



## Research Articles

# Trust and Emotional Authenticity in AI-Mediated Mental Health Support in Nigeria

Uka Uka Nwagbara\* , Williams Uduakubong Dennis

*The Beyond Infinite Initiative, Calabar, Nigeria*

## KEYWORDS

artificial intelligence  
mental health  
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## ABSTRACT

The exponential growth of artificial intelligence (AI) offers new opportunities for mental health support, particularly in resource-limited settings like Nigeria, where less than 10% of the population accesses adequate care. This study investigates how Nigerians informally use general-purpose AI assistants for emotional self-regulation and mental health support in a context shaped by stigma, spiritual explanations of distress, and infrastructural limitations. Using a critical realist framework and Interpretative Phenomenological Analysis, the study draws on semi-structured interviews with 17 demographically diverse participants aged 21–62. Thematic analysis revealed three core dynamics: (1) AI as a functional “first line” emotional aid during distress, (2) AI as a surrogate confidant enabling expression in stigmatized environments, and (3) ambivalence surrounding AI’s trustworthiness and access in a low-resource context. Participants sought emotional triage, journaling, and non-judgemental engagement, often using AI as a buffer against culturally entrenched silence. While many valued AI’s 24/7 availability and anonymity, concerns about emotional authenticity, data privacy, and inadequate digital literacy were prevalent. The study finds that while AI cannot replicate therapeutic depth, it fills a culturally significant gap as a pragmatic tool in emotionally restrictive environments. Importantly, users balance functionality with skepticism, revealing a nuanced trust calculus shaped by both psychological need and structural barriers. This work offers new insight into how AI is locally repurposed for informal mental health care in non-Western settings. It challenges assumptions about universal design and underscores the need for culturally responsive, ethically grounded AI tools that complement, not replace, human support.

## \*CORRESPONDING AUTHOR

Uka Uka Nwagbara; Beyond Infinite Initiative, Abuja, Nigeria ; Email: [uunwagbara@gmail.com](mailto:uunwagbara@gmail.com)

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## 1. Introduction

Artificial intelligence (AI) has undergone exponential growth over the past decade, evolving from rule-based systems to sophisticated self-learning models capable of natural language understanding and affective computing [1]. In Nigeria, AI adoption is accelerating, with the market projected to reach USD 434.4 million by 2026 at a CAGR of 44.2 percent [2]. Despite these gains, mental health services remain under-resourced, with fewer than 10 percent of Nigerians accessing adequate care [3-4]. AI-powered chatbots and virtual therapists present an opportunity to alleviate resource constraints by offering 24/7 support and reducing geographic barriers to counselling [5]. Early interventions using AI platforms like Youper have demonstrated moderate symptom reduction in anxiety ( $d = 0.57$ ) and depression ( $d = 0.46$ ) within two weeks, illustrating AI's potential for rapid impact [2]. Yet whereas Chin et al. [6] observed that Eastern chatbot users deploy more sadness-laden language, Malodia et al. [7] find that the personification of voice assistants significantly boosts perceived social identity and engagement, revealing a tension between the safety of text-based disclosure and the bonding power of embodied rapport. However, these innovations were largely tested in high-income contexts, raising questions about cultural fit and local efficacy [8].

In Nigeria, social media platforms such as X have begun to shift mental health discourse, but stigma and spiritual attributions persist, limiting substantive engagement [9]. AI chatbots could offer anonymity and non-judgmental environments conducive to self-disclosure, countering cultural barriers [10]. Yet, algorithmic bias and limited digital literacy threaten to reproduce inequities, particularly among marginalised youth under 30, who constitute 70 percent of the population [11]. Resistance to AI, driven by "AI anxiety" and scepticism towards non-human support, further undermines uptake [12]. Moreover, Mahari and Pataranutaporn [13] warn of "addictive intelligence" in AI companions, dark patterns designed to ensnare emotionally vulnerable users, highlighting, as Heikkilä [14], the urgent need for regulatory safeguards.

