Online Counselling Practices and Female Students' Academic Achievement in Colleges of Education, Sokoto State, Nigeria

[*][1]Fatima Dantama Sanusi and [2]Amina Diri Aliyu

[*][1]Federal College of Education, Gidan Madi, Sokoto

[2]Sokoto State University, Sokoto

Abstract

The study investigated on an online counselling practices and female students' academic achievement in colleges of educations, Sokoto state. The study employed correlational survey design. A sample size of 331 were used in representing the population 1,215 final-year female students from Shehu Shagari College of Education, Biga College of Education, and Federal College of Education Gidan Madi, with and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Two objectives and two hypotheses were formulated as guide to the study. Two instruments titled Online Counseling Practices Questionnaire (OCPQ) and Academic Achievement Student Questionnaire were used to collect data from the respondents and the data collected were analysed using statistical tool Peason Product Moment Correlation Coefficient (PPMC) with the help of SPSS Version 20. The finding revealed that online counselling and e-learning platforms have a significant positive effect on female students' academic achievement, based on the above it was recommended that online counselling services and e-learning platform should be encourage in promoting students' academic achievement.

Keywords: Online Counselling Services, e-earning Platform and Academic Achievement

Introduction

Online counselling resource centers have emerged as a crucial component of Information Communication Technology Counselling Practices (ICTCP) usage in guidance and counseling. These platforms provide students with access to a wide range of counseling materials, self-help resources, and relevant information (UNESCO, 2013). The integration of Online counseling practices (ICTCP) in guidance and counseling offers a range of potential benefits for female students. Online counseling resource centers, for example, provide students with easy access to a wide range of counseling materials, self-help resources, and relevant information (Effiom, Amuchi, Ojedor, Ebuka, & Ubi. 2023). By utilizing online counseling resource centers, students can independently explore topics related to their academic success and personal development, ultimately benefiting their academic achievement (Dahiru, 2017). Online counseling resource centers offer a comprehensive collection of resources that cater to students' diverse needs. These centers provide information on various career paths, job market trends, and academic requirements, enabling students to make informed decisions about their educational

pathways (Wells, 2023). Moreover, online counseling resource centers offer self-assessment tools that help students identify their strengths, interests, and values, which are essential factors in aligning their academic pursuits with their personal aspirations (Gysbers & Henderson, 2012).

One important form of Online counseling practices (ICTCP) integration in guidance and counseling is the utilization of E-Learning platforms. E-Learning platforms provide flexible and interactive learning environments that can enhance engagement and academic performance (Effiom, Amuchi, Ojedor, Ebuka, & Ubi, 2023). These platforms offer online courses, multimedia resources, discussion forums, and virtual collaboration tools, enabling female students to access educational materials and engage in interactive learning experiences outside of traditional classroom settings (Tsagem, 2016). E-Learning platforms have been found to positively impact academic achievement by promoting self-directed learning, facilitating active engagement, and offering flexibility in terms of time and pace of learning (Wells, 2023). Research has shown that female students who engage with E-Learning platforms display increased motivation, improved information retention, and enhanced critical thinking (Okpe, D., Asuquo, Abuo, & Unimna, A. 2018). E–Learning platforms can provide personalized learning experiences, allowing female students to tailor their educational journey according to their specific needs and preferences (Makinde, 2021).

Nigeria. Existing studies have highlighted the potential benefits of integrating Online counseling practices (ICTCP) in counseling practice, including online counseling resource centers, mobile applications, E-Learning platforms, and online counseling platforms (Johnson & Rice, 2019).

Richards & Viganó, (2013) aims to critically review the existing literature on online counseling. The researchers conducted a comprehensive search using both databases and hand-searches, using specific search terms and eligibility criteria. This led to the identification of a total of 123 studies. The review covers various aspects of online counseling, including its characteristics, outcome and process research, cyber behaviors, ethical considerations, professional training, client suitability, and the attitudes and experiences of both clients and therapists. The study concludes that the growing body of knowledge in the field of online counseling suggests that it can have a similar impact to face-to-face encounters and replicate the facilitative conditions. However, the researchers emphasize the need for stronger empirical evidence to establish the efficacy and effectiveness of online counseling and to gain a better understanding of the unique mediating and facilitative variables involved. The study does not explicitly address the generalizability of the findings

