**Attitudes of Undergraduates towards Online Classes in Osun State Universities: The role of Gender and School type**

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ABSTRACT

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| The rapid advancement of technology has continually impacted the mode of disseminating instruction especially at the tertiary level of education. The study was conducted to assess undergraduates’ attitude towards online classes at Osun State universities, Nigeria. It also examined the influence of undergraduates’ demographic factors of gender and school type on the attitude of undergraduates towards online classes in the study area. The descriptive survey research design was employed for the study. Six hundred undergraduates from both public and private universities in Osun State made up the sample. Three Universities were purposively selected based on the adoption of online classes for teaching. In each of the universities, two hundred undergraduates were selected using the accidental sampling procedure. Data gathered were analysed using statistical package for the social sciences (SPSS). Mean and standard deviation were used to analyse the research question while 2-way ANOVA was used to test the research hypothesis. The results revealed that undergraduates had a very good attitude towards online classes (overall mean = 66.1%; S.D = 7.30). Also, both gender (F (1,598) = 29.47; p < 0.05) and school type (F (1,598) = 41.85; p < 0.05) significantly influence undergraduates’ attitude towards online classes in the study area. |

*Keywords: Online classes, Attitude, School Type, Undergraduates*

1. INTRODUCTION

The activities of teaching and learning at higher education level across the globe has improved tremendously in this digital era through the emergence and adoption of Information and Communication Technology (ICT) tools to teaching (Al-Rahmi, Alzahrani, Yahaya, Alalwan & Kamin, 2020). In Nigeria, the deployment of ICT to instruction delivery at tertiary institutions of learning cannot be overemphasized and has produced positive results in mitigating some of the challenges tertiary education is battling with. Some of the challenges such as shortage of lecturers, large population of students and insufficient lecture halls leading to overcrowded lecture halls have been reasonably addressed by the application of technology to instruction delivery. Furthermore, the incorporation of information and communication technology has brought a paradigm shift in the mode of teaching adopted by lecturers compared to the traditional physical classroom setting (Kinshuk, Chen, Cheng & Chew, 2016). Today, teaching can effectively take place without the physical presence of the teacher and students irrespective of students’ population as a result of the adoption of online learning systems to academic engagements which can be tagged “online classroom(s)” and abbreviated as ‘online class(es) in the context of this study.

Online class is a learning environment that incorporates digital instructional tools to teaching for the transfer of instruction technologically to a large group of receivers (Economic Times, 2020). According to Efthymiou and Zarifis (2021),individualized learning, group discussion with fellow students, clarification of doubting issues, sharing of materials as well as monitoring of academic achievement are facilitated through internet-based channels in an online class. Students in an online class experience flexibility in learning and access to instructional contents irrespective of location, pace, space and time (Francisco, 2020). Online classroom is being embraced today as a medium of instruction because of some its peculiarities such as collaboration and interactivity among students, social networking, and reflection on the contents of instruction delivered which are core indicators of an efficient learning process (Rudestam&Schoenholtz-Read, 2010). Online classroom approach offers students a highly developed, an elaborate and interactive open online instruction anchored by highly ranked professionals across the globe (Christensen & Eyring, 2011; Cowen & Tabarrok, 2014). Stein, Shephard and Harris (2011) opined that online classroom serves as a platform for instructors to showcase their digital competence in the adoption of technology to the dissemination of instruction as well as an opportunity for learners to acquire skills that will enhance the acquisition of digital skills needed in handling digital devices and communication gadgets for learning. Globally, online classroom environments have occupied a significant and indispensable position in the educational system providing social inclusiveness, financial efficiency, ideological variation and pedagogical creativity (Wu & Hwang, 2010).

However, the adoption of online learning has not been given a well-deserved acceptance especially in developing countries like Nigeria and scholars have identified several problems facing the application of Information and Communication Tools in online learning. Lawn, Zhi and Morello (2017) cited in Bubou and Job (2021) listed factors like; students’ poor study habits, feeling of isolation and negative attitude of learners, absence or lack of peer-to-peer collaboration, delay in instructors’ feedback and response when issues arise. Furthermore, attitude of lecturers and students, insufficient internet facilities, inadequate training are some of the factors presented by Eze et. Al. (2018) to be affecting the successful adoption of online learning in some tertiary institutions of learning in Nigeria.