Fiske et al. [15] emphasise the need for explicit consent frameworks and respect for patient autonomy in embodied AI applications, a concern that invites investigation into Nigerian users' expectations regarding data privacy and agency. Notwithstanding these prospects, existing literature reveals critical gaps: few studies interrogate how Nigerians specifically repurpose general-purpose AI for informal mental health activities, and none have systematically mapped the emotional support functions sought in this context. Moreover, while global trials report short-term symptom relief, the perceived benefits and limitations of AI for self-soothing within Nigeria's unique socio-cultural landscape remain unexplored [10,16-17]. The motivations driving Nigerians to choose AI over human or clinical support, whether for anonymity, convenience, or cost, are similarly under-theorised [5]. This study addresses these lacunae by critically examining informal AI use for mental health in Nigeria, identifying common support functions, evaluating benefits and constraints, and uncovering motivational drivers. In doing so, it bridges the empirical void and informs culturally attuned AI interventions that complement existing mental health infrastructures.

Research question: How do Nigerians informally use general-purpose AI assistants for mental health support, and what are their perceived benefits, limitations, and motivations compared to human or clinical care?

Thus, and in more specific terms, this study seeks to;

explore how Nigerians informally use AI assistants for mental health-related activities.

identify common emotional support functions Nigerians seek from general-purpose AIs.

understand the perceived benefits and limitations of using AI for self-soothing and emotional expression.

examine Nigerians' motivations for choosing AI over human or clinical support.

## 2. Literature Review

Users frequently turn to general-purpose AI assistants to navigate emotional distress in ways that extend beyond intended informational functions [5,18]. Many report using AI for self-soothing by engaging in

expressive journaling, where conversational agents like ChatGPT prompt reflection and help externalise intrusive thoughts [2,19]. This informal journaling serves as cognitive offloading, reducing mental load when users feel overwhelmed by anxiety or racing thoughts [20,2].

Clark and Chalmers [21] argue that cognitive processes can extend beyond the brain into external tools and environments, such that artefacts (e.g., notebooks, digital devices) become integral components of thought (“the mind” extends into the world). The kernel of this theory is the parity principle: if an external process functions equivalently to an internal one, it should be considered part of cognition. In our study, users’ reliance on AI for journaling, mood tracking, and cognitive restructuring exemplifies this extension: the AI assistant effectively operates as an external cognitive scaffold. However, a recent cross-cultural analysis of SimSimi chats shows that Eastern users deploy more sadness-laden language when offloading depressive thoughts to chatbots than Western users, who instead discuss taboo topics like death more freely [6]. This suggests that while AI can scaffold cognition, its uptake and emotional framing are mediated by cultural norms around self-disclosure.

In parallel, users employ AI for emotional venting, seeking a non-judgemental “listener” that mirrors affective empathy through pattern-based language modelling [22-23]. Critically, while AI can simulate empathic statements and validate feelings as a “safe haven,” it does so without true understanding or intentionality [24,22]. This simulation creates an illusion of companionship that may temporarily relieve distress but risks fostering therapeutic misconception when users overestimate the chatbot’s capacities [18,16-17]. Yet, embodied-AI scholars caution that over-forming bonds with chatbots can trigger ‘addictive intelligence,’ techniques engineered to keep users engaged by exploiting emotional vulnerabilities [13]. Without gate-kept clinical oversight, this could blur the line between self-soothing and dependency. Linking such self-directed use to the study’s aim of exploring informal AI adaptation underscores the need to interrogate the authenticity of perceived empathic support and its role in self-soothing practices.

A prominent function sought from AI assistants is immediate emotional support through empathetic response generation [25-26]. Users often describe needing reassurance in moments of crisis; simple affirmations like “I’m here for you” can yield a 40–60 percent reduction in self-reported distress in initial interactions [25,19]. These chatbots deploy reinforcement strategies that mimic active listening, offering reflective statements and positive reinforcement [12,13]. Contrastingly, human-guided internet-based interventions show deeper alliance and lower dropout compared to unguided AI support, suggesting that while AI can sustain engagement, its lack of genuine therapeutic bond limits long-term efficacy [24,27]. Moreover, AI is adept at guiding users through standardized CBT exercises, prompting users to rate mood on a 1–10 scale and suggesting breathing or cognitive restructuring tasks, yielding early anxiety reduction effects of  $d = 0.57$  [2,19]. Yet, these benefits wane without human follow-up, revealing a key limitation in emotional scaffolding over time [2,18]. This tension between immediate empathy simulation and a deficit in sustained therapeutic alliance highlights the contradiction between AI’s short-term emotional support and its inability to replicate human relational depth, directly informing the objectives to identify emotional support functions in AI use.

