

HARNESSING ARTIFICIAL INTELLIGENCE FOR EFFECTIVE DISPUTE RESOLUTION IN COUNSELLING PRACTICE: TOWARDS AN ETHICAL FRAMEWORK FOR THE NIGERIAN CONTEXT

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Abstract

The research study investigates how schools in Nigeria use Artificial Intelligence (AI) technology for their counselling services to improve their ability to resolve conflicts. Nigerian educational institutions currently face a critical shortage of professional counsellors with practitioner-to-student ratios often exceeding 1:1,000. The "counselling gap" requires innovative solutions but the implementation of AI-driven tools creates important ethical and operational difficulties for the education system. Through a thematic analysis of current literature and professional standards the study identifies three primary findings which demonstrate that AI increases service accessibility in rural areas while the Nigerian cultural values regulatory framework needs immediate development and "human-in-the-loop" systems must remain operational to test these boundaries. The research proposes a phased implementation approach which begins with capacity building and advances toward national policy development as its methodology for increasingly developing the field. The research proposes a hybrid model which uses AI technology to enhance human empathy while preserving student privacy and professional accountability through technological progress.

Keywords: Artificial intelligence; counselling; dispute resolution; ethics; Nigerian context.

Introduction

Nigerian school counselling systems currently experience a critical development phase which establishes professional standards in response to increasing student mental health needs (Adeniyi, 2018). The National Policy on Education requires all schools to deliver complete guidance and counselling services (Federal Republic of Nigeria, 2013), yet the country experiences inconsistent

proactive dispute resolution systems. The main challenge arises from the extreme shortage of staff because professional guidance standards recommend staffing ratios between 1:250 and 1:500 while present research shows that actual ratios in most public schools exceed 1:1,000 and many rural schools lack dedicated counsellors (Olayinka & Loto, 2020). The critical state of student mental health in Nigeria is further evidenced by Ogunleye and Adebayo (2022), who identified a significant correlation between psychological well-being and academic performance among secondary school students, highlighting the urgent need for accessible support systems. The “counselling gap” leads to an escalation of disputes because people do not address conflicts until they become major disciplinary issues. The position paper establishes that Artificial Intelligence (AI) should support Nigerian school counsellors through a regulated human-in-the-loop system which protects students' privacy and reduces algorithmic bias while enhancing counselling skills.

The Role of Counselling in Dispute Resolution and Student Well-being

The school counselling system provides structured methods which develop interpersonal relationships to help students resolve conflicts. School counsellors facilitate student understanding through their role as mediators who solve peer disputes while delivering psychosocial services and guiding students and their families to mental health resources and parental support services and academic accommodations. The activities help students achieve their academic, social, and career goals through reduction of psychological damage which would result from unresolved disputes. Scientific studies and policy documents view counselling as an essential element of high-quality education which should be available in all schools (Egbo, 2020).

Challenges and Future Directions

Feasibility and infrastructure: Many Nigerian schools—especially in rural and underserved districts—face unreliable electricity, limited internet connectivity, and a shortage of basic hardware. The current situation prevents organisations from using online AI services because they require constant internet connections. The implementation of the system needs to include both offline-capable designs and local data caching which uses strong encryption and realistic cost estimation for hardware and maintenance expenses (Okoli & Okechukwu, 2021).

Cultural and ethical fit: The societal stigma which exists about mental health matters together with cultural distress expressions and local mentorship practices determine people’s willingness to seek help and their acceptance of digital health solutions. The system requires both cultural adaptation and linguistic validation for its AI tools while implementation needs to involve community participation and stigma reduction activities to succeed at ethical compliance (Oduh, 2020; Olayinka & Loto, 2020).

Governance, data sovereignty, and accountability: AI systems create major governance issues because they determine the storage locations of data and the control rights over model updates and data access. International frameworks (e.g., GDPR) and policy guidance on AI ethics stress

these principles to local realities and ensure the national data-protection authority is involved in any school-level rollout.