**1.1 Objectives of the Study**

The objectives of the study are to:

1. İnvestigate undergraduates’ attitude towards online classes at Osun State universities, Nigeria;
2. examine the influence of undergraduates’demographic variables of gender and school type on the attitude of students towards online classses in the study area.

**1.2 Research Question**

What is the undergraduates’ attitude towards online classes in Osun state Universities?

**1.3 Research Hypothesis**

Demographic variables of gender and school type have no significant influence on the attitude of undergraduates towards online classes .

**2. LITERATURE REVIEW**

The deployment of online learning tools has continued to advance over the past decades predominantly in developed countries of the world with less adoption in developing countries like Nigeria (Eli-Chukwu, Igbokwe, Ifebude, Nmadu, Iguodala, Uma & Akudo, 2023). However, there was a significant improvement during the unexpected emergence of COVID-19 pandemic that ravaged the entire world leading to closure of schools thereby making physical contact between the teacher and students impossible. During the Pandemic period, students in higher institutions of learning in Nigeria transited from the physical mode of learning to the online modes using different platforms to facilitate the delivery of instruction. The essence of this is to allow students continue receiving lectures outside the four walls of the lecture halls since restriction has been issued on all physical gatherings in order to curtail the spread of the pandemic. The new normal led to diverse reactions and opinions about the applicability and successful deployment of the online delivery mode of instruction due to lack of preparation and readiness for such unpredicted change in the approach of delivering lectures on the part of both lecturers and students (Oteyola and Oyeniran, 2021; Houlden & Veletsianos, 2020).

Moreover, in any learning scenario either physical or online, students’ attitude is a core determinant of desirable learning outcomes and academic progress (Aguilera-Hermida, Quiroga-Garza, Gómez-Mendoza, Del Río Villanueva, Avolio Alecchi & Avci, 2021). A competent teacher must take cognizance of the attitude of his/her students towards a lecture irrespective of the mode of delivery either physically or remotely. The fact remains that learning experience may not happen if consideration is not given to the attitude of online learners that are major actors of the online learning classroom environment (Küçükahmet, 2017). Therefore, for online learning to be effective and efficient, significant priority must be given to the attitude of online learners (Ismaili, 2021).

According to Rosemund (2006) in Odewole (2023) tagged attitude as an evaluative reaction in terms of belief, emotions, feelings and behaviour displayed by an individual towards something, events, and programs which could be favourable or unfavourable. Also, Soibamcha and Pandey (2016) asserted that attitudes are individualised and complex features which are personally organised and developed to serve as a product of reactions to the experiences gathered by an individual. Schiffman and Kanuk (2008) in Nasir and Neger (2022) described attitude to be the displayed pleasant or unpleasant behaviour of someone to a particular object or occurrence. Neely and Tucker (2010) posited that the attitude of the students towards online courses majorly determined the students’ learning outcomes and activeness in the online courses they have enrolled to take. Therefore, the attitude developed by an individual may be positive or negative as determined by some factors.

Studies abound on students’ attitude towards online classrooms. A study conducted by Verma, Verma, Garg, & Godara (2020) revealed that the respondents which are medical students perceived the online classroom interactions as relevant and the design of the online instruction suitable to meet their educational needs. Also, the respondents prefer the online sessions to the physical mode of learning indicating factors such as safety, comfortability and flexibility of the online environment. In a study conducted by Fedynich, Bradley, and Bradley (2015) to investigate the perception of online learning among graduate students, findings of the study showed that students were satisfied with the simplicity and clarity of the online instruction received which maximized the interaction between students and the instructor. Shang (2005) conducted a study on the attitude of university students in Taiwan towards an online class in journaling using e-mail as the digital tool for learning second language. The study adopted an open-ended survey to gather information on the attitude of students. The results showed that students had positive attitude towards the online class which had favourable impact on the learning outcomes and reading performance of the second language of the students. Nassoura (2012) submitted that students developed positive attitudes towards online learning due to the significant positive impact the application of online learning tools had on the motivation and self-esteem of the students. The findings of the studies conducted by Zhu et al., (2020), Allo (2020) and Dhoot and Thakare (2020) submit that a significant number of students developed positive attitude towards online learning.

