Counsellors Perception and Readiness to Use AI for Students Support in Secondary Schools in Nasarawa Zonal Ed. Directorate, Kano State, Nigeria

[1]Muhammad Musa UMAR & [2]Usman Nuhu MASANAWA
[1](mmumar@fudutsinma.edu.ng [2]unuhu1@fudutsinma.edu.ng)
Department of Educational Psychology and Counselling
Federal University Dutsin-Ma, Katsina State, Nigeria

Abstract

This study assessed the perception and readiness of secondary school counsellors regarding the integration of Artificial Intelligence (AI) into counselling practices. It was noted that the effective use of educational technologies is strongly influenced by end-users' perceptions, attitudes, confidence, and readiness, especially counsellors who play a key role in learners' growth. The research employed a descriptive survey design with a population comprising all 76 counsellors from public senior secondary schools in the Nasarawa Zonal Education Directorate, Kano State; a full census sampling technique was adopted in which the entire population of the research was utilized. Data was collected via three set of structured questionnaires as indicated in the research and demonstrated high reliability with the overall Cronbach's alpha coefficient of 0.84. Key findings revealed that counsellors were aware of AI's benefits notably for reducing administrative tasks, but their primary concern was practical challenges like poor infrastructure, displacement. Readiness levels were critically low, characterized by low self-efficacy and a severe lack of institutional support, though a strong willingness to be trained was evident. The study recommends that the Kano State Government and the Zonal Education Directorate prioritize investments in foundational infrastructure and provide hands-on, practical training for counsellors to bridge the identified readiness gap and facilitate successful AI adoption.

Keywords: Artificial Intelligence, School Counsellors, Perception, Readiness

Introduction

The landscape of education is undergoing a profound transformation, fueled by the rapid proliferation of digital technologies. Among these,

Artificial Intelligence (AI) has emerged as a significant catalyst for change with the potential to reshape pedagogical and administrative processes globally (Baker & Smith, 2019). In the realm of student support services, AI applications are being explored for tasks ranging from automated counselling chatbots and predictive analytics for identifying at-risk students, to intelligent tutoring systems and tools for managing counsellor workloads (Cheng & Wu, 2022; Zhang & Aslan, 2021). Proponents argue that AI can augment the capabilities of educational professionals, freeing them from administrative burdens to focus on the complex, empathetic, and relational aspects of their roles (Kaplan & Haenlein, 2019).

Globally, education systems are increasingly turning to artificial intelligence to enhance counselling efficiency, widen access, and support data-driven decision-making. These developments highlight AI's potential to complement human counsellors, especially in environments where demand exceeds available professional support. This global movement provides an important lens for understanding local realities in Nigeria. In the Nigerian context, particularly in states like Kano, the secondary education system grapples with significant challenges, including large student-to-counsellor ratios and limited resources (Federal Ministry of Education, 2018). School counsellors in this environment are tasked with the critical mandate of guiding students' academic, vocational, and personal development, often under demanding conditions. Consequently, the global advancements in AI-powered counselling tools become especially relevant, as they offer a promising pathway for addressing these systemic constraints. The integration of such tools presents a tantalising opportunity to enhance the efficiency, reach, and personalisation of counselling services in resource-limited settings (Adeoye et al., 2023). Theoretically, AI could streamline administrative record-keeping, provide data-driven insights into student progress, and offer initial, scalable support for common student concerns.

However, the successful integration of any educational technology is not merely a technical matter but a fundamentally human and systemic one (Selwyn, 2022). The efficacy of AI in education depends heavily on the acceptance and readiness of end-users, teachers and counsellors who

must ultimately decide whether and how to employ the tools (Ifinedo & Rikala, 2020). Research consistently shows that technology adoption is shaped by a complex interplay of factors, most notably users' perceptions of usefulness and ease of use, as articulated in the Technology Acceptance Model (Davis, 1989), their sense of technological self-efficacy, and the degree of institutional support available to them (Ertmer & Ottenbreit-Leftwich, 2010). These constructs; perceptions, self-efficacy, and institutional support form the core variables that this study seeks to examine in relation to AI adoption among school counsellors. In the specific field of counselling, which is deeply grounded in empathy, trust, and human connection, these factors become even more critical. Ethical apprehensions such as concerns about data privacy, algorithmic bias, and the potential dehumanization of therapeutic relationships (Graham, 2023; Stein & Brooks, 2021) further shape counsellors' perceptions and confidence, thereby directly influencing their willingness to integrate AI into their professional practice.