Onyema, Ezeanya, & Nkiruka, (2020) aimed to examine the impact of an e-learning platform on students' interest and academic achievement in the Data Structure course. The study utilized a quasi-experimental design and involved 50 Computer Science students enrolled in the Data Structure course at a tertiary institution. The participants

were divided into two groups: an experimental group (EG) consisting of 25 students taught using the e-learning platform, and a control group (CG) consisting of 25 students taught using the traditional classroom approach the researchers tested the hypotheses using analysis of variance (ANOVA). The post-test results indicated a statistically significant difference in academic achievement between the experimental group and the control group, favoring the experimental group after the treatment. The mean score of the EG was found to be significantly higher than that of the CG, suggesting that students in the experimental group performed better after the treatment. In addition, the study found that the use of e-learning platforms had a statistically significant effect on the learning interests of the experimental group after the treatment. The study had a relatively small sample size of 50 students from a specific course and institution.

Benedict & Bando (2022) examined the availability of e-counseling services for students in secondary schools in Niger State during the COVID-19 pandemic. The specific objectives of the study were to assess the availability of ICT facilities in guidance and counseling services and the availability of trained e-counselors in secondary schools in Niger State. The sample consisted of 480 participants selected through simple random and purposive selection procedures. Data collection was conducted using the E-counseling Facilities' Availability for Guidance and Counseling Services in Schools Questionnaire (EFAGCSSQ). The study employed frequencies and percentages as the main statistical techniques for analyzing the acquired data. Additionally, t-test statistics were used to test the null hypothesis at a significance level of 0.05. The findings of the study indicated that senior secondary schools in Niger State lacked suitable e-counseling facilities, and trained e-counselors were scarcely accessible. However, without further details provided about the specific findings and their implications, it is challenging to provide a comprehensive empirical review of the study. The study primarily relied on frequencies, percentages, and t-tests for data analysis. While these techniques provide basic descriptive and inferential information, they may not capture the complexity of the research questions. Incorporating more advanced statistical techniques, such as regression analysis or factor analysis, could provide a deeper understanding of the factors influencing the availability of e-counseling services.

Objectives of the Study

The following research Objectives and hypotheses were formulated to guide the study;

1. To assess the contribution of e-learning platforms to female students' academic achievement in tertiary institutions in Sokoto State.

2. To examine how online counselling platforms influence academic achievement of female students in tertiary institutions in Sokoto State.

Ho$_1$ There is no significant relationship between e-learning platforms and the academic achievement of female students in tertiary institutions in Sokoto State.

Ho₂ There is no significant relationship between online counseling platforms and the academic achievement of female students in tertiary institutions in Sokoto State.

Methodology

The study employed correlational research design where relationship between variables were examined. The population for this study consists of final year female students from Federal and State-owned colleges of Education in the state. These are; Shehu Shagari College of Education, Biga College of Education, and Federal College of Education Gidan Madi in Sokoto State, Nigeria. The total population of 1,215 final year female students represented by a sample size **310** female students across the colleges under study. The following table shows the distribution of population and sample size.

Table 1: Distribution of the sample size According to their Educational Institutions

S/N	School Name	Level	Population	Sample Size
1	Shehu Shagari College of Education, Sokoto State	NCE III	723	723/1,215 x 301= 179
2	Biga College of Education, Sokoto State	NCE III	412	412/1,215 x 301= 102
3	Gidan Madi Federal College of Education, Sokoto state	NCE III	80	80/1,215 x 301= 20
	Total		1,215	301

Source: Field Study, 2024

The research utilized two questionnaires in this study, data was collected using a structured questionnaire titled "Investigating the Relationship between online counseling practices and Academic Achievement: A Student Questionnaire on Counseling practice" (OCPAAQ. The instrument selected for this study was an adapted version of the questionnaire developed by Effiom, B. E., Amuchi, G. O., Ojedor, F., Ebuka, G. C., and Ubi, G. M. (2023) on the Educational Imperative of Guidance and Counselling on Information and Communication Technology (ICT) Usage on Students' Academic Performance at the University of Nigeria, Nsukka, Enugu State. The adaptation process will entail a comprehensive review of the original questionnaire, followed by necessary modifications to ensure its suitability for the target population and alignment with the research objectives.

The study employed partial least squares structural equation modeling (PLS-SEM) as the data analytical technique to investigate the online counseling practices (ICTCP) usage and its impact on the academic achievement of female students in Sokoto State. PLS-SEM is selected because of its suitability for modeling complex relationships between observed and latent variables in the multidimensional context of counseling practices and online (ICTCP) usage. It enables predictive modeling, providing valuable insights for researchers and practitioners in understanding the educational imperative of online counseling practices (ICTCP) utilization in guidance and counseling practices.