Actionable Directions for Policymakers:

- ◆ Mandate phased minimum counsellor-to-student targets. Set a realistic national roadmap (e.g., aim for 1:500 within five years), with clear funding lines and monitoring by the Ministry of Education.
- ◆ Accredite and audit AI counselling tools. Create a certification pathway—led by professional bodies and the national data-protection authority—for bias testing, privacy compliance, and human-in-the-loop guarantees prior to deployment. (Suggested agencies: Ministry of Education, APROCON, national data-protection authority.)
- ◆ Modernize counsellor training. Update curricula to include digital literacy, AI ethics, and supervision of algorithmic tools in pre-service and in-service programmes.
- ◆ Invest in secure, offline-capable infrastructure. Fund hardware, reliable power/backups, and school-level encryption standards before scaling AI pilots.
- ◆ Fund stigma-reduction and community engagement. Run national and school-level campaigns to increase mental health literacy and acceptability of hybrid digital services.

Exploring AI Applications in Learning and Counselling

Globally, the integration of AI in educational settings is viewed as a transformative shift capable of addressing systemic inefficiencies and providing personalised support at scale (Baker & Smith, 2019; Holmes et al., 2019; Luckin et al., 2018). These technologies offer a pathway to bridge the gap between resource scarcity and student needs. AI applications in education and counselling use adaptive learning systems together with conversational agents to provide personalized learning experiences. The intelligent tutoring system IBM Watson Tutor uses learner analytics to create customized learning experiences which result in better educational outcomes according to Smith and Lee 2021. The mental health field shows that randomized studies demonstrate that Woebot conversational agents reduce users' self-reported depressive and anxiety symptoms during the first few months after treatment (Fitzpatrick et al., 2017). Research studies show that AI chatbots function as beneficial tools which help people control their emotions while decreasing their psychological suffering (Hoermann et al. 2020).

The findings demonstrate that AI technology enables educational and counselling services to deliver instant scalable intervention solutions. Western datasets serve as the primary training resource for most commercial systems. The ability to transfer training results from Western datasets to Nigerian youth training programmes lacks verification due to massive variations in cultural norms and linguistic expressions of distress and conflict dynamics across different contexts. The implementation of educational programmes in Nigerian schools requires both local validation studies and design modifications which match local cultural practices.

The mental health field has expanded its consumer-oriented AI tools since 2017 because of improved natural language processing and mobile application development capabilities (Fitzpatrick et al., 2017). Research on conversational agents shows that they produce short-term emotional distress reductions while AI-assisted mediation systems use generative technology to create conflict summaries and devise settlement paths and facilitate negotiation preparation activities (Shonk, 2025). Counselling professionals need hybrid models which use AI technology to enhance their existing services.

The regulatory system has undergone changes. The European Union's General Data Protection Regulation (GDPR) establishes stringent rules which govern both automated decision processes and the handling of confidential health information (Voigt & Von dem Bussche 2017). The United States and United Kingdom have developed policy documents which require AI health services to maintain transparency while organisations must work to eliminate biases because human monitors need to control all AI systems (FTC, 2021; CDEI, 2020). The global regulatory system creates an uneven distribution of regulatory frameworks while scholars have yet to investigate how governance models operate in Global South countries. The development of research needs to study fighting data protection regimes with ethical standards in environments which combine diverse cultural elements with limited resources (Nigeria).

Opportunities of AI in Nigerian Counselling Practice

AI technology offers multiple advantages which improve counselling services and dispute resolution processes in Nigeria.

- **Accessibility:** Remote areas without professional counsellors can access counselling services through AI platforms which eliminate transportation, stigma, and professional shortages as access obstacles. For example, AI-assisted frameworks have been proposed to improve the reach of mental health services in Nigerian schools where human practitioners are scarce (Obi et al., 2022).
- **Efficiency:** The process of administrative task automation enables human counsellors to concentrate on delivering more intensive therapy sessions instead of managing scheduling and reminder tasks and record documentation. The research shows that organisations which reduce administrative work improve their capability to deliver student-centred educational services at appropriate times (Adewale & Yusuf, 2019).
- **Real-Time Support:** AI tools provide users with 24/7 access to de-escalation support which they can access whenever emergencies occur. Modern applications like mental health chatbots provide a safe immediate space for students to express concerns and receive responses based on Cognitive Behavioural Therapy (CBT) principles (Shum et al., 2022).
- **Data Analytics:** AI systems can handle massive data sets to recognize behavioural trends and forecast potential conflict situations and propose prevention strategies. AI technology

provides educational institutions with tools which help them identify student behavioural trends and forecast academic performance problems to deliver timely educational support (Adegbite & Yusuf, 2021).