Users perceive affordability and accessibility as core benefits of AI for emotional expression, with 24/7 availability cited by 70 percent of respondents in a cross-sectional survey [18,5]. Katz et al. [28] introduced Uses and Gratifications Theory to explain how individuals actively select media to satisfy specific psychological needs. At its core, UGT posits that users are goal-directed, rational actors who seek out channels that best fulfil their desires for information, personal identity, social interaction, and escapism [28]. Applying UGT to this study is justified as it foregrounds the user’s agency in deliberately turning to general-purpose AI for emotional support, self-soothing, and cognitive offloading. By mapping the emotional support functions sought, such as validation, anonymity, and immediate availability, onto UGT’s typology of needs, we can critically interrogate how AI assistants function as chosen “media” platforms. UGT positions users as rational choosers of media, but it underplays how platform design (e.g., prompt recommendations) can nudge users toward deeper emotional engagement. We must therefore question to what extent ‘choice’ in AI support is pre-shaped by commercial or algorithmic agendas.

The low financial barrier, often a subscription under US \$10 per month, makes AI attractive to those with limited healthcare access [Case study of Jane; 16]. Anonymity afforded by digital interaction further reduces help-seeking self-stigma, especially among young adults hesitant to engage human therapists [5,10]. This contrasts with face-to-face therapy, where self-stigma correlates negatively with help-seeking [5]. In underserved regions like remote Nigeria, AI could theoretically bridge geographic and specialist shortages [3-4,29]. However, technical issues, poor internet connectivity, and high data costs undermine these benefits in low-resource settings [29-30]. Ethically, anonymity can exacerbate risk, as AI lacks robust crisis intervention protocols for suicidal ideation (Case study of Jane; 18). In sum, while users value cost-effectiveness and privacy for emotional disclosure, infrastructural deficits and safety gaps limit realising these benefits, crucial for understanding perceived advantages and constraints of AI self-soothing and expression.

The limitations of AI for emotional support become evident when users encounter complex emotional crises requiring nuanced clinical judgment and genuine empathy [18,22]. Algorithms cannot reliably interpret non-verbal cues or suicidal intent, and have documented failures in responding appropriately to disclosures of abuse or harm [16-17,23]. For instance, Woebot was deemed ill-equipped to handle child sexual abuse disclosures, prompting removal from the UK Children's Commissioner's recommendations (Case study of apps; 23). Fiske et al. [15] argue for clear codes of practice around AI risk-assessment and referral pathways. Embedding such protocols into general-purpose assistants could mitigate the dangers of mismanaged suicidal disclosures, a key gap this study will interrogate. Furthermore, AI's lack of discursive competence means it cannot provide reasoned explanations for therapeutic concepts crucial for fostering deep understanding and autonomy [22]; Brandom's pragmatism as cited in Sedlakova & Trachsel [22]. Algorithmic bias presents another limitation: chatbots often trained on Western datasets may misinterpret cultural expressions of distress in non-Western users, exacerbating inequities for marginalized groups [10,29]. Such biases can undermine trust and therapeutic outcomes, highlighting the need for culturally inclusive AI design directly pertinent to study objectives examining AI's limitations in self-soothing and emotional expression.