A critical gap exists in the Nigerian education literature. While there is growing discourse on the potential of AI, there is a scarcity of empirical research investigating the ground readiness of the professionals who are central to its implementation. As noted by Alabi et al. (2022), technology initiatives in Nigerian schools often fail to account for the perceptions and capacity of the educators, leading to poor adoption and wasted resources. Therefore, before any meaningful integration of AI can be contemplated within the counselling services of Nasarawa Zone, it is imperative to first understand the landscape from the perspective of the counsellors themselves.

Statement of the Problem

The rapid growth of Artificial Intelligence (AI) in education has introduced new possibilities for improving school guidance and counselling services. AI-based applications can assist counsellors by helping them identify vulnerable students early, offer academic and emotional support, provide career guidance, manage student records, and deliver timely interventions. Despite these potentials, the use of AI tools in secondary schools across Kano State appears to be very limited. Many counsellors still depend mainly on conventional counselling

methods and have little or no experience with AI solutions created for student support.

It was noticed that the effective use of educational technologies is strongly influenced by end-users' perceptions, attitudes, confidence, and readiness especially counsellors who play a key role in learners' growth. When counsellors view AI as complex, unreliable, ethically questionable, or as a threat to their professional identity, they may be reluctant to adopt it. On the other hand, favourable perceptions combined with adequate readiness such as proper training, digital skills, awareness, and institutional backing can promote responsible integration of AI tools. In Kano State, it is not yet known whether school counsellors possess the knowledge, competence, or willingness required to apply AI in their work.

Additionally, challenges such as limited digital facilities, weak ICT infrastructure, inadequate professional training, and unclear policy frameworks may hinder counsellors' readiness to embrace AI for student support. The absence of research evidence on these issues results in a significant information gap, making it difficult for decision-makers and school leaders to develop strategies that will guide the use of AI in counselling services.

Thus, this study aims to address the lack of empirical information on counsellors' perceptions and readiness to utilize AI for supporting students in secondary schools in Kano State. Without such understanding, initiatives to strengthen counselling services through AI are likely to be ineffective or poorly directed (Selwyn, 2022).

Objectives of the Study

The objectives of this study were to assess counsellors' perception and readiness to use AI for Student Support in Secondary Schools in Nasarawa Zonal Education Directorate in Kwara State, Nigeria.

Specifically, the study examine:

1. the general awareness and benefits of integration of AI in counselling ?
2. the level of self-efficacy and institutional support among counsellors for adopting AI tools.
3. the specific training needs required to prepare counsellors for AI integration

Research Questions

The following questions were answered:

1. What are the counsellors' levels of awareness, benefits of integration of AI in counselling?
2. What is the level of counsellors' self-efficacy and institutional support among counsellors for adopting AI tools?
3. What are the specific training needs do the counsellors identify as essential for the adoption of AI tools?

Methodology

The study adopted a descriptive survey research design. This design was selected because it was best suited for collecting data to describe the characteristics of the population and to provide a accurate snapshot of their perceptions and states of readiness at the time of the study, without manipulating any variables. The population for this study comprised all 76 school counsellors working in the 76 public senior secondary schools within the Nasarawa Zonal Education Directorate of Kano State. The decision to study the entire population was based on its manageable size and the desire to capture a comprehensive view from every practising public senior secondary school counsellor in the zone. Given the finite and accessible nature of the population, a full census technique was employed. This meant that the questionnaire was distributed to all 76 counsellors identified in the population, as there was no need to draw a sample.