Moreover, in some instances, students can display negative attitudes towards online classes as a result of some factors. Govindasamy (2001), Rosenberg and Foshay (2002) in Ogunbodede & Ukpebor (2021) noted that factors such as low level of computer skills, technological anxiety, computer hardware problems, as well as poor study skills, low motivation, and inability to work independently are key contributors to students’ negative attitude towards online classes. In a study conducted by Barzani (2021) on the attitudes of Kurdish University Students towards online education during the Pandemic, the result of the study revealed that majority of the students had negative attitude towards online classes organised during the emergency period of the pandemic. Some of the factors that might influenced this negative attitude as indicated in the study are; unstable internet connection and electricity, poor time management and technical factors.

Diverse results have been presented on the influence of demographic factors on the attitude of students towards online learning. Nistor (2013) posited that gender had no significant influence on the attitude of students towards online learning because students that were male showed a positive attitude than their female counterparts in an online class. Also, Suri & Sharma (2013) conducted a study to know if there exist significant relationship between gender and attitude towards e-learning. The results of the study presented that no significant relationship existed between gender and attitude of students towards e-learning. In a comparative study conducted by Nasir and Neger (2022) on the students’ attitude towards online education system between Public and Private Universities in Bangladesh. The results of the study showed that the attitude of students in private universities towards online classes is stronger that of their counterparts from the public universities based on some indicators like interaction, internet self-efficacy, students’ self-determination, course design, and technical support. Marjerison, Rahman and Li (2020) compared the attitude of Sino-foreign cooperative universities and typical universities students in China towards distance education. The result indicated that there was no significant differences in the students’ attitudes towards distance education irrespective of the type of universities they are currently engaged in

3. method

This study employed the descriptive survey design. All Undergraduates admitted into universities in Osun State constituted the population of the study. Three Universities that adopted online learning for teaching were purposively selected. In each of the universities selected, two hundred undergraduates were selected using the accidental sampling procedure. The age of the undergraduates ranges between fifteen and nineteen. A self-developed instrument with two sections was used to collect data from the respondents. Section one of the instrument elicited the demographic information of the undergraduates like gender and type of school while Section two collected information on the attitude of the undergraduates towards online classes in their various institutions. The validation of the instrument was carried out and it was adjudged valid and reliable.

The researchers visited the selected universities to sought for permission to carry out the study. The instrument was administered on the respondents with the help of a trained research assistant. Data collected were analysed using appropriate descriptive and inferential statistics.

4. results and discussion

**4.1 Research Question:** What is the undergraduates’ attitude towards online classes in Osun state Universities?

**Table 1*:* Undergraduates’ Attitude towards Online Classes**

N = 600

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Min** | **Max** | **Mean** | **Overall Mean (%)** | **Standard Deviation** |
| **Attitude** | 19.00 | 60.00 | 39.66 | 66.1 | 7.30 |

Table 1 presented the minimum and maximum scores obtained in each of the items that measures the attitude of undergraduates towards online classes. The overall minimum and maximum attitude scores of the undergraduates as well as the overall mean and standard deviation were presented in the table. The overall mean score of the undergraduates’ attitude expressed as a percentage = 39.66 / 60 x 100 = 66.1%. The attitude towards online classes was determined by adopting Aladejana (2006) categorization of attitude towards information technology as shown in table 2 below.

