

## **Impact of Online Counseling Platforms on Female Students' Academic Achievement in Tertiary Institutions, Sokoto State**

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### **Abstract**

The study is meant to examine the impact of E-learning counseling platform on female students' academic achievement in Sokoto state. Two objectives were set with their corresponding research questions and two hypotheses. The study is quantitative, with a sample size of 301 respondents. The target respondents are the NCE 111 students of Shehu Shagari college of Education, Biga College of Education and Federal College of Education Gidan Madi all in Sokoto state. A stratified random sampling was employed. Structured questionnaires were used for data collection and data analysis was done using partial least squares structural equation modeling (PLS-SEM). The findings of the study revealed that, there is a significant and positive impact of online counseling resource centers on the academic achievement of female students in Sokoto State and also mobile counseling applications have a significant impact on the academic achievement of female students in Sokoto State. Based on the findings, the study recommends the enhancement of Online Counseling Resource Centers, through continuous improvement and expansion of the resources as well as thorough evaluation and Improvement of Mobile Counseling Applications.

**Key Words:** E-learning, Counseling platform, Academic Achievement and Female Students

### **Introduction**

The integration of Online counseling platform (OCP) in education has gained momentum globally, as it enhances access to educational resources, promotes interactive learning experiences, and develops digital literacy skills (UNESCO, 2013). The academic achievement of students in tertiary institutions is a crucial indicator of their educational success and future prospects (Oguguo, Ajuonuma, Azubuike, Ene, Atta, & Oko, 2020). However, in recent years, online counseling practices (OCP) has become increasingly integrated into educational settings, offering new opportunities for enhancing guidance and counseling practices (Gysbers & Henderson, 2012). Online counseling practices (OCP) offers innovative tools and platforms that can potentially transform the delivery of guidance and counseling services, particularly among female students in tertiary institutions. (Dahiru, 2017).

The integration of Online counseling practices (OCP) 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).

In Sokoto State, like many other regions, there is a growing emphasis on integrating Online counseling practices (OCP) in educational institutions. However, the focus on the guidance and counselling practice to support female students' Online counseling practices (OCP) usage and its impact on their academic achievement remains limited. Female students may face unique challenges and barriers in accessing and utilizing Online counseling practices (OCP) resources effectively. Gender disparities, socio-cultural factors, and limited access to Online counseling practices (OCP) infrastructure and training can hinder their ability to fully benefit from Online counseling practices (OCP) in their academic pursuits.

To address these challenges, the integration of online counseling practices (OCP) in guidance and counseling practice has gained attention as a potential solution. However, the research gap in this study lies in the lack of specific investigation into the educational imperative of different Online counseling practices (OCP) tools on the academic achievement of female students in tertiary institutions in Sokoto State, Nigeria. Existing studies have highlighted the potential benefits of integrating Online counseling practices (OCP) in counseling practice, including online counseling resource centers, mobile applications, E-Learning platforms, and online counseling platforms (Johnson & Rice, 2019). However, these studies have not specifically examined their impact on the academic achievement of female

students in Sokoto State. Therefore, this study aims to address this research gap by focusing on the unique context of Sokoto State and investigating the influence of these specific Online counseling practices (OCP) tools on female students' academic achievement.

### **Objective of the Study**

The objectives of the study is to:

1. To explore the impact of online counseling resource centers on female students' academic achievement in Sokoto State.
2. To evaluate how mobile counseling applications enhance academic achievement among female students in Sokoto State.

### **Research Questions**

In line with this problem, the research tends to answer the following questions

3. What impact do online counseling resource centers have on the academic achievement of female students in Sokoto State?
4. How do mobile counseling applications influence the academic achievement of female Students in Sokoto State?

### **Hypothesis of the Study**

In an attempt to provide answers to the research question stated above, the following hypotheses were tested.

**Ho<sub>1</sub>:** There is no significant relationship between the online counseling resource centers and the academic achievement of female students in Sokoto State.

**Ho<sub>2</sub>:** There is no significant impact of mobile counseling applications on the academic achievement of female students in Sokoto State.

