de los estudiantes de pregrado en contabilidad en las IES públicas de Nigeria durante la pandemia por Covid-19. Los participantes de la investigación fueron 845 estudiantes de licenciatura en contabilidad, hombres y mujeres, seleccionados intencionalmente de seis IES. Los datos del estudio se recopilaron cuantitativamente con dos escalas de aprendizaje en línea que abordan la actitud de aprendizaje en línea de los estudiantes y la preparación para el aprendizaje en línea, respectivamente. Los datos del estudio se analizaron con pruebas estadísticas relevantes en el Paquete Estadístico para las Ciencias Sociales (SPSS, versión 22) basado en criterios de nivel de significancia de .05. El hallazgo demuestra una actitud de aprendizaje en línea significativamente positiva entre los estudiantes de pregrado en contabilidad de las IES estudiadas durante la pandemia por Covid-19. Los hallazgos también mostraron que la actitud de aprendizaje en línea de los estudiantes de licenciatura en contabilidad se relacionó significativamente con su preparación para el aprendizaje en línea durante la pandemia por Covid-19. Los estudiantes universitarios de contabilidad masculinos y femeninos no difirieron en su actitud de aprendizaje en línea y preparación para el aprendizaje en línea. No hubo diferencias significativas en la actitud de aprendizaje en línea y la preparación para el aprendizaje en línea entre los estudiantes de licenciatura en contabilidad de las IES estudiadas según el tipo de institución (universidad, politécnica y facultad de educación). Las IES y los departamentos de contabilidad de Nigeria deben proporcionar acceso y recursos de aprendizaje en línea eficientes a estos estudiantes y trabajar para salvar las disparidades institucionales existentes en la disponibilidad y el uso de las instalaciones y los recursos de aprendizaje en línea.

PALABRAS CLAVE Pandemia Covid-19; Estudiantes de Grado en Contabilidad; TIC; Aprendizaje en línea; Actitud de aprendizaje en línea; Preparación para el aprendizaje en línea.

1. INTRODUCTION

The occurrence of corona virus disease in 2019 (Covid-19) pandemic with its negative consequences on various sectors including education up till now has led to the increase in the necessity to use online learning resources and platforms for teaching and learning especially in higher education institutions (HEIs) in various countries (González et al., 2020). In order for educational institutions, particularly HEIs to be successful in their application of online learning models to educate their students at this time of the pandemic, it is important they have evidence-based information about students' online learning attitude and online learning readiness (Eze et al., 2021). Such information can help both the school administration and course lecturers in recognizing students' need areas as well as equip them with information required for improving existing online teaching and learning models and curricular implementation techniques to become more motivating and relevant to students' learning needs at this time of the pandemic (Eze et al., 2021; Olayemi et al., 2021).

Online learning attitude of students has been conceptualized in terms of students' general acceptance of online learning mode, individual student awareness, perception of usefulness of online learning mode, and application effectiveness in online learning context (Usta et al., 2016). The students' attitude towards online learning can be influenced by both internal and external factors that determine if the online learning attitude of the students will be positive or negative. Different studies have shown that internal factors such as students' personality, computer anxiety, ability to control technology, quality of personal interaction, self-control, and goal influence students' online learning attitude (Gilbert et al., 2007; Holley, & Oliver, 2010; Lee et al., 2011; Osman, 2005; Smart, & Cappel, 2006; Sun et al., 2008). On the other hand, studies also showed that external factors such as technological experience, technological control, length of online

material, multimedia used and support perception influence the online learning attitude of the students either negatively or positively (Boling et al., 2012; Bolliger et al., 2010; Gilbert et al., 2007; Lee et al., 2011; Mockus et al., 2011; Smart, & Cappel, 2006). Positive online learning attitude enables the students to gain more value from their online classes while negative online learning attitude prevents the students from gaining knowledge from these online classes (Smidt et al., 2014).