- **Reduced Cost:** The use of digital platforms makes counselling services more affordable across different economic levels thus increasing their availability to people from various socio-economic backgrounds. The current resource limitations in Nigerian rural schools make it hard to implement evidence-based interventions which treat health problems (Ajiboye & Bakare, 2019).

Ethical and Professional Considerations

The use of Artificial Intelligence (AI) in counselling practice for dispute resolution provides substantial advantages but creates numerous ethical and professional dilemmas which require resolution to ensure student protection. The following thematic areas outline the primary considerations for responsible AI integration:

1. Privacy and Data Security

Protecting sensitive client information is the paramount ethical obligation in any counselling relationship. AI systems require vast amounts of data to function effectively which increases the risk of unauthorized access or data breaches. The essential requirement for student data confidentiality and security establishes the trust foundation which enables successful dispute resolution.

2. Consent and Transparency (Informed Consent)

It is ethically non-negotiable that clients are fully informed when interacting with an AI system. Informed consent in this digital context must be expanded to explicitly disclose:

- ◆ **The Nature of the Interaction:** Users must be clearly told they are communicating with an automated system rather than a human professional.
- ◆ **System Limitations:** The specific boundaries of what the AI can and cannot do in a dispute resolution context must be articulated.
- ◆ **Data Management:** Institutions must disclose where data is stored, how long it is kept, and who has access to it.
- ◆ **Opt-out Mechanisms:** Students must be provided with a clear, accessible pathway to decline AI-driven support in favour of traditional human-led counselling without any negative repercussions.

3. Algorithmic Bias and Fairness

Algorithmic Bias and Fairness AI algorithms are only as objective as the data used to train them. The systems can create stereotypes which affect minority perspectives in Nigeria when they

use data that does not represent the population or contains historical biases. Dispute resolution

tools need to maintain cultural sensitivity while providing equal access to all student demographic groups.

4. Therapeutic Limitations and Human Oversight

Therapeutic Limitations and Human Oversight AI lack the emotional depth nuanced understanding and genuine empathy that human counsellors bring to complex interpersonal conflicts. The AI system needs professional judgement to process information which requires human abilities. The continuous human oversight process needs to handle high-stakes disputes and situations where the AI system cannot identify important cultural and emotional information.

5. Accountability and Liability

Accountability and Liability The system makes it challenging to identify responsible parties when the AI system provides wrong mediation advice or misclassifies a student's level of risk. The legal responsibility determination process requires specific definitions which identify whether the software developer or supervising counsellor or educational institution bear the responsibility for their actions. Establishing these lines of accountability is vital for maintaining professional standards and institutional integrity.

Recommendation for Professional Guidelines

To navigate these ethical complexities, it is recommended that professional counselling bodies in Nigeria, such as the Association of Professional Counsellors of Nigeria (APROCON), take a proactive leadership role. These bodies should craft formal position statements and comprehensive technical standards specifically for digital counselling tools. Such guidelines would provide a much-needed regulatory roadmap for practitioners and ensure that AI adoption aligns with Nigerian ethical values and professional requirements.

Challenges in Implementing AI in Nigerian Context

The transition from traditional, advice-based counselling models to AI-integrated systems in Nigeria is obstructed by a complex array of systemic and socio-cultural barriers .

Technical and Infrastructure Barriers

The digital divide remains a primary obstacle to the equitable adoption of AI in education. Many Nigerian schools, particularly in rural and underserved districts, suffer from unreliable power supplies and limited internet connectivity. Furthermore, the lack of infrastructure and expertise in Nigeria poses significant challenges to implementing AI in counselling practice (Okoli & Okechukwu, 2021).