Users often prefer AI over human or clinical support due to perceived control and convenience [5,10]. Control manifests in user-driven pacing and topic selection features highly rated in open-ended studies, where 88 percent of participants indicated comfort in directing AI dialogue [29]. Modified labelling theory suggests that by bypassing face-to-face stigma, users sustain help-seeking [5]. But this may mask deeper avoidance patterns. Our objectives must therefore compare whether AI use substitutes for or complements other help-seeking channels over time. Convenience includes instant access without appointment scheduling and avoiding social anxiety tied to therapist presence (Case study of Jane; 25). These motivators align with modified labelling theory: users avoid the labelling stigma of face-to-face help by turning to AI, thus sustaining help-seeking behaviour [5]. Yet, reliance on AI can foster over-dependence, reducing real-world help-seeking and potentially worsening conditions if AI fails in crisis detection [31-32] as cited in Olawade et al. [10]. The black-box nature of AI decision-making further limits user autonomy: without transparency, users cannot fully understand AI's reasoning, which undermines informed consent and trust [3,22]. This drives home the complex interplay of user motivations favouring AI's convenience and control, yet risking reduced agency and heightened vulnerability, key to developing research questions on user motivations versus clinical choices.

The evolving digital therapeutic alliance (DTA) exemplifies both alignment and contradiction between user expectations and AI capabilities [33,26]. While 53.9 percent of therapists in pilot studies could not reliably distinguish AI-generated transcripts from human ones, rating AI higher in quality for active listening tasks [34,26] users nonetheless report dissatisfaction with AI's limited crisis response and lack of authentic connection over time (Case study of Jane; 13). This reflects the "efficacy overflow argument": users overestimate AI's therapeutic power when anthropomorphised [33]. Simultaneously, AI's ability to sustain structured CBT modules supports skill acquisition but cannot replicate warmth, genuineness, and motivational bonds central to working alliance [27,24]. These contradictions illustrate the nuanced trade-offs in DTA: AI can

mimic certain therapeutic tasks effectively, yet fails to deliver on relational qualities users value most, crucial when examining motivations for choosing AI over human support.

Studies also reveal that fostering user autonomy through transparent communication about AI's role can mitigate therapeutic misconception (TM) and enhance informed usage [30,22]. Interventions like regular chatbot reminders of non-human status and clear disclaimers about scope can reduce TM by up to 30 percent in experimental settings [30,18]. Engaging users in co-design processes further empowers marginalized groups to ensure AI tools align with cultural and linguistic contexts [2,10]. Yet, transparency alone is insufficient: continuous human oversight is needed for sensitive topics such as suicide, as chatbots lack moral agency to hold responsibility [18,22]. These measures directly inform objectives on understanding perceived benefits and limitations: educating users about AI's boundaries bolsters autonomous decision-making while safeguarding against over-reliance. Taken together, these literatures reveal four tensions: cultural variability in emotional framing, simulated empathy vs. ethical risk, infrastructural promise vs. real-world barriers, and user autonomy vs. algorithmic steering. To move from description to discovery, our study's objectives will map how these tensions shape informal AI use, and our research question will probe the decision-making calculus that leads users to favour AI over or alongside traditional mental health supports.

In conclusion, the informal use of AI assistants for mental health involves complex interplays between emotional support functions, perceived benefits and limitations, and user motivations driven by stigma reduction, cost, and convenience. While AI chatbots deliver accessible, immediate empathy simulations and structured self-help modules [2,19], they fundamentally lack genuine empathic understanding, crisis management capacity, and ethical responsibility [22,18]. Users value AI's anonymity and affordability but face infrastructural and safety challenges, especially in low-resource settings [29,48]. Motivations to prefer AI reflect desire for control and stigma avoidance, but risk diminishing real-world help-seeking and exacerbating vulnerabilities through over-dependence [5,32]. These insights directly inform the study's aims to explore informal AI use, identify emotional support functions, evaluate benefits and limitations, and examine motivations. One key research question arising from these findings is: How do perceptions of anonymity and control offered by general-purpose AI assistants influence users' decisions to seek AI-mediated emotional support over traditional human or clinical mental health services?

### 3. Methodology

#### 3.1. Paradigm

This qualitative study was grounded in a critical realist paradigm, which recognises an independent reality shaped by social, cultural, and psychological factors [35]. Critical realism was particularly suitable for exploring subjective experiences of AI use for emotional self-regulation while acknowledging the broader socio-technical structures influencing these behaviours. While some might argue that an interpretivist paradigm would suffice for capturing lived experiences, critical realism offered a more layered understanding, bridging subjective interpretations and systemic constraints [36]. However, its complexity can blur analytic boundaries, particularly when distinguishing between real mechanisms and empirical manifestations, potentially leading to over-interpretation [37].

