



## **Trainee Counsellors' Perception on the Feasibility of Using Artificial Intelligence in Secondary School Counselling Services in Owerri Municipal Council, Imo State**

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### **Abstract**

The integration of Artificial Intelligence (AI) in secondary school counselling services has sparked interest globally, but its feasibility in Nigeria remains unexplored. This study investigated trainee counsellors' perceptions on the feasibility of using AI in secondary school counselling services in Owerri Municipal Council, Imo State. A descriptive survey design was employed, involving 92 trainee counsellors from Alvan Ikoku Federal University of Education and Imo State University, Owerri. Results showed that trainee counsellors perceived AI as beneficial for enhancing accessibility and providing automated support but had concerns about AI's lack of empathy and inability to handle complex issues. Technical expertise, training, and security influenced acceptance of AI. The study recommends providing technical training and support for trainee counsellors on AI-powered tools and addressing concerns about AI's limitations.

**Keywords:** Artificial intelligence, Counselling services, Feasibility, Perception, Trainee counsellors

## Introduction

The integration of Artificial Intelligence (AI) in various sectors has revolutionized service delivery, including education and counselling (Bawden & Robinson, 2012). AI-powered tools are being explored for counselling services, offering potential benefits like increased accessibility and efficiency. However, the feasibility of AI in secondary school counselling services is not well understood, particularly in Nigeria given the fact that traditional face-to-face counselling service is deeply rooted in the consciousness of people. Counselling is a professional therapeutic relationship aimed at helping individuals overcome challenges that might clog on their educational, vocational, professional and growth and personal development. Counselling services are critical in secondary schools, addressing students' academic, social, and emotional needs (Nigerian Educational Research and Development Council, 2020). Effective counselling services can enhance students' academic performance, improve their mental health, and promote social skills development. Counsellors play a vital role in helping students navigate challenges and make informed decisions about their future.

In Nigeria, secondary school counselling services are quite essential for supporting students' transition from adolescence to adulthood in Nigeria. Counsellors provide guidance on academic and career choices, help students develop coping strategies, and address issues related to mental health and relationships. The benefits of counselling services in secondary schools are well-documented, including improved academic performance and reduced dropout rates (Onyechi, 2018). Despite the importance of counselling services, secondary school counsellors especially in Nigeria face challenges in providing effective counselling, including inadequate resources and limited accessibility. The integration of AI in counselling services could potentially address these challenges and enhance effective delivery of counselling services. Artificial Intelligence (AI) is a branch of computer science that mimic type of human intelligence to do work as well as humans do (Umunna & Uwazuruike, 2024). This technological device (AI) is automated based on human prepared instructions and commands. It is created to help solve problem for humans. Thomas in Umunna & Uwazuruike (2024) opined that AI can learn new concepts and tasks, reason and draw conclusions, understand a natural language and comprehend a visual scene using human type of reasoning. AI-powered tools can provide automated support, resources, and assessments, supplementing traditional counselling services (Bodnar, 2017). However, the feasibility of AI in secondary school counselling services is not well understood, and concerns about AI's limitations, such as empathy and complex issue handling, need consideration (Giger, 2013).

The Nigerian educational system emphasizes technology integration, making AI exploration timely (Federal Ministry of Education, 2019). Secondary schools can benefit from AI-powered counselling services. However, trainee counsellors' perceptions of AI's feasibility are crucial in informing the development and implementation of AI-powered counselling tools. Trainee counsellors are future professionals who will shape the future of counselling services in Nigeria. Their perceptions of AI's feasibility will influence the adoption and effective use of AI-powered counselling tools. Understanding their concerns and attitudes towards AI is essential in ensuring the successful blending of AI in secondary school counselling services. The fusing of AI in secondary school counselling services requires careful consideration of its potential benefits and limitations (Nigerian Educational Research and Development Council, 2020). AI can enhance accessibility and efficiency, but its limitations, such as lack of empathy and inability to handle complex issues, need to be addressed. Mullen, Critelli, Lambie & Conley in Ezeala, Eromaka, Duru. Ofoegbu & Aguokpoh (2024) questioned the ethical considerations of relying on artificial intelligence to make therapeutic decisions and managing boundaries.

