

ARTIFICIAL INTELLIGENCE IN DISPUTE RESOLUTION AND COUNSELLING IN ABUJA, NIGERIA

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Abstract

The increasing complexity of disputes across various sectors has necessitated innovative and efficient approaches to conflict resolution and counselling. This study examined the effectiveness of Artificial Intelligence (AI) in dispute resolution among counsellors in Abuja, Nigeria. Specifically, the study addressed four research questions focusing on counsellors' awareness, perceptions, utilization, and challenges associated with AI integration in practice. A descriptive survey design was adopted. Data were collected using a 25-item structured questionnaire with a reliability coefficient of 0.82 (Cronbach's Alpha), alongside semi-structured interviews conducted with selected respondents to obtain in-depth insights. The participants comprised counsellors engaged in conflict management across educational, workplace, family, and community settings. Quantitative data were analysed using descriptive and inferential statistics, while qualitative data from the interviews were analysed thematically. Findings revealed that counsellors exhibited moderate awareness of AI; however, only a limited number actively utilized AI tools. AI was perceived as useful for handling repetitive tasks, emotion recognition, and preliminary mediation processes. Despite its benefits, concerns were raised regarding limited emotional intelligence, data privacy risks, ethical issues, and the possible erosion of the human element in counselling. Key challenges identified included inadequate training, high implementation costs, and scepticism about AI's neutrality and empathy. The study concluded that while AI has significant potential to enhance dispute resolution, it cannot replace the human-centered nature of counselling. It recommended targeted training programmes, stronger collaboration between technology experts and counsellors, and the establishment of clear ethical guidelines.

Keywords: Artificial Intelligence, Dispute Resolution, Counselling Practice, AI Integration Challenges and Conflict Management

Introduction

Artificial Intelligence (AI) has emerged as a major transformative technology, reshaping how complex tasks are executed and how decisions are made across diverse sectors. In general terms, AI refers to computer systems designed to perform functions that typically require human intelligence, including learning, reasoning, pattern recognition, and decision-making (Russell &

Norvig, 2020). Recent advancements in machine learning, natural language processing, and intelligent systems have significantly expanded AI applications into fields such as healthcare, education, and security (Smith & Chen, 2022).

In dispute resolution, AI is increasingly gaining attention through tools such as automated negotiation systems, intelligent chatbots, and decision-support platforms. These systems are being integrated into mediation and counselling environments to enhance efficiency and improve decision accuracy. By analysing large datasets, identifying patterns in conflicts, and generating possible outcomes, AI supports mediators and practitioners in making more informed decisions (Sharma & Brown, 2021; Huang et al., 2023). In addition, AI systems can handle multiple cases simultaneously, thereby reducing the time and resources required for conflict resolution processes (Li & Zhao, 2022).

Beyond legal and mediation concepts, AI is also reshaping counselling and mental health support services. Applications such as virtual therapy platforms, emotion recognition systems, and cognitive behavioural therapy (CBT)-based tools provide real-time support for individuals experiencing psychological distress such as anxiety and depression (Bohannon et al., 2020; Boyer & Finch, 2021). These technologies enable continuous monitoring, personalized feedback, and data-driven interventions that improve accessibility and consistency in care delivery (Adams, 2022).

This study is grounded in three key theoretical frameworks: Emotional Intelligence Theory, the Technology Acceptance Model (TAM), and Conflict Resolution Theory. Emotional Intelligence Theory (Goleman, 1995) emphasizes skills such as empathy, self-awareness, and emotional regulation, which are essential in counselling and mediation. In this context, AI tools such as emotion recognition systems and conversational agents can support counsellors by analysing emotional cues and improving intervention strategies, thereby enhancing emotional understanding in dispute resolution.