Result

Hypothesis One

Null Hypothesis (H_{O1}): There is no significant relationship between e-learning platforms and the academic achievement of female students in tertiary institutions in Sokoto State.

Table 2: Hypothesis Testing (Path Coefficients)

Variables	Coefficient	T statistics	P values
ELP -> FAA	0.308	3.857	0.000
MAD-> FAA	-0.260	2.350	0.019
OCRC -> FAA	0.335	4.492	0.000
OCS -> FAA	0.623	13.560	0.000
$R^2 = 0.963$, Adjusted $R^2 = 0.963$			

Source: Author's Computation from Smart PLS output, 2024

The evidence presented in Table 2 contradicts the null hypothesis, indicating a significant positive relationship between e-learning platforms (ELP) and female academic achievement (FAA). This is supported by the R-squared value of 0.963, indicating a substantial amount of variance explained. The coefficient for the path connecting ELP and FAA is estimated at 0.308. The t-statistics value associated with this coefficient is 3.857, and the p-value is 0.000. Consequently, the study rejects the null hypothesis (H_{O3}) in favor of the alternative hypothesis. These findings provide strong evidence that e-learning platforms significantly influence academic achievement among female students in Sokoto State.

Hypothesis Two

H_{02}: There is no significant relationship between online counseling platforms and the academic achievement of female students in tertiary institutions in Sokoto State.

The results in table 4.9 indicate a significant positive relationship between online counseling platforms (OCP) and female academic achievement (FAA). This is corroborated by the high R-squared value of 0.963, which signifies a substantial amount of the variance explained by the model. The coefficient for the path connecting OCS and FAA is estimated at 0.623. The t-statistics value associated with this coefficient is 13.560, with a p-value of 0.000. Given that the p-value (0.000) falls below the predetermined significance level (e.g., $\alpha = 0.05$), the study rejects the null hypothesis (H_{O4}) in favor of the alternative hypothesis. These outcomes underscore the significant and positive relationship between online counseling platforms and the academic achievement of female students in tertiary institutions in Sokoto State. Significantly, to ensure the validity of the obtained results, a multi-collinearity test was conducted using the variance inflation factor (VIF), and the outcomes are reported in Table 4.9 below.

Discussion

The first finding indicates significant positive effect of e-learning platforms (ELP) on female academic achievement is well-supported by previous research. For instance, Prasad (2012) found that e-learning enhances student engagement, which in turn leads to improved academic achievement. Similarly, Okpe, Asuquo, Abuo, and Unimna (2018)

highlighted that the effective use of e-learning platforms positively impacts student learning outcomes, particularly within higher education settings. Further supporting this notion, Onyema, Ezeanya, and Nkiruka (2020) demonstrated that e-learning tools facilitate better interaction and collaboration among students, contributing to higher levels of academic success. Additionally, the findings of Benedict and Bando (2022) emphasized that e-learning not only increases accessibility to educational resources but also enhances the overall learning experience, resulting in improved academic achievement for students. These studies collectively underscore the importance of e-learning platforms as effective tools for fostering academic success, particularly for female students, in environments where traditional learning methods may be less effective.

The second finding of the study reveals a strong positive relationship between online counselling services (OCS) and female academic achievement. This finding is in agreement with the research conducted by Kato, Shiono, Goto, and Tsuchida (2011), Richards and Viganó (2013), Kerr (2015), Bato and Marcial (2016), as well as Kato et al. (2022), all of which reported significant benefits of online counseling in educational settings. The substantial impact of OCS highlights their critical role in addressing the emotional and psychological barriers that female students often encounter during their academic journeys. Many female students face unique challenges, including stress, anxiety, and balancing academic responsibilities with personal and familial obligations. Online counseling services provide essential support by offering accessible and flexible options for mental health and emotional well-being. This accessibility can be particularly beneficial for students who may be hesitant to seek help in traditional settings due to stigma or logistical barriers. Moreover, institutions should ensure that these services are well-promoted so that female students are aware of their availability and can easily access the support they need. By doing so, educational institutions can create a more supportive environment that not only enhances academic performance but also contributes to the overall well-being of female students. This proactive approach to integrating online counseling services into the academic framework can lead to improved student outcomes and foster a culture of mental health awareness and support within educational settings.