Social and Cultural Barriers

Deep-seated cultural perceptions regarding mental health and technology present significant

hurdles. There is often a prevailing stigma surrounding the act of seeking professional help for

psychological or interpersonal disputes (Oduh, 2020). Additionally, cultural variables and traditional mentorship models may conflict with digitized solutions (Olayinka & Loto, 2020).

Skills Gaps and Digital Literacy

A critical challenge is the limited training of current practitioners, which often results in an inadequate understanding of complex mental health issues (Ibrahim, 2019). Without comprehensive capacity-building initiatives and training on AI tools and digital ethics, counsellors may struggle to engage with new technologies.

Procurement and Funding Realities

The successful deployment of AI tools is heavily dependent on sustainable funding, yet many Nigerian schools currently face significant funding shortages. Establishing clear guidelines and national policies is necessary to manage how these tools are procured and utilized across the educational sector.

Impact on Student Outcomes: An Empirical Note

While this paper asserts that ineffective counselling services contribute to high dropout rates and poor academic performance (Ajiboye & Bakare, 2019), it is important to note that these consequences are often identified as correlational in a broader systemic context. While AI-enhanced counselling aims to improve student support, its direct causal impact on these outcomes requires further empirical validation within the Nigerian landscape.

Suggestions

To ensure the responsible and effective integration of Artificial Intelligence (AI) within the Nigerian counselling landscape, the following actionable measures are recommended, categorized by their implementation timeline and impact feasibility:

Short-Term Recommendations (0–12 Months)

- ◆ Capacity Building (Professional Bodies & Universities): Launch a 12-month pilot training programme targeted at 500 school counsellors focusing on AI literacy, digital ethics, and hybrid counselling models. Success should be measured through standardized pre- and post-training evaluations to ensure a significant increase in technical proficiency.
- ◆ Public Engagement (Ministry of Education & NGOs): Launch national awareness campaigns to demystify AI technology and promote its responsible use among students, parents, and educators. Indicators of success include increased participation rates in digital mental health forums and a measurable reduction in stigma surrounding technology-assisted counselling.

Medium-Term Recommendations (1–3 Years)

- ◆ Policy Development (Ministry of Education & APROCON): Within 18 months, formalize and issue national guidelines that mandate specific informed consent templates, define minimum

tools.

- ◆ Research and Innovation (Local Tech Hubs & Academic Institutions): Incentivize the local development of culturally relevant AI tools tailored to Nigerian languages, indigenous values, and specific communal conflict dynamics. This ensures that dispute resolution algorithms are grounded in the socio-cultural realities of the Nigerian student population.

Long-Term Recommendations (3–5+ Years)

- ◆ Infrastructure Investment (Federal Government & International Donors): Prioritize the expansion of stable digital infrastructure, aiming to provide reliable internet connectivity and hardware to 60% of rural and underserved schools within 3 to 5 years. This systemic improvement is essential to bridge the digital divide and ensure equitable access to AI-enhanced counselling services across all regions

Conclusion

The integration of Artificial Intelligence (AI) into Nigerian school counselling services offers a transformative opportunity to revolutionize student support, enhance accessibility, and streamline complex dispute resolution processes. While AI-powered tools, including chatbots, mental health applications, and predictive analytics, can identify at-risk students and bridge critical gaps in underserved areas, their successful implementation cannot be left to chance.

Ultimately, this paper argues that while AI can significantly expand the reach and responsiveness of school counselling in Nigeria, its benefits will only be realized under a strictly regulated hybrid approach that preserves human oversight, secures sensitive student data, and ensures deep cultural relevance. The current evidence suggests that a reactive or unmonitored adoption risks exacerbating digital inequalities and compromising ethical standards. Therefore, this paper advocates for a cautious, incremental strategy i.e. pilot, evaluate, and regulate, to ensure that technology serves to augment rather than replace essential human care. By adopting this comprehensive and inclusive strategy, Nigerian educational institutions can responsibly harness the power of AI to foster more sustainable, effective, and conflict-competent learning environments.

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