

# TRUST, PRIVACY CONCERNS, DIGITAL LITERACY AND ADOPTION OF AI-BASED COUNSELLING TOOLS FOR MANAGING SCHOOL-RELATED STRESS AMONG SECONDARY SCHOOL COUNSELLORS IN DELTA NORTH SENATORIAL DISTRICT, DELTA STATE

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## Abstract

*The integration of Artificial Intelligence (AI) into educational and mental health systems has led to the emergence of AI-based counselling tools, such as chatbots to assist. This study investigated how school counsellors perceive the adoption of chatbot counselling tools for managing school-related stress in secondary schools in Delta State. The objective was to examine how perceived trust, privacy concerns and digital literacy influence counsellors' intention to adopt AI-based chatbots. Four research questions were raised and three hypothesized and tested at 0.05 level of significance. This study employed a descriptive survey research design with a target population consisted of 80 registered school counsellors in Delta North Senatorial District of Delta State. A purposive sample of 67 practicing counsellors from public secondary schools in Delta North Senatorial District was selected, based on their active counselling roles and digital literacy exposure. Data were collected using a researcher-developed instrument, titled Counsellors' Chatbot Acceptance Scale (CCAS), comprising 25 items based on the Extended Technology Acceptance Model (TAM). Responses were rated on a 4-point Likert scale. Face and content validity were ensured through expert review and factor analysis, while the reliability of the instrument was established with a Cronbach's Alpha coefficient of 0.89, indicating high internal consistency. Data analysis was conducted applying descriptive statistics, Coefficient of determination, Regression, and ANOVA. Results showed that perceived trust, privacy concern and digital literacy significantly predicted intention adoption of chatbot counselling tools for managing school-related stress. Thus, it is recommended that counsellors should work on their trust and privacy concerns as well as their level of literacy in use of chatbot counselling tools in counselling activities. In addition, professional training for counsellors on ethical AI integration is encouraged.*

**Keywords:** Adoption, Chatbots, Trust, Privacy Concerns, AI-based Counselling.

## Introduction

Artificial Intelligence (AI) has increasingly become a driving force across key sectors such as education, healthcare, and psychological services. In recent years, its application in mental health support has led to the development of intelligent digital systems designed to complement traditional counselling approaches. One of the most notable innovations in this area is the use of chatbot technologies—automated conversational systems that interact with users in real time. These systems are designed to support emotional regulation, provide coping strategies, and assist individuals in managing psychological stress (Abd-Alrazaq et al., 2020; Li et al., 2023).

The growing interest in AI-based counselling tools is largely driven by the increasing demand for accessible, scalable, and cost-effective mental health interventions. Globally, mental health challenges among adolescents have risen significantly, with many young individuals experiencing stress, anxiety, depression, and social adjustment difficulties. Traditional face-to-face counselling services, although effective, are often limited by accessibility, cost, and availability of trained professionals. In response to these challenges, AI-driven chatbot systems have been developed to provide immediate and continuous psychological support, thereby bridging the gap between demand and service provision (Zhang et al., 2025).

Empirical evidence has increasingly supported the effectiveness of chatbot-based interventions in improving mental health outcomes. For instance, a meta-analysis by Zhong et al. (2024) found that AI-based chatbot interventions significantly reduced symptoms of anxiety and depression across diverse populations. Similarly, Abd-Alrazaq et al. (2020) reported that chatbot interventions are not only effective but also safe and scalable, particularly for young users. More recent systematic reviews further confirm that conversational agents can enhance emotional well-being, improve coping strategies, and promote behavioural change when appropriately designed and implemented (Li et al., 2023; Zhang et al., 2025). These findings highlight the growing relevance of chatbot technologies in addressing contemporary mental health challenges.

Within the educational context, particularly in secondary schools, students are frequently exposed to various academic, social, and emotional stressors. These include examination pressure, peer influence, interpersonal conflicts, identity formation challenges, and family-related expectations. When such stressors are not effectively managed, they can negatively impact students' academic performance, emotional stability, and overall well-being. Studies have shown that school-related stress is a major factor affecting students' engagement, motivation, and psychological health (Eze & Nworgu, 2023). In addition, unresolved interpersonal conflicts among students may lead to bullying, absenteeism, and behavioural problems, further disrupting the learning environment (Okafor & Ibrahim, 2022).