Table 2- Attitude towards information technology

|  |  |
| --- | --- |
| **Score (%)** | **Rating** |
| 0-20 | Very Poor |
| 21-40 | Poor |
| 41-60 | Good |
| 61-80 | Very Good |
| 81-100 | Excellent |

From table 2, the overall mean score of the undergraduates’ attitude towards online classes expressed as a percentage equals 66.1% which corresponds to very good on the rating scale. Therefore, the undergraduates’ attitude towards online classes in Osun State Universities was very good. This result is related with that of Ogunbodede and Ukpebor (2021) who found that majority of students has positive attitude towards online classes that was adopted during the lockdown period in one of the universities in Nigeria. Moreover, the result of this study contradicts that of Alharthi (2020) which presented that students had negative attitudes towards the use of technology in delivering online courses. Also, the findings of the study conducted by Barzani (2021) on the attitudes of Kurdish University Students towards online education during the Pandemic contradicts the findings of this study because Barzani (2021) revealed that majority of the students had negative attitude towards online classes. Furthermore, the finding of this study is in agreement with the findings of the studies of authors like Zhu et al., (2020), Allo (2020) and Dhoot & Thakare (2020) which submitted that a significant number of students developed positive attitude towards online learning interventions.

**4.2 Hypothesis:** Gender and school type have no significant influence on the undergraduates’ attitude towards online classes.

This hypothesis was formulated as part of a measure to assess the influence of sex and school type on the undergraduates’ attitude towards online classes. 2-Way ANOVA was employed in testing this hypothesis.

**Table 3: 2-Way ANOVA of the influence of gender and school type on undergraduates’ attitude towards online class.**

Dependent Variable: Attitude

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Source | Type III Sum of Squares | Df | Mean Square | F | Sig. |
| Corrected Model | 4346.759a | 3 | 1448.920 | 31.262 | .000 |
| Intercept | 828151.837 | 1 | 828151.837 | 17868.145 | .000 |
| Gender | 1365.741 | 1 | 1365.741 | 29.47 | .000 |
| School Type | 1939.536 | 1 | 1939.536 | 41.847 | .000 |
| Gender \* Type | 411.499 | 1 | 411.499 | 8.878 | .003 |
| Error | 27530.680 | 594 | 46.348 |  |  |
| Total | 972665.000 | 598 |  |  |  |
| Corrected Total | 31877.440 | 597 |  |  |  |
| 1. R Squared = .136 (Adjusted R Squared = .132) | | | | | |

Table 3 presented the result of the 2-Way ANOVA on the influence of gender and school type on undergraduates’ attitude towards online classes. The result showed significant influence in the effect of gender (F (1,598) = 29.47; p < 0.05) and significant influence in the effect of school type (F (1,598) = 41.85; p < 0.05). Also, sex and school type jointly had significant influence on the attitude of undergraduates towards online classes (F (1,598) = 8.88; p < 0.05). Therefore, the hypothesis which states that gender and school type have no significant influence on undergraduates’ attitudes towards online classes is rejected. The findings of this study opposed that of Nistor (2013) which showed that gender had no significant influence on students’ attitude towards online learning with males having positive attitude than the female students. Likewise, the findings of this study negate that of Suri and Sharma (2013) which presented that no significant relationship existed between gender and attitude of students towards e-learning.

Furthermore, on the influence of school type on undergraduates’ attitude towards online classes, the findings of this study corresponds to the results the comparative study conducted by Nasir and Neger (2022) which showed that the type of school significantly influenced students’ attitude towards online education based on some indicators like interaction, internet self-efficacy, students’ self-determination, course design, and technical support with students from private universities displaying better attitudes than their counterparts from the public universities. Also, the findings of this study reverse that of Marjerison, Rahman and Li (2020) that showed no significant differences in the students’ attitudes towards distance education in some Sino-foreign cooperative universities and some typical universities in China.

4. Conclusion

Considering the findings of this study, it could be concluded that undergraduates in both public and private universities in Osun State had a positive attitude towards online classes which will in turn positively influence their readiness and motivation to participate in online classroom settings. Furthermore, gender and type of school do not have individually have significant influence on undergraduates’ attitude towards online classes. Also, there was a joint significant influence of gender and type of school on undergraduates’ attitude towards online classes in Osun State Universities.