Online learning readiness has been conceptualized in terms of students' computer/internet self-efficacy; self-directed learning, control in online learning, motivation for learning and online communication self-efficacy (Hung et al., 2010). Kayaoglu and Akbas (2016) showed that proficiency, subject, organizational structure, human and fiscal resources have an effect on online learning readiness. Factors that influence online learning readiness positively include: emotional intelligence, grades, internet access, internet literacy, aim of learning, learning features, technical base, combined teaching, measured pattern, rating and feedback, learning time, learning motive and knowledge of learners' features (Borotis et al., 2008; Cinkara, & Bagceci, 2013; Engin, 2017). In order to significantly contribute to the empirical discourse on students' online learning attitude and readiness, especially from a developing country sample, the researchers considered investigating the online learning attitude and online learning readiness of undergraduate accounting students in Nigerian HEIs during the Covid-19 pandemic as an important research that could positively impact the use of online learning and teaching model in the studied higher education institutions.

1.1. Statement of Problem

Many teachers use online learning for teaching, but some people say it makes them unable to understand the cultural perspective of their students and that their interactivity is unsatisfactory due to insufficient communication options offered by online learning mode (Anderson, 2008). However, the use of technology as a tool for teaching online has been described as a social inclusion strategy (Aguilera, & Cuenca, 2022). While Covid-19 restrictions increased the use of online learning, research points the increase in stress experienced by teachers (Télez et al., 2022) and problematic use of the Internet and technological tools by teachers-in-trainee (Colomo Magaña et al., 2021) which might impact teaching and learning outcomes. Some other studies demonstrated that the Covid-19 pandemic negatively impacted workplace orientation of employees including the school workforce (e.g. Egara et al., 2021). Therefore, it is important to explore the online learning attitude and online learning readiness of students during the Covid-19 pandemic.

1.2. Theoretical Underpinning

The theory underpinning this research is the Online Collaborative Learning theory (OCLt) (Harasim, 2012). Aside from the fact that OCLt allows students to work as a team to create knowledge, this theoretical model also offers a learning approach that encourages and supports students to explore avenues through which they can innovate, invent, and engage in abstract thinking required for problem-solving instead of indulging in rote learning. Thus, the OCLt emphasizes the importance of active and engaged learners for the construction of knowledge. On the other hand, teachers, according to the OCL theoretical framework, play invaluable roles as conduits for the diffusion of knowledge in their particular subject area being studied. OCLt is mainly driven by the idea that, at least in some cases, some of the tasks typically carried out in classroom

learning can be performed through computers. Therefore, a significant proposition of OCLt is to utilize technology as a tool to improve the interaction between teachers and students. The OCLt may help to identify how knowledge can be developed and enhanced via social discourse in virtual learning environment between the teacher and students (Bates, 2014).

1.3. Research Objectives

This research paper's major goal was to investigate the online learning attitude and online learning readiness of undergraduate accounting students in Nigerian HEIs during the Covid-19 pandemic. Specific objectives of this research paper are to investigate:

- a. The online learning attitude of the undergraduate accounting students from the studied HEIs during the Covid-19 pandemic.
- b. The relationship between undergraduate accounting students' online learning attitude and their online learning readiness during the Covid-19 pandemic.
- c. The extent of difference between male and female undergraduate accounting students in their online learning attitude and online learning readiness.
- d. The extent of differences in online learning attitude and online learning readiness among the undergraduate accounting students from the studied HEIs based on institution type (university, polytechnic and college of education)

1.4. Research Questions

- a. What is the online learning attitude of the undergraduate accounting students from the studied HEIs during the Covid-19 pandemic?
- b. Is undergraduate accounting students' online learning attitude related to their online learning readiness during the Covid-19 pandemic?
- c. What is the extent of difference between male and female undergraduate accounting students in their online learning attitude and online learning readiness?
- d. What is the extent of differences in online learning attitude and online learning readiness among the undergraduate accounting students from the studied HEIs based on institution type (university, polytechnic and college of education)?

1.5. Research Hypotheses

- H01: There will be no significant relationship between undergraduate accounting students' online learning attitude and their online learning readiness during the Covid-19 pandemic.
- H02: There will be no significant difference between male and female undergraduate accounting students in their online learning attitude and online learning readiness.
- H03: There will be no significant differences in online learning attitude and online learning readiness among the undergraduate accounting students from the studied HEIs based on institution type (university, polytechnic and college of education).

2. MATERIAL AND METHOD

2.1. Ethics Statement

The researchers received ethics approval to carry out this online survey from the Research Ethics Committee at the University of Nigeria.