### **Methodology**

This study employed a quantitative research approach using survey research to examine the online counseling practices (OCP) on the academic achievement of female students in tertiary institutions in Sokoto State, Nigeria. The population for this study comprises final year female students from Shehu Shagari College of Education, Biga College of Education, and Federal College of Education Gidan Madi in Sokoto State, Nigeria. The total population of interest consists of

1,215 final year female students. A proportionate sampling technique was employed. This technique involves dividing the population into distinct subgroups or strata based on relevant characteristics, and then selecting participants randomly from each stratum (Gurbuz, 2017).

To determine the sample size, the Taro Yamane formula was employed. By applying the appropriate mathematical approach, the study calculated that a sample size of approximately 301 is necessary. This sample size is deemed sufficient to ensure that the results will accurately reflect the broader population of final year female students. The study administered a total of 331 copies of the research instrument in order to reduce a sampling error, minimize case of non-return of questionnaire and nonresponse bias. This is in line with the study of Israel (1992) as cited by Naing (2003) suggested that 10% or 30% can be added to the sample size to compensate non-return of questionnaire and nonresponse bias. This study adopted 10% increase of the sample size.

**Table 1:** Sample of the study

S/N	School Name	Level	Population	Sample Size
1	Shehu Shagari College of Education, Sokoto State	NCE III	723	$723/1,215 \times 301 = 179$
2	Biga College of Education, Sokoto State	NCE III	412	$412/1,215 \times 301 = 102$
3	Gidan Madi Federal College of Education, Sokoto state	400 level	80	$80/1,215 \times 301 = 20$
	Total			301
	1,215			

The instrument used for data collection is a structured questionnaire titled "Investigating the impact of online counseling practices and Academic Achievement Questionnaire (OCPAAQ). The questionnaire was administered to the selected samples. The questionnaire includes a close-ended section comprising questions with pre-determined response options. The questionnaire were administered in a classroom setting during a designated time agreed upon with the school authorities.

## Results

From the total population of 1,215 final year female students from Shehu Shagari College of Education, Biga College of Education and

Federal College of Education Gida Madi Sokoto State. A sample size of 301 respondents was determined using the Taro Yamane formula, as outlined in chapter three. After adding 10% to the initial sample size, a total of 331 questionnaires were distributed. Out of these, 297 copies of the questionnaire were successfully retrieved and deemed suitable for analysis, resulting in a response rate of 89%. All subsequent analyses were conducted using the 297 valid responses obtained. The demographic profile of the respondents is presented using simple percentages in table 2.

**Table 2:** Demographic Profile of Respondents

Options	Respondents	Percentage %
<b>Gender</b>		
Female	297	100
<b>Total</b>	<b>297</b>	<b>100%</b>
<b>Age</b>		
18-24 years	242	81.5
25-34 years	41	13.8
35-44 years	14	4.7
<b>Total</b>	<b>297</b>	<b>100%</b>
<b>Frequency of ICT Usage</b>		
Daily	0	0
Several Times a Week	5	1.7
Once a Week	7	2.4
Several Times a Month	46	15.5
Rarely	239	80.5
<b>Total</b>	<b>297</b>	<b>100%</b>

**Source:** Field survey, 2024.

The demographic profile of the respondents reveals that the study engaged female students, with a total of 297 (100%) participants. The majority of respondents fall within the age of 18 to 20 years. The study also indicates that respondent percentage on the frequent use of online counseling resources is too low.

### **Test of Hypotheses**

Table 3 reports the results of hypothesis testing, presenting path coefficients, t-statistics, p-values, R<sup>2</sup> values, and variance inflation factor (VIF) results. The table provides a detailed account of the findings obtained from the hypothesis testing process.

**Table 3:** Hypothesis Testing (Path Coefficients)

Variables	Coefficient	T statistics	P values
MAD-> FAA	-0.260	2.350	0.019
OCRC -> FAA	0.335	4.492	0.000
R <sup>2</sup> = 0.963, Adjusted R <sup>2</sup> = 0.963			

**Hypothesis One:** There is no significant impact between the online counseling resource centers and the academic achievement of female students in Sokoto State.