Disclaimer (Artificial intelligence): Authors hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and NO text-to-image generators have been used during the writing or editing of this manuscript.

Consent (where ever applicable)

Not Applicable

Ethical approval (where ever applicable)

Not Applicable

References

Aguilera-Hermida, A. P., Quiroga-Garza, A., Gómez-Mendoza, S., Del Río Villanueva, C. A., Avolio Alecchi, B., & Avci, D. (2021). Comparison of students’ use and acceptance of emergency online learning due to COVID-19 in the USA, Mexico, Peru, and Turkey. *Education and Information Technologies*, *26*(6), 6823-6845.

Alharthi, M. (2020). Students’ attitudes toward the use of technology in online courses. *International Journal of Technology in Education (IJTE)*, 3(1), 14-23.

Allo, M. D. G. (2020). Is the online learning good in the midst of Covid-19 Pandemic? The case of EFL learners. *Jurnal Sinestesia*, *10*(1), 1-10.

Al-Rahmi, W. M., Alzahrani, A. I., Yahaya, N., Alalwan, N., & Kamin, Y. B. (2020). Digital communication: Information and communication technology (ICT) usage for education sustainability. *Sustainability*, *12*(12), 5052.

Barzani, S. H. (2021). Students' perceptions towards online education during COVID-19 pandemic: An empirical study. *International journal of social sciences and Educational Studies*, 28-38.

Bassey U., Umoren G., Akuegwu B., Udida L. , Ntukidem P., and Ekabua O. (2007). Nigerian graduating students Access to E-learning technology: Implication for higher Education management *.Proceedings of the 6th International internet Education conference,(ICTlearn2007)* held in Cairo Egypt from 2-4 September 2007, pp59-76.

Bubou, G., & Job, G. (2021). Benefits, Challenges and Prospects of Integrating E-Learning into Nigerian Tertiary Institutions: A Mini Review. *International Journal of Education and Development using Information and Communication Technology*, *17*(3), 6-18.

Cowen, Tyler, and Alex Tabarrok (2014). “The Industrial Organization of Online Education.” *American Economic Review* 104 (5): 519-22.

Dhoot, P., & Thakare, R, S. (2020). A Study on perception of Students’ toward e-learning during COVID-19 Lockdown Phase in India. *Drsrjournal.Com, 07*, 334–349.

Economic Times (2020), The Economic Times, Definition of ‘E-learning’, available at: https:// economictimes.indiatimes.com/definition/e-learning.

Eli-Chukwu, N. C., Igbokwe, I. C., Ifebude, B., Nmadu, D., Iguodala, W., Uma, U., ... & Akudo, F. U. (2023). Challenges confronting e-learning in higher education institutions in Nigeria amid Covid-19. *Journal of Applied Research in Higher Education*, *15*(1), 238-253.

Eze, S. C., Chinedu-Eze, V. C., & Bello, A. O. (2018). The utilisation of e-learning facilities in the educational delivery system of Nigeria: a study of M-University. International Journal of Educational Technology in Higher Education, 15(1), 1-20.

Fedynich, L., Bradley, K S., & Bradley, J. (2015). Graduate students’ perceptions of online learning. Research in Higher Education Journal, 27, January 2015.

Francisco, C. (2020). Effectiveness of an online classroom for flexible learning. *International Journal of Academic Multidisciplinary Research (IJAMR)*, *4*(8), 100-107.

Govindasamy, T. (2001). Successful implementation of e-Learning Pedagogical considerations. Internet and Higher Education, 4(3–4), 287–299.

Houlden, S., & Veletsianos, G. (2020). *Coronavirus pushes universities to switch to online classes: But are they ready? The Conversation.* Retrieved from  
<https://theconversation.com/coronavirus-pushes-universities-to-switch-to-onlineclasses-but-are-they-ready-132728>

Ismaili, Y. (2021). Evaluation of students’ attitude toward distance learning during the pandemic (Covid-19): a case study of ELTE university. *On the horizon*, *29*(1), 17-30.