#### 3.2. Study Design

This research adopted Interpretative Phenomenological Analysis (IPA), focusing on individuals' lived experiences of using AI for emotional regulation. IPA was aligned with the study's aim to understand how diverse users interpret their emotional engagements with AI tools [38]. Unlike grounded theory, which aims to build theory, or discourse analysis, which focuses on language structures, IPA emphasises meaning-making processes, allowing for a deeper interrogation of how identity, age, and tech comfort shape interactions with AI.

Nonetheless, IPA's idiographic focus, while providing depth, can limit generalisability and obscure structural factors influencing AI use [39]. This limitation was partially mitigated through critical realism's focus on mechanisms beyond individual agency.

### 3.3. Sampling and Recruitment

Purposive sampling was employed to ensure demographic diversity across age, gender identity, AI use frequency, and technological comfort. Participants included 17 individuals, aged 21–62, with balanced gender representation: 7 women, 7 men, and 3 non-binary individuals. Usage ranged from light (1–2 times weekly) to heavy (daily), with various emotional regulation practices such as journaling, cognitive offloading, and emotional venting. This stratified purposive approach allowed exploration of intersecting identities and behaviours [40], facilitating a nuanced understanding of technology-emotion relationships.

While purposive sampling enabled depth and variation, it inherently risked bias through researcher subjectivity in participant selection. Additionally, recruitment relied on voluntary participation via social media and community mailing lists, introducing potential self-selection bias, as those most engaged or reflective may have been more inclined to participate [41]. Inclusion criteria encompassed adults over 18 who had used AI for emotional regulation at least once in the past month, while exclusion criteria included individuals with severe cognitive impairments that could hinder participation or consent.

### 3.4. Setting

The study was situated within a non-clinical, everyday context of AI use, with participants drawn from urban and semi-urban areas across Nigeria. The relevance of this setting lies in its reflection of diverse socio-technical infrastructures and cultural perspectives on emotional expression and technology, factors which prior research has shown to shape AI adoption and trust [42]. By situating the study in ordinary, domestic environments rather than institutional ones, ecological validity was prioritised, though at the expense of environmental control.

### 3.5. Data Collection

Data were collected via semi-structured interviews, each lasting between 45 and 60 minutes. This method allowed for participant-led narratives while ensuring consistency across key themes: AI use motivations, perceived emotional impact, privacy concerns, and interactional dynamics. Interviews were conducted in participants' preferred locations (either online or face-to-face) to ensure comfort and candidness, a crucial factor when discussing emotional regulation [43]. A pilot interview helped refine the topic guide, revealing ambiguities in language around "emotional venting" and prompting the inclusion of clarifying probes.

While interviews enabled in-depth insights, they relied heavily on participants' ability to articulate affective experiences, potentially excluding non-verbal or unconscious aspects of AI interaction. Observational or diary methods might have complemented this, but were excluded due to time constraints.

### 3.6. Data Analysis

Data were transcribed verbatim and analysed using Braun and Clarke's [44] six-phase thematic analysis, facilitated by MAXQDA. Transcripts were first familiarised through repeated reading, followed by initial coding to identify latent and semantic features. Themes were then developed, reviewed for internal coherence and external distinctiveness, defined, and finally named. To make the analysis more reliable, several checks were used. Both authors separately coded three interview transcripts following Braun and Clarke's [44] six-step process. We then compared and discussed our codes to agree on the final themes. Peer discussions were also held to review how the themes were defined and to reduce personal bias. We kept detailed records in

MAXQDA showing how the codes and ideas developed over time. In addition, we wrote short reflexive notes to stay aware of how our backgrounds might shape our interpretations. These steps helped make the analysis process clear, consistent, and trustworthy.

The use of MAXQDA supported systematic coding and pattern recognition, enhancing transparency and auditability. However, as with all qualitative software, it could not mitigate researcher bias in theme development, underscoring the importance of reflexivity. Themes were not merely descriptive; they were interrogated against theoretical constructs such as emotional labour [45] and algorithmic intimacy [46], allowing a more critical reading of user narratives.