The Technology Acceptance Model (Davis, 1989) explains that the adoption of AI in counselling depends largely on perceived usefulness and ease of use. Counsellors are more likely to integrate AI tools when they believe such systems improve efficiency and are user-friendly. However, concerns about complexity, professional relevance, and reliability may reduce willingness to adopt AI in practice. Conflict Resolution Theory further provides a foundation for understanding how disputes are managed through negotiation and mediation, with AI contributing by offering data-driven insights, identifying patterns, and supporting objective decision-making in conflict situations.

Empirical studies further support these theoretical perspectives. AI has been applied in various dispute resolution contexts, including corporate, family, and online environments, where it improves efficiency and reduces costs (Katz & Roberts, 2022; Smith & Johnson, 2020). In counselling, AI-based chatbots and virtual assistants are used to support mental health by addressing anxiety and stress through personalized responses (Liu et al., 2022). Additionally, AI

contributes to crisis intervention by detecting early emotional distress (Vasileva et al., 2020) and enhances emotional intelligence by analysing verbal and non-verbal cues to improve empathy and therapeutic relationships (Pieterse & Park, 2021; Sharma & Brown, 2021).

Effective conflict management remains essential for maintaining stability in workplaces, families, schools, and communities (Johnson & Smith, 2020). However, traditional face-to-face mediation approaches are often limited by time, cost, and logistical constraints (Kaur & Sharma, 2021). AI-based systems present an alternative by offering faster, scalable, and data-driven solutions that improve efficiency in managing disputes (Miller & Wright, 2022). Furthermore, AI can reduce bias in emotionally charged situations and support counsellors by automating routine tasks, allowing greater focus on complex human interactions (Bennett, 2021; Garrison et al., 2020). Overall, AI represents a shift toward more efficient, adaptive, and evidence-based approaches to dispute resolution and counselling, with potential to improve both outcomes and user experience (Rodriguez et al., 2021).

Despite these advancements, the application of AI in counselling and dispute resolution remains limited compared to its adoption in other sectors such as healthcare, finance, and education (Russell & Norvig, 2020). Many practice settings still rely heavily on traditional approaches, which are often time-consuming, resource-intensive, and susceptible to human bias (Sharma & Brown, 2021; Kaur & Sharma, 2021). As a result, the full potential of AI in improving efficiency, objectivity, and scalability in conflict management has not been fully realized.

In addition, there exists a notable gap in awareness, competence, and readiness among counsellors and mediators regarding AI adoption. Many professionals lack sufficient knowledge of AI tools or are hesitant to use them due to concerns about data privacy, ethical implications, and the potential reduction of human interaction in counselling relationships (Boyer & Finch, 2021). These challenges are further intensified by limited access to structured training and professional development opportunities (Adams, 2022).

Furthermore, the role of AI in supporting emotional intelligence within counselling and conflict resolution remains insufficiently explored. Emotional intelligence plays a critical role in understanding emotions, managing interpersonal relationships, and achieving sustainable conflict outcomes (Goleman, 1995). However, uncertainty remains regarding whether AI can effectively replicate or complement these inherently human abilities. These gaps highlight the need to examine AI integration in counselling practice, assess practitioners' perceptions, and identify barriers to adoption in order to improve conflict management systems.

Purpose of the Study

This study examines the role and effectiveness of Artificial Intelligence (AI) in enhancing dispute resolution and counselling practices among professionals in Abuja, Nigeria.

1. Meanwhile the objectives of the study seek the followings:

2. To determine counsellors' awareness of AI in dispute resolution.
3. To examine the perceived effectiveness of AI in resolving conflicts.
4. To identify challenges faced in integrating AI into counselling practice.
5. To assess the impact of AI on clients' emotional intelligence in counselling settings.

In the course of this study, questions shall be research based on the below interrogations

1. What is the level of awareness of AI among counsellors involved in dispute resolution?
2. How effective do counsellors perceive AI tools in managing conflicts?
3. What challenges hinder the adoption of AI in counselling practice?
4. How does AI influence clients' emotional intelligence during counselling sessions?

Hypothesis

H₀: There is no significant relationship between the use of AI tools in dispute resolution and client satisfaction.