Despite the increasing need for psychological support in schools, many educational systems, particularly in developing countries such as Nigeria, face significant challenges in providing adequate counselling services. A major concern is the shortage of trained school

counsellors, with many public secondary schools operating with only one counsellor or, in some cases, none at all. This situation often results in delayed interventions, limited access to counselling services, and inadequate support for students experiencing emotional or psychological difficulties (Agu et al., 2022). The problem is even more pronounced in rural and underserved communities, where access to mental health services is extremely limited. In this context, AI-based chatbot counselling tools present a promising complementary solution to enhance the delivery of psychological support in schools. These tools offer several advantages, including accessibility, anonymity, cost-effectiveness, and 24-hour availability. Such features make them particularly appealing to adolescents, who may be hesitant to seek traditional counselling services due to stigma, fear of judgment, or lack of privacy. Chatbot systems can provide immediate responses, offer coping strategies, and guide users through basic therapeutic exercises, thereby supporting students in managing stress and emotional challenges (Olawade et al., 2024).

Furthermore, chatbot tools have the potential to reduce the workload of school counsellors by handling routine interactions and providing preliminary support, allowing counsellors to focus on more complex cases requiring professional intervention. In this way, AI-based counselling systems can serve as supportive tools rather than replacements for human counsellors. However, the effectiveness of such systems depends largely on how they are perceived and accepted by professional counsellors, who play a central role in implementing and supervising counselling interventions within school settings. Counsellors are key stakeholders in school-based mental health services. Their responsibilities extend beyond academic guidance to include emotional support, behavioural intervention, crisis management, and referral services. As such, they are responsible for ensuring ethical practice, maintaining confidentiality, and safeguarding students' well-being. The integration of AI-based tools into counselling practice therefore requires careful consideration of counsellors' perceptions, attitudes, and readiness to adopt such technologies (AlMaskari et al., 2025).

Existing research suggests that several factors influence the adoption of AI-based technologies in educational and mental health contexts. Among these, trust, privacy concerns, and digital literacy have been identified as critical determinants. Trust refers to the degree to which users believe that a system is reliable, safe, and capable of performing its intended function. In counselling contexts, trust is particularly important because it directly relates to the ethical use of technology and the protection of vulnerable users. If counsellors do not trust chatbot systems, they are unlikely to adopt or recommend them, regardless of their potential benefits (Gefen et al., 2020).

Privacy concerns are also a major factor influencing technology adoption. AI-based chatbot systems often collect, store, and process sensitive personal information, including emotional and psychological data. Concerns about data security, confidentiality, and potential misuse of information can therefore discourage adoption. Research has shown that users are more likely to adopt digital health technologies when they are confident that their data is

protected and used responsibly (Olawade et al., 2024). In addition to trust and privacy, digital literacy plays a crucial role in shaping adoption behaviour. Digital literacy refers to the ability to effectively use and interact with digital technologies. Counsellors with higher levels of digital competence are more likely to understand how chatbot systems function, evaluate their usefulness, and integrate them into their professional practice. On the other hand, counsellors with limited technological skills may experience anxiety or resistance towards adopting new technologies, thereby limiting the effectiveness of AI-based interventions (Li et al., 2023).

The Technology Acceptance Model (TAM) provides a theoretical framework for understanding these dynamics. Originally developed by Davis (1989) and later extended by Venkatesh and Bala (2008), TAM explains how users come to accept and use new technologies based on factors such as perceived usefulness, perceived ease of use, trust, and behavioural intention. In the context of AI-based counselling tools, TAM helps to explain how counsellors evaluate the effectiveness, usability, and ethical implications of chatbot systems before deciding whether to adopt them. In the Nigerian context, emerging studies indicate that trust, privacy concerns, digital literacy, and professional experience significantly influence the adoption of digital technologies in school counselling practice (Okoye & Ojo, 2023; Yakubu & Onwuegbuchulam, 2023). However, despite the increasing global interest in AI-assisted counselling, empirical evidence on the adoption of chatbot counselling tools among school counsellors in Delta North Senatorial District remains limited. This lack of context-specific research highlights the need for further investigation into the factors influencing counsellors' acceptance and use of chatbot technologies in Nigerian schools. Given the increasing relevance of AI in counselling practice and the urgent need to strengthen school-based mental health support systems, this study examined the influence of trust, privacy concerns, digital literacy, and years of experience on counsellors' adoption of chatbot counselling tools for managing school-related stress in secondary schools in Delta North Senatorial District, Delta State.