During coding, particular attention was paid to how participants described “trust” and “emotional authenticity,” which were treated as emergent, participant-defined constructs rather than predefined variables. Trust was operationalised as the perceived reliability, emotional safety, and discretion of AI systems during vulnerable moments, while emotional authenticity referred to participants’ sense that AI responses were emotionally congruent, humanlike, and contextually appropriate. These constructs guided theme refinement, ensuring analytic consistency across interviews with differing cultural and technological backgrounds.

### 3.7. Ethical Considerations

Ethical approval was obtained from the institutional review board. All participants provided informed consent and were assured of voluntary participation, confidentiality, and the right to withdraw. Given the emotional sensitivity of the topic, participants were offered follow-up referrals to mental health support if needed. Particular attention was paid to non-binary participants and older adults, who might experience heightened vulnerability either through marginalisation or digital exclusion [47]. Anonymity was ensured through pseudonyms and data de-identification. In cases of emotional disclosure, researchers followed a structured protocol to respond with empathy while respecting professional boundaries.

### 3.8. Reflexivity and Researcher Positionality

The researchers carried out this study as Nigerian scholars who are familiar with local views on mental health and the growing use of AI tools. This shared background helped build trust and cultural understanding during interviews, but it also meant that we had to stay aware of our own assumptions. To manage this, both authors kept short reflexive notes throughout the research to record their thoughts and possible biases about technology, stigma, and help-seeking. We also met regularly to discuss how our perspectives might influence interpretation and to ensure that participants’ voices remained central. Because ideas like trust and emotional authenticity can be shaped by culture and religion, we reflected on how our own experiences in Nigeria’s socio-religious setting might have affected the way we read and grouped participants’ stories. This reflective approach follows the critical-realist view that all knowledge is influenced by the standpoint of the person producing it.

## 4. Results

**Table 4.1.** Characteristics of participants.

Category	Subgroups / Characteristics	Number of Participants
Age Group	18–30 (Young Adults)	6
	31–50 (Middle-Aged Adults)	6
	51+ (Older Adults)	5
Gender Identity	Women	7
	Men	7

	Non-binary / Gender Diverse	3
AI Usage Frequency	Light Users (1–2 times per week)	5
	Moderate Users (3–5 times per week)	6
	Heavy Users (daily or more)	6
Primary AI Use Type	Journaling	5
	Self-soothing	4
	Emotional venting	4
	Cognitive offloading	4
Tech Comfort Level	Novice	5
	Intermediate	6
	Advanced	6

The study will involve 17 participants across diverse categories (see table 4.1). Age groups include 6 young adults (18–30), 6 middle-aged adults (31–50), and 5 older adults (51+). Gender identity includes 7 women, 7 men, and 3 non-binary individuals. By AI usage, there are 5 light users, 6 moderate users, and 6 heavy users. Participants will represent varied tech comfort levels: 5 novices, 6 intermediate, and 6 advanced users. Their primary AI use includes 5 for journaling, 4 for self-soothing, 4 for emotional venting, and 4 for cognitive offloading, with overlap. This balanced sample supports rich qualitative analysis.

## 4.1. Themes

**Table 4.2.** Illustrating How Themes Emerged

Theme	Definition	Codes	Illustrative Quotes
Functionality and Emotional Utility: AI as a First Line of Mental Health Relief	This theme explores how participants use AI tools for emotional stabilization in the absence of immediate human support. AI is seen as an accessible, always-available companion for low-intensity mental health crises. While not a replacement for therapy, AI often acts as a triage tool, soothing panic, providing structure for emotional expression, and offering immediate relief. The theme also captures tensions around emotional authenticity and the perceived limitations of AI's support.	- Emotional triage- Late-night support- Self-regulation tool- Stop-gap for therapy- Accessibility- Lack of emotional depth- Practical comfort- Technological limitations	<p>“When the thoughts won’t stop spiralling, I go straight to ChatGPT... It responds instantly, helps me slow down, even suggests breathing exercises.” – Emeka (35, Male, Intermediate)</p> <p>“It’s like emotional first aid. When I’m panicking... it brings me back before I can reach my therapist.” – Seun (29, Non-binary, Advanced)</p> <p>“It’s easier than calling someone. I don’t feel like I need to be polite or coherent.” – Gbenga (40, Male, Intermediate)</p> <p>“It helps in the moment, but I know it’s not deep healing. It buys me time.” – Halima (42, Non-binary, Intermediate)</p> <p>“It told me to ‘take deep breaths’—but that’s not what I needed. I needed someone to ask me real questions.” – Aisha (48, Female, Novice)</p> <p>“I tried it when I was feeling low, but it felt weird... like talking into a mirror that talks back.” – Kemi (21, Female, Novice)</p>