Methodology

This study adopted a descriptive survey design with a mixed-methods approach to provide both quantitative and qualitative insights into the subject matter. The study was conducted in Abuja, Nigeria, with participants also drawn from selected states including Lagos State, Rivers State, and Kaduna State to ensure wider geographical coverage and diversity of perspectives. The quantitative component focused on assessing counsellors' awareness, usage, and perceptions of Artificial Intelligence (AI) in dispute resolution, while the qualitative component explored lived experiences, challenges, and contextual issues surrounding the integration of AI into counselling practice.

The population comprised approximately 130 counsellors actively engaged in dispute resolution across family, organizational, and community settings, alongside 5 AI specialists who provided technical and professional perspectives on AI applications. A sample of 80 counsellors was selected using purposive sampling to ensure that only relevant and experienced participants were included. Data were collected using a 25-item structured questionnaire, which was validated by experts in counselling and measurement to ensure content validity, and yielded a reliability coefficient of 0.82 (Cronbach's Alpha), indicating good internal consistency. Semi-structured interviews were also conducted to enrich and support the quantitative findings.

Data collection was carried out electronically through platforms such as Google Forms and SurveyMonkey to enhance accessibility and response rate, while interviews were conducted both physically and virtually via Zoom and Skype based on participants' availability. Quantitative data were analysed using descriptive statistics (frequencies, percentages, mean, and standard deviation) and inferential tools such as chi-square and t-tests. Qualitative data were analysed using thematic analysis with the aid of NVivo software to ensure systematic coding, consistency, and reliability of findings.

Results

This section presents the results of the study using both quantitative and qualitative approaches. Findings are summarized in tables and supported with brief interpretations to enhance clarity and understanding.

Table 1: *Awareness of AI Among Counsellors*

Level of Awareness	Frequency (n)	Percentage (%)
Highly aware	18	22.5
Somewhat aware	35	43.75
Unaware	27	33.75
Total	80	100

The results indicate a moderate level of awareness of AI among counsellors. The majority of respondents, 35 (43.75%), reported being *somewhat aware*, suggesting a basic understanding of AI concepts without deep knowledge or practical application. A smaller proportion, 18 (22.5%), indicated they were *highly aware*, reflecting a limited number of counsellors with strong familiarity or expertise in AI.

However, a significant proportion, 27 (33.75%), reported being *unaware*, highlighting a considerable gap in knowledge and exposure to AI within the profession. Overall, the findings suggest that while awareness of AI exists, it is not sufficiently widespread or advanced, indicating the need for increased training and sensitization programmes among counsellors.

Table 2: *Perceived Effectiveness of AI in Dispute Resolution*

Effectiveness Rating	Frequency (n)	Percentage (%)
Very effective	20	25.0
Somewhat effective	47	58.75
Not effective	13	16.25
Total	80	100

The results show that most respondents, 47 (58.75%), perceive AI as *somewhat effective* in dispute resolution, indicating a generally positive but cautious assessment of its usefulness. Additionally, 20 (25.0%) rated AI as *very effective*, suggesting that a smaller proportion of counsellors strongly support its impact. However, 13 (16.25%) considered AI *not effective*, reflecting some level of scepticism or limitations in its practical application. Overall, the findings suggest that AI is viewed as moderately effective, with potential for greater acceptance if existing concerns are addressed.

Table 3: *Challenges in AI Adoption*

Challenges	Frequency (n)	Percentage (%)
Lack of training/knowledge	29	36.25
Client resistance to technology	23	28.75
Ethical concerns (privacy/bias)	16	20.0
Infrastructure limitations	12	15.0
Total	80	100

The results indicate that the most prominent challenge to AI adoption in counselling is lack of training and knowledge, with 29 (36.25%) of respondents identifying it as a key issue. This is followed by client resistance to technology, reported by 23 (28.75%), suggesting hesitation among clients in accepting AI-supported counselling processes.