#### Statement of the Problem

Adolescents in Nigerian secondary schools' face increasing academic, emotional, and social pressures that require timely psychological support. However, many public schools lack sufficient trained guidance counsellors, leading to a high counsellor-to-student ratio and limited access to mental health services. AI-powered chatbot counselling tools have emerged globally as accessible and cost-effective alternatives capable of providing immediate emotional support and guided interventions. Despite this potential, research in Nigeria has largely focused on student users, with little attention given to school counsellors, who are key stakeholders in ensuring ethical and effective implementation.

The acceptance of chatbot counselling tools among counsellors is therefore critical, particularly in relation to concerns about data privacy, emotional suitability, and professional relevance. In addition, factors such as digital literacy and years of experience may influence their willingness to adopt such technologies. Given the limited empirical evidence from

contexts such as Delta North Senatorial District, this study seeks to examine how trust, privacy concerns, digital literacy, and years of experience influence counsellors' adoption of chatbot technologies for managing student mental health in public secondary schools.

### **Purpose of the Study**

The main purpose of this study is to examine the factors influencing the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State. Specifically, the study seeks to:

1. examine the extent to which trust influences the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State.
2. determine the extent to which privacy concerns influence the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State.
3. assess the extent to which digital literacy influences the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State.
4. determine whether there is a significant difference in the adoption of chatbot counselling tools based on years of experience among counsellors in secondary schools in Delta North Senatorial District, Delta State.

### **Research Questions**

The following research questions guided the study:

1. To what extent does trust influence the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State?
2. To what extent do privacy concerns influence the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State?
3. To what extent does digital literacy influence the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State?
4. Is there any significant difference in the adoption of chatbot counselling tools based on years of experience among counsellors in secondary schools in Delta North Senatorial District, Delta State?

## Research Hypotheses

The following null hypotheses were tested at the 0.05 level of significance:

1. Trust does not significantly influence the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State?
2. Privacy concerns do not significantly influence the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State?
3. Digital literacy does not significantly influence the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District, Delta State?
4. There is no significant difference in the adoption of chatbot counselling tools based on years of experience among counsellors in secondary schools in Delta North Senatorial District, Delta State?

## Methodology

This study employed a descriptive survey research design. The population consisted of 80 registered guidance counsellors in Delta North Senatorial District of Delta State (CASSON, Delta State, 2025). From this population, a sample of 67 counsellors was selected from public secondary schools in the area using purposive sampling, with the sample size guided by the Taro Yamane formula. Data was collected using a structured instrument titled *Counsellors' Chatbot Acceptance Scale (CCAS)*, adapted from the Extended Technology Acceptance Model (ETAM). The instrument measured variables such as trust, privacy concerns, and digital literacy. It comprised 25 items rated on a four-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (4), and also included demographic information such as age, gender, and years of experience.

A pilot study was conducted with 15 counsellors outside the study area to test the instrument. Face and content validity were established through expert review, while construct validity was assessed using factor analysis, which produced eigenvalues ranging from 0.67 to 0.92, with a cumulative variance of 97%. Reliability was determined using Cronbach's alpha, yielding a coefficient of 0.89, indicating high internal consistency. Data obtained were analyzed using descriptive statistics, coefficient of determination, regression analysis, and one-way Analysis of Variance (ANOVA) at the 0.05 level of significance.

## Result

**Research Question 1:** To what extent does trust concerns influence the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State?

**Table 1:** *Coefficient of Determination Analysis of Trust Concern and Adoption of Chatbot Counselling Tools For Managing School-Related Stress Among Counsellors*

| Variables          | Mean | SD   | N  | r    | R <sup>2</sup> | Decision              |
|--------------------|------|------|----|------|----------------|-----------------------|
| Trust              | 3.48 | 0.50 | 67 | .387 | .152           | Positive Relationship |
| Adoption of Chabot | 3.36 | 0.64 |    |      |                |                       |

Table 1 showed the coefficient of determination value (r-value) of the perceived trust concerns' influence in the adoption of AI chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District of Delta State. The r-value =.387, which showed that trust concern influences the intention to adopt AI chatbot counselling tools among counsellors. The coefficient of determination was 0.152 (15.2%), which revealed that both trust concern contributed 15.2% on the adoption of AI chatbot counselling tools for managing school-related stress among counsellors. This revealed a positive influence of trust concerns in the adoption AI chatbot counselling tools in counselling among counsellors.