The primary instruments used for data collection were three self-constructed structured questionnaires (2025). The First scale is Counselors' perception scale (CPS) which assessed the counsellors' perception of AI using, the second scale is Readiness for AI Integration (RAIIS) which evaluated the readiness for AI integration, also using a scaled response format, and Training needs questionnaire (TNQ) which assess the specific training needs required to prepare counsellors for AI integration. Each instrument divides into two sections: Section 'A' collected demographic information about the counsellors. Section 'B' of each scale is the closed ended types and its responses were rated on 4-points modified Likert scales as strongly agree (SA)=4 points, agree (A)=3 points, disagree (D)=2 point, and strongly disagree (SD)=1 points. The respondents responded to the items

by a tick against the appropriate option that reflect or show their personal opinion as indicated.

To ensure the instrument measured what it was intended to, face and content validity were established. The initial draft of the questionnaire was presented to the two other experts in Guidance and Counselling and educational test and measurement. Their feedback was used to refine the wording, structure, and relevance of the items. For reliability, a pilot study was conducted with 15 counsellors from a neighboring zonal education directorate who were not part of the main study. The data collected from the pilot test was analysed using Cronbach's Alpha, in which the reliability index of the instruments are; r = 0.8, 0.82 and 0.90 respectively which yielded the overall coefficient of 0.84, indicating a high level of internal consistency and reliability for the instrument.

The administration of the questionnaires was a meticulous process. An introductory letter was obtained from Kano State Senior Secondary Schools Management Board. This letter was presented at the Nasarawa Zonal Education Directorate to secure official permission. Subsequently, the researcher, with the assistance of two research assistants, personally visited all 76 schools over a period of four weeks. The purpose of the study was explained directly to each counsellor, confidentiality was assured, and the questionnaires were administered. For the few counsellors who were unavailable during the first visit, appointments were scheduled for a return visit. This direct approach resulted in a high response rate.

Upon retrieval, the completed questionnaires were checked for completeness. The quantitative data from Sections A, and B were coded and entered into the Statistical Package for the Social Sciences (SPSS, Version 26) for analysis. Descriptive statistics, specifically percentages, means, and standard deviations were used to summarize the data and answer the research questions. The responses from the open-ended questions were analysed using thematic analysis, where common themes were identified, categorised, and used to provide qualitative depth to the numerical findings.

Results

The results are presented according to the research questions.

Research Question One: *What are the counsellors' levels of awareness, benefits of integration of AI in counselling in Nasarawa Zonal Educational Directorate?*

Data from Section B (Perception) was used to answer this question. The descriptive statistics for the perception items are presented in Table 1 below.

Table 1: Descriptive Statistics for Counsellors' Perception of AI Integration (N=76)

Items	Strongly Disagree n (%)	Disagree n (%)	Agree n (%)	Strongly Agree n (%)	M	SD
Awareness of AI	3 (3.9)	4 (5.3)	33 (43.4)	36 (47.4)	3.34	0.80
Reduces Admin Tasks	2 (2.6)	2 (2.6)	32 (42.1)	40 (52.6)	3.34	0.80
Privacy Concerns	2 (2.6	4 (5.3)	35 (46.1)	35 (46.1)	3.36	0.72
Useful Data Insights	3 (3.9)	4 (5.3)	33 (43.4)	36 (47.4)	3.34	0.80
Lacks Cultural Understanding	4 (5.3)	6 (7.9)	30 (39.5)	36 (47.4)	3.29	0.84
Improves Service Accessibility	3 (3.9)	6 (7.9)	34 (44.7)	33 (43.4)	3.28	0.81
Fear of Human Replacement	5 (6.6)	5 (6.6)	36 (47.4)	30 (39.5)	3.20	0.85
Identifies At-Risk Students	4 (5.3)	3 (3.9)	34 (44.7)	35 (46.1)	3.32	0.80

Note. M = Mean; SD = Standard Deviation. The mean is based on a 4-point scale: 1=Strongly Disagree to 4=Strongly Agree.

Interpretation for RQ1:

The results in Table 1 indicate a high level of awareness among counselors (M = 3.34). They perceive strong benefits in AI's ability to reduce administrative tasks (M = 3.45) and provide useful data insights (M = 3.34). However, these positive perceptions coexist with significant concerns. Counsellors are highly concerned about data privacy and confidentiality (M = 3.36), and a strong majority agree that AI lacks cultural understanding (M = 3.29) and fear it could replace their roles (M = 3.20).