2.2. Design

For this research, the descriptive survey design was employed to answer four research questions and test three null hypotheses regarding online learning attitude and online learning readiness of undergraduate accounting students in selected Nigerian public higher education institutions (HEIs) in Southern Nigeria.

2.3. Sample

The research participants consisted of a purposive, random sample of 845 undergraduate accounting students selected from six public HEIs in Nigeria. In terms of institution category, the study sample consisted of undergraduate accounting students from two public universities, two public polytechnics, and two public colleges of education. The study respondents included 441 male (52.2 %) and 404 female (47.8 %) undergraduate accounting students. A total of 500 students (59.2 %) were from the university, 241 students (28.5 %) were the polytechnic while 104 (12.3) were college of education students. Out of the total sample, 489 students (57.9 %) were between 19-25years of age while 356 students (42.1 %) were between 26-30 years of age.

2.4. Instruments

The study data was collected quantitatively with two online learning scales addressing students' online learning attitude (Usta et al., 2016) and online learning readiness (Hung et al., 2010) respectively.

2.4.1. The Online Learning Attitude Scale (OLAS)

The Online Learning Attitude Scale (OLAS) (Usta et al., 2016) consist of 20 items in four dimensions (general acceptance – 7 items; individual awareness – 6 items; perceived usefulness – 3 items; and application effectiveness –4 items) on five-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). Research report concerning the internal consistency of the OLAS show total Cronbach's alpha value of 0.90 (Usta et al., 2016).

2.4.2. The Online Learning Readiness Scale (OLRS)

The Online Learning Readiness Scale (OLRS) (Hung et al., 2010) consist of 18 items in five clusters (computer/internet self-efficacy –3 items; self-directed learning – 5 items; learner control – 3 items; motivation for learning – 4 items; and online communication self-efficacy – 3 items) on five-point Likert-type scale ranging from strongly disagree (1) to strongly agree(5). Research report concerning the internal consistency of the OLRs show total Cronbach's alpha value of 0.89 (Herguner et al., 2020).

2.5. Procedure

The two online learning scales were sent to the undergraduate accounting students as online survey in which they were required to provide online informed consent before proceeding to complete the demographic information section (age, gender, and institution type) and respond to the items in the scales. A total of 1050 online surveys were sent out whereas 845 completed surveys were received by the end of three months of data collection.

2.6. Analysis

The study data were analysed with relevant statistical tests (including mean, standard deviation, regression, and F-test statistics) in the Statistical Package for the Social Sciences (SPSS, version 22) based on .05 level of significance criteria.

3. RESULTS

TABLE 1. Descriptive statistics for the students' online learning attitude and readiness

	Gender	HEI type	Mean	Standard Deviation	N
OLAS	Male	University	28.45	4.57	264
		Polytechnic	27.54	2.38	123
		COE	28.12	4.53	54
		Total	28.16	4.09	441
	Female	University	27.96	3.93	236
		Polytechnic	28.82	5.68	118
		COE	27.34	1.84	50
		Total	28.14	4.36	404
	Total	University	28.22	4.29	500
		Polytechnic	28.17	4.36	241
		COE	27.75	3.51	104
		Total	28.15	4.22	845
OLRS	Male	University	38.65	9.85	264
		Polytechnic	39.10	10.01	123
		COE	38.69	10.03	54
		Total	38.78	9.89	441
	Female	University	38.25	9.87	236
		Polytechnic	38.18	9.87	118
		COE	38.50	10.02	50
		Total	38.26	9.86	404
	Total	University	38.46	9.85	500
		Polytechnic	38.65	9.93	241
		COE	38.60	9.98	104
		Total	38.53	9.88	845

OLAS=Online Learning Attitude Scale; OLRS=Online Learning Readiness Scale,
N=Number of respondents, COE=College of Education, HEI=Higher Education Institution

RQ1: What is the online learning attitude of the undergraduate accounting students from the studied HEIs during the Covid-19 pandemic?

Table 1 show that the total OLAS mean responses of the students was 28.15 with standard deviation score of 4.22. This suggests a positive online learning attitude among the undergraduate accounting students from the studied HEIs during the Covid-19 pandemic.