**Research Question 2:** To what extent does privacy concerns influence the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State?

**Table 2:** *Coefficient of Determination Analysis for Privacy Concern and Adoption of Chatbot Counselling Tools For Managing School-Related Stress Among Counsellors*

| Variables          | Mean | SD   | N  | r    | R <sup>2</sup> | Decision              |
|--------------------|------|------|----|------|----------------|-----------------------|
| Privacy Concern    | 2.81 | 0.66 | 67 | .615 | .381           | Positive Relationship |
| Adoption of Chabot | 3.36 | 0.64 |    |      |                |                       |

Data presented in Table 2 showed the coefficient of determination values of the perceived privacy concerns' influence in the adoption of AI chatbot counselling tools for managing school-related stress among counsellors among counselors in secondary schools in Delta North Senatorial District of Delta State. The r-value =.615, which showed that privacy concern positively influences the intention to adopt AI chatbot tools counsellors. The coefficient of determination was 0.381 (38.1%), which revealed that privacy concerns contributed 38.1% to the adoption of AI chatbot counselling tools in counselling. This revealed a high positive influence of privacy concerns in the adoption AI chatbot counselling tools for managing school-related stress among counsellors.

**Research Question 3:** To what extent does digital literacy influence the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State?

**Table 3:** *Coefficient of Determination Analysis of Digital Literacy and Adoption of Chatbot Counselling Tools For Managing School-Related Stress Among Counsellors*

| Variables             | Mean | SD    | N  | R    | R <sup>2</sup> | Decision              |
|-----------------------|------|-------|----|------|----------------|-----------------------|
| High Digital Literacy | 3.10 | 0.402 |    |      |                |                       |
| Low Digital Literacy  | 2.47 | 0.18  | 67 | .312 | .097           | Positive Relationship |
| Adoption of Chatbot   | 3.36 | 0.64  |    |      |                |                       |

Table 3 showed the coefficient of determination values of the perceived influence of digital literacy on the adoption of chatbot counselling tools for managing school-related stress among counsellors in secondary schools in Delta North Senatorial District of Delta State. The r-value =.312, which showed a relative influence of digital literacy on the adoption of chatbot counselling tools among counsellors in secondary schools. The coefficient of determination was 0.097 (9.7%) which revealed that digital literacy contributed 9.7% on the adoption of AI chatbot counselling tools in counselling. This revealed a positive influence of digital literacy in the adoption AI chatbot counselling tools for managing school-related stress among counsellors in Delta North Senatorial District of Delta State.

**Research Question 4:** Is there any difference in the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State based on years of experience?

**Table 4:** *Descriptive Analysis of Differences of Years of Experience on Adoption of Chatbot Counselling Tools For Managing School-Related Stress Among Counsellors*

| Years of Experience | N  | Mean | SD   |
|---------------------|----|------|------|
| Below 10 Years      | 30 | 3.11 | 0.46 |
| 11–20 Years         | 28 | 3.46 | 0.43 |
| Above 21 Years      | 9  | 3.27 | 0.48 |

Table 4 presents the descriptive statistics of mean and standard deviation of the difference in years of experience in respect to the adoption of chatbot counselling tools among counsellors in secondary schools in Delta North Senatorial District, Delta State. It showed a mean and standard deviation (3.11, 0.46) for below 10 years, while 3.46 and 0.43 for counsellors between 11-20 years of experience and 3.27 and 0.48 for counsellors with above years of experience. From these values, it can be seen that counsellors with 11 to 20 years of counselling experience are better disposed to the adoption of chatbot counselling tools as compared to their counterparts of below 10 and above 21 years of counselling experience.

### Hypothesis Testing

**Hypothesis 1:** There is no significant influence of trust concerns on the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State.