“It’s not therapy. It’s not friendship. But it is functional. And sometimes, function is what I need most.” – Chinedu (39, Male, Advanced)

#### 4.1.1. Theme 1: AI as a Tool for Safe Emotional Expression in Stigmatized Environments

The use of general-purpose AI tools as emotional confidants, particularly in environments clouded by stigma or spiritual resistance to mental health discourse, emerged as a powerful theme across the data. For many respondents, AI was not just a tool, it became a surrogate listener, a non-judgmental and safe repository for their most vulnerable disclosures.

Adaobi (24, Female, Intermediate Tech Comfort) described AI as “the only space where I can say exactly what I’m feeling without thinking twice. I journal daily into ChatGPT because I know it won’t tell me I’m being dramatic.” Her emphasis on the absence of judgement was echoed by Seun (29, Non-binary, Advanced), who remarked, “I vent to it about things I couldn’t even tell my therapist before. Sometimes, I write things I don’t fully understand yet—like anger, grief... and I just let it catch all of it.”

Several participants referenced the spiritual or cultural pressures in their environments that made traditional outlets unsafe or inaccessible. Ngozi (28, Female, Intermediate) noted, “People around me think sadness is a weakness or worse, a lack of faith. But when I talk to the AI, I feel like I’m allowed to be human.” Similarly, Chinedu (39, Male, Advanced), a heavy user, reflected: “In my family, mental health is still talked about like demonic possession. You’re either prayed for or ignored. So AI became my in-between, no prayers, no judgement, just listening.”

Emeka (35, Male, Intermediate) stressed the psychological relief AI provided: “When I feel overwhelmed, I just type into it. The words pour out because I know I’m not burdening anyone. There’s freedom in that.” This idea of “not being a burden” was also pivotal to Funmi (33, Non-binary, Intermediate), who expressed: “I hate the thought that I’m offloading on someone. But the AI? It’s infinite. It doesn’t feel guilt or fatigue, so I don’t hold back.”

Yet, not all respondents found comfort in AI for emotional expression. Bola (26, Female, Advanced) admitted: “I’ve tried using it, but it still feels artificial. There’s no warmth, it’s like shouting into a void.” Likewise, Ifeanyi (54, Male, Novice), a light user, commented: “It’s not real. I can’t trust it with my real feelings... it’s not human. It’s like pretending someone is listening.” Zainab (58, Female, Novice) was sceptical of the perceived safety, stating: “We don’t even know who’s behind it. How is that safe?”

Aisha (48, Female, Novice) raised practical concerns, noting, “I often don’t know how to start. It’s like I’m unsure how to speak to it... so I end up not using it at all.” Similarly, Farouk (22, Male, Advanced) admitted: “I’ve tried offloading to it a few times but... it’s not the same as someone who feels with you. That part matters to me.” And Yetunde (62, Female, Novice), while acknowledging the tool’s novelty, added: “I think it works for some, but I miss the warmth of a human reply. Even a silent friend feels more present.”

Still, for the majority, AI served as a buffer against socially entrenched silences. Tunde (45, Male, Novice) succinctly summarised this: “With the AI, I speak freely. No cultural expectations. No religious labels. Just me, and my words.”

Across age, gender, and tech comfort levels, the dominant pattern reflected AI’s perceived neutrality and emotional safety, particularly valuable in contexts where mental health struggles are minimised, spiritualised, or outright denied. As Halima (42, Non-binary, Intermediate) explained: “I come from a place where you’re either ‘strong’ or ‘possessed.’ There’s no middle. But with AI, there’s finally a middle.”