RQ2: Is undergraduate accounting students' online learning attitude related to their online learning readiness during the Covid-19 pandemic?

Table 2 show that students' online learning attitude was positively related to the students' online learning readiness (Pearson R=.32, R2=.10, Adjusted R2=.10, β =.32). [See Table 2]

TABLE 2. Relationship between the students' online learning attitude and readiness

Model	R	R2	Adj. R2	B	β	Sig	95 % CI
1	.32	.10	.10	.75	.32	.000	.596, .896

B=Unstandardized Coefficients, β =Standard Coefficient

RQ3: What is the extent of difference between male and female undergraduate accounting students in their online learning attitude and online learning readiness?

In respect of online learning attitude, male students had OLAS mean score of 28.16 and standard deviation score of 4.09 while female students had OLAS mean score of 28.14 and standard deviation score of 4.36. Regarding the students' online learning readiness, male students had OLRS score of 38.78 and standard deviation score of 9.89 while female students had OLRS mean score of 38.26 and standard deviation score of 9.86. The closeness of the standard deviation scores of male and female students in both the OLAS and OLRS suggest a similarity of opinions about online learning attitude and online learning readiness [See Table 1].

RQ4: What is the extent of differences in online learning attitude and online learning readiness among the undergraduate accounting students from the studied HEIs based on institution type (university, polytechnic and college of education)?

In respect of online learning attitude, university students had OLAS mean score of 28.22 and standard deviation score of 4.29; polytechnic students had OLAS mean score of 28.17 and standard deviation score of 4.36; while college of education students had OLAS mean score of 27.75 and standard deviation score of 3.51. For the students' online learning readiness, university students had OLRS mean score of 38.46 and standard deviation score of 9.85; polytechnic students had OLRS mean score of 38.65 and standard deviation score of 9.93; while college of education students had OLRS score of 38.60 with standard deviation score of 9.98. The closeness of the standard deviation scores of the university, polytechnic and college of education students in both the OLAS and OLRS suggest a similarity of opinions about online learning attitude and online learning readiness [See Table 2].

H01: There will be no significant relationship between undergraduate accounting students' online learning attitude and their online learning readiness during the Covid-19 pandemic.

Table 2 show the regression analysis testing the significant relationship between undergraduate accounting students' online learning attitude and their online learning readiness during the Covid-19 pandemic. The results showed a statistically significant relationship between students' online learning attitude and their online learning readiness during the Covid-19 pandemic ($\beta=.32$, $p=.000$, 95 %CI: .596, .896). Therefore, the null hypothesis of no significant relationship was rejected [See Table 2].

TABLE 3. F-test analysis of the students' online learning attitude and readiness

Source	Scales	df	F	Sig.
Gender	OLAS	1	.004	.948
	OLRS	1	.585	.445
Institution type	OLAS	2	.541	.582
	OLRS	2	.032	.968
Total	OLAS	845		
	OLRS	845		
Corrected Total	OLAS	844		
	OLRS	844		

OLAS=Online Learning Attitude Scale; OLRs=Online Learning Readiness Scale

H02: There will be no significant difference between male and female undergraduate accounting students in their online learning attitude and online learning readiness.

Table 3 show the F-test analysis testing the significant difference between male and female undergraduate accounting students in their online learning attitude and online learning readiness. The results revealed that there is no significant difference between the male and female students in their online learning attitude [$F(1, 844)= .004$, $p=.948$] and online learning readiness [$F(1, 844)= .585$, $p=.445$]. Thus, the null hypothesis of no significant difference was accepted [See Table 3].

H03: There will be no significant differences in online learning attitude and online learning readiness among the undergraduate accounting students from the studied HEIs based on institution type (university, polytechnic and college of education).

Table 3 show the F-test analysis testing the significant differences in online learning attitude and online learning readiness among the undergraduate accounting students from the studied HEIs based on institution type (university, polytechnic and college of education). The results revealed that there are no significant differences in online learning attitude [$F(2, 844)= .541$, $p=.582$] and online learning readiness [$F(2, 844)= .032$, $p=.968$] among the students from the studied HEIs based on institution type (university, polytechnic and college of education). Thus, the null hypothesis of no significant difference was accepted [See Table 3].