The findings presented in Table 3. in the hypothesis testing reveal a significant positive impact between online counseling resource centers (OCRC) and female academic achievement (FAA). This is substantiated by the R-squared value of 0.963, indicating a substantial amount of variance explained. The coefficient for the path connecting OCRC and FAA is estimated at 0.335. The t-statistics value associated with this coefficient is 4.492, with a corresponding 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 ( $H_{02}$ ) in favor of the alternative hypothesis. These outcomes highlight the significant and positive impact of online counseling resource centers on the academic achievement of female students in Sokoto State.

**Hypothesis Two:** There is no significant impact of mobile counseling applications on the academic achievement of female students in Sokoto State.

Table 3 results demonstrate a statistically significant negative impact between mobile counseling applications (MAD) and female academic achievement (FAA). This is supported by the high R-squared value of 0.963, indicating that a substantial amount of the variance is explained by the model. The coefficient for the path connecting MAD and FAA is estimated at -0.260. The associated t-statistic for this coefficient is 2.350, and the corresponding p-value is 0.019. These findings indicate that the null hypothesis ( $H_{02}$ ) can be rejected in favor of the alternative hypothesis. Therefore, it can be concluded that mobile counseling applications have a significant impact on the academic achievement of female students in Sokoto State, suggesting that as their usage increases, academic performance may decrease.

## **Discussion**

The discussion of the findings is based on the formulated hypotheses and how they are in the study.

There is no significant impact of mobile counseling applications on the academic achievement of female students in Sokoto State. The analysis of the collected data led to significant findings that enhance the understanding of the influence of online counseling practices tools

on academic achievement among female students in Sokoto State. The key findings are as follows:

5. Online Counseling Resource Centers (OCRC) exhibited a significant positive effect on female academic achievement.
6. Mobile Counseling Applications (MAD) demonstrated a significant negative effect on academic achievement.

### **Conclusion**

The primary objective of this study was to explore the influence of online counseling practices on the academic achievement of female students in tertiary institutions in Sokoto State. Specifically, the study investigated the influence of two key factors: online counseling resource centers and mobile counseling applications. Utilizing a quantitative research approach, the study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze the relationships between these factors and the outcome of academic achievement. The analysis of the data yielded notable and statistically significant findings, which carry practical implications for educators, policymakers, and other relevant stakeholders.

The findings of this study provide valuable insights into the role of online counseling practices on the academic achievement of female students in tertiary institutions in Sokoto State. First, online counseling resource centers were found to have a significant positive effect on academic achievement. This underscores the importance of accessible and effective counseling resources that support students in navigating academic challenges and personal issues.

Second, the analysis revealed a significant negative effect of mobile counseling applications on academic achievement. This unexpected finding suggests the need for a thorough evaluation of the content and usability of these applications, as they may not be effectively meeting the needs of female students. Further research is warranted to understand the factors contributing to this negative impact and to explore ways to improve mobile counseling resources.

### **Recommendations**

Based on the findings, summary, and conclusion of this study, the following recommendations are proposed for educators, policymakers, and stakeholders in Sokoto State:

7. Enhancement of Online Counseling Resource Centers: Given the significant positive effect of online counseling resource centers on academic achievement, it is recommended that institutions invest in the continuous improvement and expansion of these resources. This includes ensuring that the centers are adequately staffed with trained counselors and that they offer a wide range of support services tailored to the needs of female students. Regular assessments of resource effectiveness and student feedback should guide the ongoing development of these centers.
8. Evaluation and Improvement of Mobile Counseling Applications: In light of the unexpected negative impact of mobile counseling applications, a thorough evaluation of these tools is necessary. Developers and educators should collaborate to redesign these applications, focusing on content relevance, user interface, and accessibility. Incorporating user feedback into the development process will help create applications that genuinely support students' academic needs and enhance their learning experiences.

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