Küçükahmet, L. (2017). *Öğretim ilke ve yöntemleri* (27. Baskı). Ankara: Nobel Yayın Dağıtım

Kinshuk, Chen, N. S., Cheng, I. L., & Chew, S. W. (2016). Evolution is not enough: Revolutionizing current learning environments to smart learning environments. *International Journal of Artificial Intelligence in Education*, *26*(2), 561-581.

Lawn, S., Zhi, X., & Morello, A. (2017). An integrative review of e-learning in the delivery of self-management support training for health professionals. *BMC medical education*, *17*, 1-16.

Marjerison, R. K., Rahman, J. M., & Li, Z. (2020). Students’ attitudes towards distance education: A comparative study between Sino-foreign cooperative universities and typical universities in China. *Journal of Instructional Pedagogies*, *25*.

Nasir, K, B., and Neger, M. (2022). Students’ attitude towards online education system: A comparative study between Public and Private Universities in Bangladesh. *Journal of Social, Humanity, and Education*, 2(2), 167-183.

Nistor, N. (2013). Stability of attitudes and participation in online university courses: Gender and location effects. *Computers & Education*, *68*, 284–292.

Nassoura, A. B. (2012). Students' acceptance of mobile learning for higher education in Saudi Arabia. *American Academic & Scholarly Research Journal, 4*(2).

Odewole, Mojisola Omowumi, "Attitudes Of Undergraduate Students Toward The Utilization of Multimedia Resources in University of Ibadan" (2023). Library Philosophy and Practice (e-journal). 8039. <https://digitalcommons.unl.edu/libphilprac/8039>

Ogunbodede, K. F. & Ukpebor, C. O. (2021): Attitude of undergraduate students towards online learning during the stay-at-home policy (COVID-19) Pandemic in Nigeria. *Benue Journal of Library, Management & Information Science, Vol. 11*, No. 1, 1-14.

Rosemond, D. G. (2006). Acquisition of scientific attitudes and its relevance to science educators. In *A paper presented at the median seminar of Faculty of Sciences*.

Rosenberg, M. J., & Foshay, R. (2002). (2002). E-Learning: strategies for delivering knowledge in the digital age. Performance Improvement, 41(5), 50–51., 5(2), 50–51.

Schiffman, L., and L. L. Kanuk. (2008). *Perilaku Konsumen*. Edition 7. Indeks, Jakarta.

Shang, H. (2005). “Email dialogue journaling: Attitudes and impact on L2 reading performance.” Educational Studies, 31(2), 197-212.

Soibamcha, E., & Pandey, N. (2016) Attitude of teachers towards teaching profession. *Global Institute for Research & Education, 5(3),* 49-51.

Stein, S. J., Shephard, K., & Harris, I. (2011). Conceptions of e‐learning and professional development for e‐learning held by tertiary educators in New Zealand. *British Journal of Educational Technology*, *42*(1), 145-165.

Suri, G., & Sharma, S. (2013). The impact of gender on attitude towards computer technology and e-learning: An exploratory study of Punjab University, India. *International Journal of Engineering Research*, *2*(2), 132-136.

Tucker, J., & Neely, P. (2010). Unbundling faculty roles in online distance education programs. *The International Review of Research in Open and Distributed Learning*, *11*(2), 20-32.

Verma, A., Verma, S., Garg, P., & Godar, R. (2020). Online Teaching During COVID-19: Perception of Medical Undergraduate Students. *Indian Journal of Surgery,* 82(3), 299–300.

Wang, K., Zhang, L., & Ye, L. (2021). A nationwide survey of online teaching strategies in dental education in China. *Journal of Dental Education*, *85*(2), 128–134. <https://doi.org/10.1002/jdd.12413>

Wu, W., & Hwang, L. (2010). The effectiveness of e-learning for blended courses in college: A multi-level empirical study. *International Journal of Electronic Business Management, 8(4),* 312-322.

Zhu, Y., Zhang, J. H., Au, W., & Yates, G. (2020). University students’ online learning attitudes and continuous intention to undertake online courses: A self-regulated learning perspective. *Educational technology research and development*, *68*, 1485-1519.