This quantitative finding is strongly supported by the qualitative data from Section D1 and D2. The most frequently cited benefits were Handling Workload & Data Analysis (23 respondents) and Accessibility & Availability (22 respondents). Crucially, the most pressing concern by an overwhelming margin was Technical & Practical Challenges (54 respondents), far exceeding fears about job replacement (17 respondents) or data ethics (2 respondents). This suggests that while counsellors see the potential of AI, their primary fear is that the necessary infrastructure (electricity, internet, support) is not available to support its implementation.

Research Question Two: *What is the level of counsellors' self-efficacy and institutional support among counsellors for adopting AI tools?*

Data from Section C (Readiness) was used to answer this question. The descriptive statistics for the readiness items are presented in Table 2.

Table 2: Descriptive Statistics for Counsellors' Readiness and Institutional Support for AI Integration (N=76)

Item	Not at All n(%)	Slight Extent n(%)	Moderate Extent n(%)	Great Extent n(%)	M	SD
Personal Preparedness	12 (15.8)	54 (71.1)	10 (13.2)	0 (0.0)	1.97	0.58
Digital Skills	6 (7.9)	52 (68.4)	14 (18.4)	2 (2.6)	2.11	0.66
School Technical Support	45 (59.2)	20 (26.3)	9 (11.8)	2 (2.6)	1.58	0.82
Government Training	61 (80.3)	13 (17.1)	2 (2.6)	0 (0.0)	1.22	0.47
Willingness to be Trained	4 (5.3)	6 (7.9)	43 (56.6)	12(15.8)	2.82	0.83

Note. M = Mean; SD = Standard Deviation. The mean is based on a 4-point scale: 1=Not at All to 4=To a Great Extent.

Interpretation for RQ2: The data in Table 2 reveals a critical readiness gap. Counsellors report very low levels of personal preparedness (M = 1.97) and moderately low digital self-efficacy (M = 2.11). This is compounded by an almost complete lack of institutional support, with abysmally low ratings for school technical support (M = 1.58) and government-provided training (M = 1.22). However, a strong silver lining is the high willingness to be trained (M = 2.82), indicating motivation and a positive attitude towards learning.

The qualitative data from Section D3 directly clarifies what is needed to bridge this gap. Counsellors' primary needs are Hands-On Practical Training (33 respondents) and Infrastructure & Technical Support (24 respondents). This aligns perfectly with the quantitative data, showing

that counsellors are aware of their skill deficit and the systemic infrastructure problems, and they are explicitly asking for practical, supported training to become ready.

Research Question 3: *What are the* ***specific training needs do the counsellors identify as essential for the adoption of AI tools?***

Data from Section D was used to answer this question. The descriptive statistics for the (Training Needs items are presented in Table 3.

Table 3: Descriptive Statistics for Counsellors' Identified Training Needs for Effective Adoption of AI in Practice

Training Need	Not Needed (%)	Slight Extent (%)	Moderate Extent (%)	Great Extent (%)	Mean (M)
AI Literacy & Basics	5 (6.6)	18 (23.7)	32 (42.1)	21 (27.6)	2.91
Ethical & Data Privacy Training	7 (9.2)	20 (26.3)	28 (36.8)	21 (27.6)	2.83
AI Tools Hands-On Practice	2 (2.6)	10 (13.2)	33 (43.4)	31 (40.8)	3.22
Technical Troubleshooting	12 (15.8)	22 (28.9)	30 (39.5)	12 (15.8)	2.55
Data Interpretation Skills	6 (7.9)	17 (22.4)	34 (44.7)	19 (25.0)	2.87

Note. M = Mean; SD = Standard Deviation. The mean is based on a 4-point scale: 1=Strongly Disagree to 4=Strongly Agree

Interpretation for RQ3: The table highlights that counsellors perceive hands-on practical training with AI tools as the most essential requirement (M = 3.22). This indicates a strong desire for direct interaction with AI platforms, allowing counsellors to build confidence and competence in real-world usage. AI literacy and foundational knowledge (M = 2.91), along with data interpretation skills (M = 2.87), also rank highly, showing that counsellors understand the need for conceptual understanding as well as applied skills.