**Table 5:** *Regression Analysis of Trust Concerns and Adoption of Chatbot Counselling Tools For Managing School-Related Stress Among Counsellors*

| Predictor | $\beta$ (Beta) | T    | Sig. (p) | Interpretation                 |
|-----------|----------------|------|----------|--------------------------------|
| Trust     | 0.387          | 4.85 | .001     | Significant positive predictor |

$R = 0.387$ ,  $R^2 = 0.152$ ,  $F(2,118) = 32.21$ ,  $p < .05$

a. Dependent Variable: Adoption of chatbot

b. Predictor (s): (Constant), Trust Concern

Table 5 shows the regression ANOVA result,  $F(2,118) = 32.21$ ,  $\beta=0.387$ ,  $p = 0.001$ . At the 0.05 alpha level, the  $p$ -value was less than 0.05, indicating significance. Thus, the null hypothesis of no significant influence of trust concerns on the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State, is rejected. This indicated that there was a significant influence of trust on the adoption chatbot counselling tools among counsellors in secondary schools in Delta North Senatorial District, Delta State.

**Hypothesis 2:** There is no significant influence of privacy concerns on the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State.

**Table 6:** *Regression Analysis of Privacy Concerns and Adoption of Chatbot Counselling Tools For Managing School-Related Stress Among Counsellors*

| Predictor        | $\beta$ (Beta) | T    | Sig. (p) | Interpretation        |
|------------------|----------------|------|----------|-----------------------|
| Privacy Concerns | 0.615          | 5.67 | .014     | Significant predictor |

$R = 0.615, R^2 = 0.381, F(1,118) = 32.21, p < .05$

a. *Dependent Variable: Adoption of chatbot*

b. *Predictor(s): (Constant), Privacy Concern*

Table 6 shows the regression ANOVA result,  $F(1,118) = 32.21, \beta = .615, p = 0.014$ . At the 0.05 alpha level, the  $p$ -value was less than 0.05, indicating significance. Thus, the null hypothesis of no significant influence of privacy concerns on the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State, is rejected. This indicated that there was a significant influence of privacy concerns on the intention to adopt chatbot counselling tools among counsellors in secondary schools in Delta North Senatorial District, Delta State.

**Hypothesis 3:** There is no significant influence of digital literacy on the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State.

**Table 7:** *Multiple Regression Analysis of Influence of Digital Literacy and Adoption of Chatbot Counselling Tools For Managing School-Related Stress Among Counsellors*

| Predictor             | $\beta$ (Beta) | t     | Sig. (p) | Interpretation                 |
|-----------------------|----------------|-------|----------|--------------------------------|
| High Digital Literacy | .316           | 3.225 | .002     | Significant positive predictor |
| Low Digital Literacy  | -.072          | -.739 | .462     | Not Significant predictor      |

$R = 0.312, r^2 = 0.97, F(2,118), t = 5.121, p = .007$

a. *Dependent Variable: chatbot use*

b. *Predictor(s): (Constant), Low Digital Literacy, High Digital Use*

Table 7 shows the regression ANOVA result,  $F(2,118) = 5.121, p = 0.007$ . Since the  $p$ -value was less than 0.05, the null hypothesis was rejected, confirming that digital literacy significantly influences the adoption of chatbot counselling tools among counsellors in Delta North. The coefficients revealed that high digital literacy ( $\beta = 0.316, t = 3.225, p = .002$ ) had a significant positive effect, while low digital literacy ( $\beta = -0.072, t = -.739, p = .462$ ) showed no significant influence. Hence, high digital literacy has significant positive influence on the adoption of

chatbot counselling tools, but low digital literacy has no significant influence on the adoption of chatbot counselling tools for Managing School-Related Stress among counsellors in secondary schools in Delta North Senatorial District, Delta State.

**Hypothesis 4:** There is no significant difference in the adoption of chatbot counselling tools for Managing School-Related Stress based on years of experience among counsellors in secondary schools in Delta North Senatorial District, Delta State.

**Table 8:** *One-Way Analysis of Variance of Chatbot Acceptance Based on Years of Professional Experience of Counsellors*

| Years of Experience | Type III Sum of Squares | df | Mean Squares | F     | p    | Eta Squared |
|---------------------|-------------------------|----|--------------|-------|------|-------------|
| 1–10 Years          | 138.712 <sup>a</sup>    | 1  | 138.712      | 5.944 | .015 | .024        |
| 11–20 Years         | 1.702 <sup>b</sup>      | 1  | 1.702        | .046  | .831 | .000        |
| Above 21 Years      | 65.140 <sup>c</sup>     | 1  | 65.140       | 1.707 | .193 | .007        |