Conclusion

Third, e-learning platforms demonstrated a significant positive effect on students' academic achievement, highlighting their potential as valuable educational tools that provide flexible and diverse learning opportunities for female students.

It was also concluded that online counseling services exhibited a strong positive impact on academic achievement, emphasizing their critical role in providing emotional and psychological support to female students. This finding reinforces the necessity for institutions to prioritize the development and integration of comprehensive online counselling services considering the diverse needs of their students.

Recommendations

1. It was recommended that Colleges and Universities should provide training for both students and educators on how to effectively utilize e-learning resources.

2. It was also recommended that online counselling should be accessible to all female students to enable them interact with counsellors as it reduces phobia and promotes privacy. Orientations and seminars to be organized regularly to enable students have update on online counselling services.

References

Bato, J. A. P., & Marcial, D. E. (2016). Students' Attitudes Towards the Development of an Online Guidance Counseling System. *Information Technologies and Learning Tools*, *56*(6), 40. https://doi.org/10.33407/itlt.v56i6.1498

Benedict, B. S., & Michael, F. B. (2022). Availability of E-Counselling Services for Students in Secondary Schools Amidst Covid-19 : A Case Study of Niger State. *Afropolitan Journals*, *3*(2), 41–51. https://publications.afropolitanjournals.com/index.php/ajhcer/article/view/77

Dahiru, A. S. (2017). The influence of information and communication technology (ICT) on students' academic achievement in secondary schools in Sokoto State, Nigeria. *Journal of Educational and Social Research*, 7(1), 55-68.

Effiom, B. E., Amuchi, G. O., Ojedor, F., Ebuka, G. C., & Ubi, G. M. (2023). The Educational Imperative of Guidance and Counselling on Information and Communication Technology (ICT), Usage on Students' Academic Performance in University of Nigeria Nsukka Enugu State. *International Journal of Information Systems and Informatics*, *4*(1), 43–53. https://doi.org/10.47747/ijisi.v4i1.1109

Gysbers, N. C., & Henderson, P. (2012). Developing and managing your school guidance and counseling program. Wadsworth Publishing,

Jamil, W., Shah, M. A., & Khan, M. R. (2019). The role of data management system in educational institutions: A review. 2019 5th International Conference on Computing, Mathematics and Engineering Technologies (iCoMET), 1-6.

Kato, C., Shiono, Y., Goto, T., & Tsuchida, K. (2011). Development of online counseling system and usability evaluation. *Journal of Emerging Technologies in Web Intelligence*, *3*(2), 146–153. https://doi.org/10.4304/jetwi.3.2.146-153

Kerr, A. (2015). Online Education and Academic Performance: The Case of Online Tertiary Students in the Caribbean. *Caribbean Educational Research Journal The University of the West Indies*, *3*(2), 90–108. http://www.cavehill.uwi.edu/fhe/hum/publications/EducationCERJ.htm

Priya, N. B., & Juvanna, I. (2014). an Android Application for University Online Counseling. *International Journal of Computer Applications*, *3*(2), 261–266.

Putra, A, & Muhtadi, A. (2023). Mobile Based Counseling Application for Facilitating Counseling Student Learning. *Counsellia: Jurnal Bimbingan Dan Konseling*, *Vol 11*, *no*, 218–224. https://doi.org/10.2991/978-2-38476-034-3_27

Richards, D., & Viganó, N. (2013). Online Counseling: A Narrative and Critical Review of the Literature. *Journal of Clinical Psychology*, *69*(9), 994–1011. https://doi.org/10.1002/jclp.21974

Prihandoko, Wibowo, Hardianto, and P. (2021). Model Development of Mobile-Based Guidance and Counseling Services (Android). *Psychology and Education Journal*, *58*(1), 4225–4228. https://doi.org/10.17762/pae.v58i1.1487

Tsagem, S. Y. (2016). Strategizing Counselling to Embrace the Provisions of ICT : A Rethink for Nigerian Academic Counsellors in Meeting the Challenges of an Information Era : Issues for Consideration. *Book of Topical Educational*.

Wells, R. (2023). The Impact and Efficacy of E-Counselling in an Open Distance Learning Environment: A Mixed Method Exploratory Study. *Journal of College Student Psychotherapy*, *37*(2), 155–172. https://doi.org/10.1080/87568225.2021.1924098