Ethical and data privacy training (M = 2.83) is another major area of concern, reflecting worries about confidentiality, responsible AI use, and safeguarding student data. Meanwhile, technical troubleshooting (M = 2.55), although rated lower, still represents an important skill gap, given the low levels of technical support in many schools. Overall, the

data suggests that counsellors recognise the transformative potential of AI but require structured, practical, and ethically grounded training to adopt AI tools effectively in their counselling practice.

Discussion

The findings paint a picture of a cohort of counsellors who are aware of AI's potential but are caught in a challenging reality. They recognise the benefits of AI for efficiency and student support (Zhang & Aslan, 2021), yet their enthusiasm is tempered by pragmatic anxieties.

The most significant finding is the overwhelming concern regarding Technical & Practical Challenges. This concern far outweighs abstract fears about job replacement or ethical dilemmas, which are more common in theoretical discourse (Graham, 2023; Stein & Brooks, 2021). This highlights a crucial context-specific reality: in many Nigerian educational settings, discussions about advanced technology must first contend with foundational issues like stable electricity and internet connectivity (Adeoye et al., 2023). The perceived lack of institutional support (Table 2) validates this concern, creating a major barrier to adoption before any clinical or ethical questions are even addressed (Ifinedo & Rikala, 2020).

The study identifies a critical readiness paradox: counsellors feel unready and unsupported, but they are highly willing to learn. This suggests that the failure to adopt technology is not due to resistance but to a systemic lack of investment in capacity building and infrastructure. The counsellors are not Luddites; they are eager professionals who feel abandoned by the system meant to support them (Alabi et al., 2022).

Base on training needs it aligns with existing research emphasising that professionals are more likely to adopt new technologies when they have opportunities for experiential learning and guided practice (Liu et al., 2021). Although, technical troubleshooting skills received a comparatively lower rating (M = 2.55), this still indicates a meaningful gap. Limited technical capacity has long been recognised as a barrier to technology integration in schools (Selwyn, 2022). In environments with minimal IT support, counsellors may struggle to use AI tools effectively without basic troubleshooting abilities. Overall, the pattern of findings demonstrates that counsellors recognise the potential benefits of AI but require structured and comprehensive training to become ready users.

The fact that all training needs scored above the midpoint indicates widespread interest and readiness to learn, echoing studies showing increasing openness among educators toward AI when adequate support is provided (Akgun & Greenhow, 2022). The results suggest that successful AI adoption will depend not only on providing the tools but also on implementing deliberate capacity-building programme that combine practical experience, conceptual understanding, ethical grounding, and technical support.

Conclusion

This study successfully assessed the perception and readiness of counsellors in Nasarawa Zone, Kano State, for AI integration. It concludes that while counsellors are broadly aware of AI's benefits and are willing to adopt it, their readiness is critically low due to a severe deficit in personal preparation, institutional support, and foundational infrastructure. The primary barrier is not opposition to the technology itself, but the practical reality of an environment unequipped to support it. Therefore, any successful integration of AI in this context must be preceded by, and concurrent with, significant investment in capacity building, infrastructure, and the creation of a robust support system. The willingness of the counsellors provides a solid foundation upon which to build.

Recommendations

The following recommendations are made:

1. State Government should invest in foundational infrastructure, prioritize the provision of reliable electricity, internet connectivity, and necessary hardware (computers, tablets) in schools as a non-negotiable first step.
2. The government should also develop and fund hands-on training, organise mandatory, practical, and ongoing training workshops focused on basic digital literacy and specific AI tools relevant to counselling.
3. School Administration should advocate strongly to the zonal and state government for the resources and training identified in this study. Foster a peer-learning environment where more tech-comfortable staff can support their colleagues.

4. Counsellor Training Institutions (Universities, NTI) should integrate digital literacy and the ethical use of technology in counselling (including AI) into the core curriculum for aspiring counsellors and prepare them to the modern workplace.

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