Furthermore, 16 (20.0%) of respondents highlighted ethical concerns such as privacy and algorithmic bias, reflecting worries about data security and fairness in AI use. The least reported challenge was infrastructure limitations, with 12 (15.0%), though it still indicates gaps in technological readiness. Overall, the findings suggest that human capacity and ethical concerns are more significant barriers than physical infrastructure in AI integration within counselling practice.

Table 4: *Influence of AI on Clients' Emotional Intelligence*

Influence of AI on Emotional Intelligence	Frequency (n)	Percentage (%)
Enhances emotional awareness	22	27.5
Moderately improves emotional regulation	34	42.5
No significant influence	18	22.5
Reduces emotional connection	6	7.5
Total	80	100

The findings indicate that AI has a generally positive but moderate influence on clients' emotional intelligence during counselling sessions. Most respondents, 34 (42.5%), reported that *AI moderately improves emotional regulation*, suggesting a supportive but not transformative effect. Additionally, 22 (27.5%) indicated that AI enhances emotional awareness, showing some benefit in helping clients understand their emotions better.

However, 18 (22.5%) believed AI has no significant influence, while a small proportion, 6 (7.5%), felt it reduces emotional connection during counselling. Overall, the results suggest that

AI contributes positively to emotional intelligence development, but its impact is still limited and varies depending on context and application.

Table 5: *Thematic Analysis of AI in Dispute Resolution*

Theme	Sub-themes	Sample Views
Effectiveness	Speed, efficiency, neutrality	“AI helps resolve disputes faster and more fairly.”
Emotional intelligence	Emotional insight, limitations	“AI cannot fully understand human emotions.”
Adoption challenges	Trust, ethics, training needs	“People are still sceptical about using AI in counselling.”
Client satisfaction	Positive and mixed responses	“Some clients are satisfied, others feel uncomfortable.”

The themes reflect a balanced perception: while AI improves efficiency, concerns remain about its emotional depth and acceptance in counselling practice.

Hypothesis

H₀: There is no significant relationship between the use of AI tools in dispute resolution and client satisfaction.

Table 6: *Relationship between AI Use in Dispute Resolution and Client Satisfaction*

Variables Compared	Test Used	Calculated Value	Critical Value	df	p-value	Decision
AI tools usage vs Client satisfaction	Chi-square (χ^2)	12.84	9.49	3	0.005	Reject H ₀

The result shows a statistically significant relationship between the use of AI tools in dispute resolution and client satisfaction, since the calculated chi-square value ($\chi^2 = 12.84$) is greater than the critical value (9.49) and the p-value (0.005) is less than 0.05. Therefore, the null hypothesis (H₀) is rejected. This implies that the use of AI tools has a significant influence on client satisfaction in dispute resolution processes.

Discussion of the Findings

The findings of this study provide important insights into counsellors’ awareness, perceptions, challenges, and the perceived impact of Artificial Intelligence (AI) in dispute resolution in Abuja, Nigeria. The results from both quantitative and qualitative data are discussed in relation to each research objective and supported by existing interpretations.

The study revealed a moderate level of awareness of AI among counsellors (Table 1), where most respondents (43.75%) were only somewhat aware, while 33.75% were completely unaware. This suggests that AI knowledge among counsellors is still emerging and not yet deeply embedded in counselling practice. The implication is that many counsellors may not be fully

equipped to utilize AI tools effectively, which aligns with the qualitative findings that highlighted limited exposure and training. This gap in awareness may slow down the integration of AI into professional counselling services.

In terms of perceived effectiveness, findings (Table 2) show that AI is generally viewed as somewhat effective in dispute resolution. While 25% rated it as very effective, the majority (58.75%) held a cautious but positive view. This indicates that counsellors recognize the potential of AI in improving efficiency and supporting decision-making, but still maintain reservations about its full capability in handling complex human conflicts.