4. DISCUSSION

This research paper's major goal was to investigate the online learning attitude and online learning readiness of undergraduate accounting students in Nigerian higher education institutions (HEIs) during the

Covid-19 pandemic. The finding demonstrates significantly positive online learning attitude among the undergraduate accounting students from the studied HEIs during the Covid-19 pandemic. This result agrees with the points from the results of Britiller and Zaki (2020) who indicated the positive online learning attitude of students at a medical college in the kingdom of Saudi Arabia in their research. The result of this research also agrees with the findings of Mehra and Omidian (2011) and Egbo et al. (2011) who both indicated positive attitude from a high number of students towards e-learning in their study.

Finding also showed that the undergraduate accounting students' online learning attitude significantly related to their online learning readiness during the Covid-19 pandemic. Similar results were reported by Jiang et al. (2021) who indicated the interrelationship between online readiness and attitude. This finding also correlates with the findings of Herguner et al. (2020) who noted from their study that online attitude predicts online readiness significantly and online attitude has 42 % of the total variance in explaining online readiness. This finding also agrees with the findings of Olayemi et al. (2021) who investigated the perception and readiness of students towards online learning in Nigeria during the Covid-19 pandemic. According to these findings the effect of positive online learning attitude on online learning in the tertiary institution has been further revealed.

The male and female undergraduate accounting students did not differ in their online learning attitude and online learning readiness during the Covid-19 pandemic. The results of this research agrees with the findings of Suri and Sharma (2013) and Egbo et al (2011) which showed that there was no significant difference between the online learning attitude of male and female, but disagrees with the findings of Britiller and Zaki (2020) and Zabadi and Al-Alawi (2016) which shows a significant difference between readiness and attitude of male and female faculty members on the use of online learning.

There were no significant differences in online learning attitude and online learning readiness among the undergraduate accounting students from the studied HEIs based on institution type (university, polytechnic and college of education). This finding agrees with the findings of Herguner et al. (2020) who revealed in their studies that online attitude and online readiness do not differ according to the faculty/ department studied. It is, thus, recommended to Nigerian public HEIs and accounting departments to provide efficient online learning access and resources to these students and work towards bridging any existing institutional disparities in the availability and use of online learning facilities and resources.

4.1. Research Contributions

This study appears to be the only research from Nigerian public HEIs examining online learning attitude and online learning readiness among undergraduate accounting students and particularly during the pandemic period. The study adds to the online learning literature to help researchers further recognize and explore undergraduate students' online learning attitude and online learning readiness in accountancy department especially in developing countries. The research brings to researchers' knowledge about the existing relationship of online learning attitude with online learning readiness in undergraduate student sample from Nigerian public HEIs setting. The research also adds to knowledge regarding accounting students' online learning attitude and online learning readiness across the various types of HEIs in Nigeria that were investigated.

5. CONCLUSIONS

Given the findings, the researchers conclude that undergraduate accounting students from the studied Nigerian HEIs possess significantly positive online learning attitude during the Covid-19 pandemic. Furthermore, there was a significant relationship between undergraduate accounting students' online learning attitude and readiness during the Covid-19 pandemic. The male and female undergraduate accounting students were similar in their mean ratings regarding online learning attitude and readiness. Finally, no significant differences exist in online learning attitude and readiness among undergraduate accounting students from the studied HEIs based on institution type (university, polytechnic and college of education). It is, thus, recommended to Nigerian public HEIs and accounting departments to provide efficient online learning access and resources to these students and work towards bridging any existing institutional disparities in the availability and use of online learning facilities and resources.

5.1. Limitations and future lines of research

This research is limited to the undergraduate sample investigated. It is suggested to investigate accounting students' ICT skills and usage in relation to how much these constructs influences their online learning attitude and readiness. It is further suggested to conduct a comparative research of online learning attitude and readiness between undergraduate accounting students and other undergraduates from other academic departments within their faculty as well students from other faculties. Another suggestion is for researchers to investigate whether undergraduate accounting students and postgraduate accounting students are similar in their online learning attitude and readiness during Covid-19 pandemic. It is also important to investigate enhancing factors for online learning attitude and readiness during Covid-19 pandemic among accounting students in both public and private HEIs. It is necessary to underline the main limitations of the research, as well as the future lines of work resulting from the study carried out.

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