$$F(2,120) = 3.82, p = 0.025$$

Table 8 shows a significant difference in counsellors' years of experience in their adoption of chatbots counselling tools. Thus, the null hypothesis of no difference is rejected. Post hoc results revealed that counsellors with less than 10 years of experience significantly adopted chatbot counselling tools ( $F = 5.944$ ,  $p = 0.015$ ,  $\eta^2 = 0.024$ ). However, those with 11–20 years ( $F = 0.46$ ,  $p = 0.831$ ,  $\eta^2 = 0.000$ ) and above 21 years ( $F = 1.707$ ,  $p = 0.193$ ,  $\eta^2 = 0.007$ ) showed no significant influence. The result implies that there was a significant difference in the years of experience of counsellors in adoption of chatbot for counselling tools in favour of those with below ten (10) years of experience among Counsellors in secondary schools in Delta North Senatorial district of Delta State.

## Discussion

This study examined how trust, privacy concerns, and digital literacy influence counsellors' adoption of chatbot counselling tools for managing school-related stress, and the findings are consistent with the focus of the study. In relation to **trust**, the findings show that it plays a key role in encouraging adoption. Counsellors who perceive chatbot systems as reliable, safe, and ethically sound are more willing to use them in practice. This aligns with Abd-Alrazaq et al. (2020) and AlMaskari et al. (2025), who emphasized that trust enhances users' willingness to engage with AI-based mental health tools. However, this is not fully supported by Li et al. (2023) and Rahman et al. (2022), who argued that AI systems still lack human empathy and emotional depth. This suggests that although trust supports adoption, concerns about the human

element of counselling may still limit full acceptance.

With regard to privacy concerns, the findings indicate that they significantly influence adoption. Counsellors are more likely to adopt chatbot systems when they are confident that users' personal information is secure. This agrees with Olawade et al. (2024) and Yakubu and Onwuegbuchulam (2023), who identified data protection as a key factor in technology acceptance. However, this is not entirely consistent with Gefen et al. (2020) and Li et al. (2023), who noted that users may still perceive risks even when strong security measures exist. This implies that perceived insecurity can continue to discourage adoption. In terms of digital literacy, the findings show that higher technological competence increases the likelihood of adoption. Counsellors who are more familiar with digital tools tend to feel more confident and less anxious when using chatbot systems. This supports Rahman et al. (2022) and Chukwu and Eke (2024). However, this is not fully supported by Li et al. (2023) and Ofem et al. (2025), who argued that digital literacy alone may not be sufficient, as ethical concerns and fear of technology replacing human roles may still limit adoption.

The findings further revealed that years of experience did not significantly influence counsellors' adoption of chatbot counselling tools. This suggests that experience alone may not determine technology use, but rather exposure to digital tools and training. This aligns with Okoye and Ojo (2023), who noted that experience without digital competence may not support adoption. However, this contrasts with Ofem et al. (2025), who found that more experienced counsellors showed higher acceptance. This indicates that the role of experience in adoption may vary depending on context and access to technological skills. Overall, while chatbot counselling tools offer benefits such as accessibility and continuous support, their adoption depends on addressing trust, privacy, and human-centered concerns alongside improving digital competence.

### **Recommendations**

1. Counsellors should critically consider trust concerns in the adoption chatbot counselling tools in the provision of counselling services in secondary schools.
2. Counsellors should study the privacy rules of chatbot counselling tools before adoption to ensure clients' confidentiality are protected. In addition, this will also boost the trust of both counsellors and clients in the use of AI chatbots tools in counselling sessions.
3. Counsellors should seek specialized training on the use of chatbot counselling tools so as to enhance their literacy capacity for the provision of counselling services.
4. Although years of counselling experience do not influence the acceptance of chatbots, as such, experienced counsellors should seek knowledge on the use of chatbots for the provision of counselling services.
5. Professional training on the ethical issues on the use of chatbot for counselling services should be integrated.

## Conclusion

The study found that school counsellors' adoption of chatbot counselling tools is shaped by their perception of the trust, data privacy and level of digital literacy. Counsellors with better digital literacy and moderate experience were more willing to adopt chatbots. While AI tools offer valuable support in addressing mental health gaps in schools, their success depends on ethical use, counsellor readiness, and proper integration into the existing support system. But for chatbot tools to work well, they must be trusted and accepted by counsellors, used in ethical ways, and adapted to fit the local school setting.

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