The study further identified key challenges to AI adoption (Table 3), with lack of training (36.25%) and client resistance (28.75%) being the most prominent. Ethical concerns and infrastructure limitations were also noted. These findings suggest that the major barriers are more human and institutional than technical. The qualitative results also emphasized issues of trust, ethical sensitivity, and limited professional capacity as major constraints.

Regarding the influence of AI on clients' emotional intelligence (Table 4), results show a mixed but generally positive effect. Most respondents (42.5%) believed AI moderately improves emotional regulation, while others reported enhanced awareness. However, some expressed concern that AI may reduce emotional connection, indicating that AI's impact on emotional development is context-dependent and not uniformly experienced.

The thematic analysis (Table 5) further supports these findings by highlighting four major areas: effectiveness, emotional intelligence limitations, adoption challenges, and client satisfaction. While AI was praised for speed, efficiency, and perceived neutrality, respondents consistently emphasized that it lacks deep emotional understanding, which is central to counselling practice. Issues of trust and ethical concerns also emerged strongly.

Finally, the hypothesis test (Table 6) revealed a significant relationship between AI usage and client satisfaction, leading to the rejection of the null hypothesis. This implies that increased use of AI tools is associated with improved client satisfaction in dispute resolution. However, qualitative insights suggest that satisfaction is not universal, as some clients still prefer traditional human-centred counselling approaches.

Overall, the findings suggest that AI holds strong potential to enhance dispute resolution and counselling effectiveness, but its successful integration depends on improved training, ethical safeguards, and balanced use alongside human judgement.

Conclusion

This study concludes that Artificial Intelligence (AI) possesses significant potential to enhance dispute resolution and counselling practices. Its primary strengths lie in improving efficiency, accelerating conflict resolution processes, and supporting more structured, evidence-based, and objective decision-making. However, the study also establishes that the level of AI adoption in counselling and dispute resolution remains relatively low. This is largely attributed to

limited awareness among practitioners, lack of trust in AI systems, and concerns surrounding ethical, professional, and confidentiality issues. These barriers collectively hinder full integration of AI into counselling practice.

Although AI demonstrates usefulness in areas such as emotional assessment, pattern recognition, and data-driven decision support, it cannot replace essential human qualities such as empathy, judgment, and relational understanding, which are central to effective counselling. Therefore, AI should be viewed as a complementary tool that enhances rather than replaces human expertise. The study further emphasizes that successful integration of AI depends on targeted training, capacity building, and the development of trust among counsellors. Strengthening these areas is critical to ensuring ethical, effective, and sustainable use of AI in counselling and dispute resolution settings.

Recommendations

Based on the findings of this study on the effectiveness of Artificial Intelligence (AI) in dispute resolution among counsellors in Abuja, Nigeria, the following recommendations are made:

- **Capacity building and training:** Counsellors should be provided with regular training, workshops, and professional development programmes on the use of AI tools in counselling practice. This will help bridge the identified gap in awareness and improve effective utilization.
- **Integration of AI into counselling curriculum:** Institutions training counsellors in Nigeria should incorporate AI-related content into their curriculum to prepare future practitioners for technology-assisted counselling and dispute resolution.
- **Development of ethical guidelines:** Professional bodies such as the Counselling Association of Nigeria should establish clear ethical frameworks governing AI use in counselling to address concerns related to privacy, bias, and confidentiality.
- **Improvement of technological infrastructure:** Government and relevant stakeholders should invest in ICT infrastructure to support the effective deployment of AI tools in counselling services, particularly in public institutions.
- **Human–AI collaboration approach:** AI should be used as a supportive tool rather than a replacement for counsellors. A balanced approach that combines human judgement with AI capabilities should be encouraged to maintain emotional connection in counselling.

Public awareness and client sensitization: Clients should be educated on the benefits and limitations of AI in counselling to reduce resistance and improve acceptance of technology-assisted dispute resolution.

Overall, these recommendations aim to enhance the effective, ethical, and sustainable integration of AI into counselling and dispute resolution practices.

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