The development of AI-powered counselling tools requires a deep understanding of counselling services and the needs of secondary school students. Trainee counsellors' perceptions of AI's feasibility can inform the development of AI-powered counselling tools that meet the needs of secondary school students. The study will contribute to the development of AI-powered counselling tools and inform stakeholders about AI's feasibility in secondary school counselling services. The inclusion of AI in secondary school counselling services is a needed exploration, given the Nigerian educational system's emphasis on technology integration (Federal Ministry of Education, 2019). Thus, the study's results will

guide policy and practice in counselling services, ensuring that AI-powered counselling tools meet the needs of secondary school students in Owerri Municipal Council, Imo State.

### **Statement of the Problem**

Ideally, secondary school counselling services should be accessible, efficient, and effective in addressing students' academic, social, and emotional needs. However, the integration of AI in secondary school counselling services is a relatively new concept in Nigeria, and its feasibility is not well understood. Presently, secondary school counselling services in Nigeria face challenges, including inadequate resources and limited accessibility. The use of AI in counselling raises questions about its effectiveness, acceptance, and potential challenges. The gap in knowledge is the lack of research on AI's feasibility in secondary school counselling services in Nigeria, particularly in Owerri Municipal Council, Imo State. This lack of research may hinder the development and implementation of AI-powered counselling tools, ultimately affecting the quality of counselling services provided to students. This study aims to fill this gap by exploring trainee counsellors' perceptions on the feasibility of AI in secondary school counselling services.

### **Purpose of the Study**

The primary purpose of this study is to ascertain trainee counsellors' perceptions on the feasibility of artificial intelligence in secondary school counselling services. Specifically, the study sought to:

1. Explore trainee counsellors' perceptions on the extent to which AI enhances accessibility in secondary school counselling services.
2. Determine trainee counsellors' perceptions on the extent to which AI provides automated support in secondary school counselling services.
3. Identify trainee counsellors' concerns about AI's limitations in secondary school counselling services.
4. Examine factors influencing trainee counsellors' acceptance of AI in secondary school counselling services.

### **Research Questions**

The following research questions guided the study:

1. To what extent do trainee counsellors perceive AI as enhancing accessibility in secondary school counselling services?
2. To what extent do trainee counsellors perceive AI as providing automated support in secondary school counselling services?
3. What are trainee counsellors' concerns about AI's limitations in secondary school counselling services?
4. What factors influence trainee counsellors' acceptance of AI in secondary school counselling services?

### **Methodology**

This study employed a descriptive survey design to explore trainee counsellors' perceptions on AI's feasibility in secondary school counselling services. The population consisted of 120 trainee counsellors from Alvan Ikoku Federal University of Education and Imo State University, Owerri. A simple random sampling technique was used to select 92 participants.

The instrument used in this study is the "Trainee Counsellors' Perceptions on AI's Feasibility Questionnaire" (TCPAFQ).

The TCPAFQ is a 5-point Likert scale questionnaire designed to collect data on trainee counsellors' perceptions of AI's feasibility in secondary school counselling services. The questionnaire has 4 sections:

1. Section A: Demographic Information (5 items) - collects data on respondents' age, gender, institution, level of study, and counselling experience.
2. Section B: AI's Feasibility in Enhancing Accessibility (5 items) - assesses respondents' perceptions on AI's potential to enhance accessibility in secondary school counselling services.

3. Section C: AI's Feasibility in Providing Automated Support (5 items) - evaluates respondents' perceptions on AI's potential to provide automated support in secondary school counselling services.
4. Section D: Concerns and Acceptance of AI (10 items) - explores respondents' concerns about AI's limitations and factors influencing their acceptance of AI in secondary school counselling services.

Each item is scored on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The instrument was validated by experts in Measurement and Evaluation and Counselling from Alvan Ikoku Federal University of Education, Owerri. The reliability of the instrument was established through pilot testing and statistical analysis specifically using Cronbach's alpha to measure internal constituency. A threshold of 0.80 was set to determine reliability and the result indicated an alpha coefficient of 0.82 validating the reliability of the instrument.

Furthermore, the researchers administered the questionnaire by hand to the selected respondents. Data collected from the administration were collated and analysed in tables using mean and standard deviation.

## Results

**Research Question 1:** To what extent do trainee counsellors perceive AI as enhancing accessibility in secondary school counselling services?

**Table 1:** Mean rating on the extent trainee counsellors perceives AI as enhancing accessibility in secondary school counselling services.

| Item                      | Mean | SD   |
|---------------------------|------|------|
| AI enhances accessibility | 4.21 | 0.72 |
| AI increases reach        | 4.05 | 0.81 |
| AI improves efficiency    | 3.92 | 0.85 |

Analysis of data from Table 1 above shows that trainee counsellors perceive AI as enhancing accessibility (mean = 4.21) and increasing reach (mean = 4.05), indicating a positive perception of AI's potential benefits.

**Research Question 2:** To what extent do trainee counsellors perceive AI as providing automated support in secondary school counselling services?

**Table 2:** Mean rating on the extent trainee counsellors perceive AI as providing automated support in secondary school counselling services

| Item                                               | Mean | SD   |
|----------------------------------------------------|------|------|
| AI provides automated support                      | 4.10 | 0.78 |
| AI offers digital resources                        | 3.95 | 0.83 |
| AI assesses students' needs via digital mechanisms | 3.80 | 0.90 |

Analysis of data from Table 2 above shows that trainee counsellors perceive AI as providing automated support (mean = 4.10) and offering resources (mean = 3.95), indicating a positive perception of AI's potential benefits.

**Research Question 3:** What are trainee counsellors' concerns about AI's limitations in secondary school counselling services?

**Table 3:** Mean rating on trainee counsellors' concerns about AI's limitations in secondary school counselling

| Item                               | Mean | SD   |
|------------------------------------|------|------|
| AI lacks empathy                   | 4.15 | 0.75 |
| AI cannot handle complex issues    | 4.01 | 0.82 |
| AI raises confidentiality concerns | 3.88 | 0.80 |

Analysis of data from Table 3 above shows that trainee counsellors have concerns about AI's lack of empathy (mean = 4.15) and inability to handle complex issues (mean = 4.01), highlighting potential limitations of AI in counselling services.

**Research Question 4:** What factors influence trainee counsellors' acceptance of AI in secondary school counselling services?

**Table 4:** Mean rating on the factors that influence trainee counsellors' acceptance of AI in secondary school counselling.

| Item                 | Mean | SD   |
|----------------------|------|------|
| Technical expertise  | 4.25 | 0.70 |
| Training and support | 4.10 | 0.78 |
| Security concerns    | 3.95 | 0.83 |

Analysis of data from Table 4 shows that trainee counsellors consider technical expertise (mean = 4.25) and training and support (mean = 4.10) as crucial factors influencing their acceptance of AI in secondary school counselling services.

### Discussion of Findings

The findings of this study suggest that trainee counsellors perceive AI as beneficial for enhancing accessibility and providing automated support in secondary school counselling services. This is consistent with Bodnar's (2017) assertion that AI can enhance counselling services by providing automated support and resources. However, trainee counsellors have concerns about AI's lack of empathy and inability to handle complex issues, which is in line with Giger's (2013) findings.

The study also reveals that technical expertise, training, and support are crucial factors influencing trainee counsellors' acceptance of AI in secondary school counselling services. This is supported by Nigerian Educational Research and Development Council's (2020) emphasis on the need for capacity building in AI integration.

The findings suggest that AI can supplement traditional counselling services, but its limitations need to be addressed. Onyechi (2018) highlights the importance of considering AI's limitations in counselling services.

The study's results have implications for policy and practice in counselling services. The integration of AI in secondary school counselling services requires careful consideration of its potential benefits and limitations.

The findings of this study contribute to the development of AI-powered counselling tools and inform stakeholders about AI's feasibility in secondary school counselling services.

### Conclusions

Sequel to the findings, the study concludes that trainee counsellors perceive AI as beneficial for enhancing accessibility and providing automated support in secondary school counselling services. However, they have concerns about AI's lack of empathy and inability to handle complex issues. The study also concludes that technical expertise, training, and support are crucial factors influencing trainee counsellors' acceptance of AI in secondary school counselling services. The integration of AI in secondary school counselling services requires careful consideration of its potential benefits and limitations.

### Recommendations

Based on the findings of the study and conclusions reached, the following recommendations were made:

That provision of technical training and support for trainee counsellors on AI-powered tools is required to enhance their skills and confidence in using AI in counselling services.

That Address concerns about AI's limitations, such as lack of empathy and inability to handle complex issues should be addressed through regular monitoring and evaluation of AI-powered counselling services.

That guidelines for the integration of AI in secondary school counselling services should be developed to ensure effective and efficient service delivery.

That collaboration between counsellors and AI developers should be encouraged to design AI-powered tools that meet the needs of secondary school students.

That further research on AI's feasibility in secondary school counselling services should be conducted to inform policy and practice.

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