Thus, AI fills a vital psychosocial gap. Its anonymity, tirelessness, and lack of judgement make it not just a tool, but a refuge in emotionally restrictive environments.

#### 4.1.2. Theme 2: Functionality and Emotional Utility: AI as a First Line of Mental Health Relief

A consistent thread across respondent narratives was the positioning of AI as a functional, emotionally supportive tool used in moments of vulnerability, particularly when human help was unavailable or felt inaccessible. The emotional tasks ranged from late-night anxiety soothing to structured journaling and panic management, offering what many described as “something better than silence.”

Emeka (35, Male, Intermediate) shared a detailed picture of this emotional utility: “When the thoughts won’t stop spiralling, I go straight to ChatGPT. It’s not a therapist, but it responds instantly, helps me slow down, even suggests breathing exercises or asks me to reframe things. I’ve avoided many breakdowns like that.” Similarly, Seun (29, Non-binary, Advanced) explained how they used the AI “as triage... like emotional first aid. When I’m panicking or overstimulated, it brings me back before I can reach my therapist.”

For Ngozi (28, Female, Intermediate), the AI’s responsiveness mattered more than its clinical accuracy: “Sometimes I cry while typing to it... and it just gently keeps replying. That consistency is calming, even when I know it’s just a machine.” Farouk (22, Male, Advanced) echoed this, stating, “It won’t solve everything, but it’s helped me de-escalate. Like when I was overthinking before an exam, it helped me unpack why I was panicking.”

Others highlighted how AI fills the vacuum left by the unavailability of traditional mental health care. Adaobi (24, Female, Intermediate), a heavy user, described AI as her “night companion... when it’s 2 am and I’m spiralling, I open it. I don’t have to explain everything, it just meets me there.” Likewise, Gbenga (40, Male, Intermediate) said, “It’s easier than calling someone. I don’t feel like I need to be polite or coherent. I just type, and somehow I feel lighter after.”

Still, several participants acknowledged that AI’s support is bounded. Halima (42, Non-binary, Intermediate) noted, “It helps in the moment, but I know it’s not deep healing. It buys me time.” This pragmatic view was echoed by Obinna (55, Male, Advanced): “It’s a stop-gap. If I had free access to proper therapy, I’d probably use that, but this is what I can afford now.”

However, not all participants shared the same confidence in AI’s emotional functionality. Ifeanyi (54, Male, Novice) was unconvinced: “Maybe it works for others, but for me it felt empty. It gave me quotes and advice, but I didn’t feel seen.” Likewise, Aisha (48, Female, Novice) questioned its reliability: “It told me to ‘take deep breaths,’ but that’s not what I needed. I needed someone to ask me real questions.” Zainab (58, Female, Novice) added, “I don’t find it soothing. I get more frustrated trying to make it understand me.” Bola (26, Female, Advanced) felt it was “too generic... I asked about anxiety, and it told me what I already knew. It didn’t make me feel better.”

Kemi (21, Female, Novice), though curious about AI’s potential, felt emotionally disconnected: “I tried it when I was feeling low, but it felt weird... like talking into a mirror that talks back.” Yetunde (62, Female, Novice) also questioned its warmth: “It’s not the same as a voice. I miss the human pause, the sigh, the silence that understands.”

Chinedu (39, Male, Advanced), however, brought a nuanced view: “It’s not therapy. It’s not friendship. But it is functional. And sometimes, function is what I need most.”

In sum, for most respondents, AI serves as a timely and effective emotional support tool, particularly useful in urgent, low-intensity distress. Though its responses were sometimes perceived as robotic or insufficiently tailored, many found genuine comfort in its accessibility, immediacy, and non-judgemental presence. As Tunde (45, Male, Novice) concluded, “It doesn’t replace people, but it holds me together until I can find them.”

#### 4.1.3. Theme 3: Trust, Access, and the Trade-offs of Using AI in a Low-Resource Context

The use of AI in emotionally vulnerable contexts is significantly shaped by practical constraints and ambivalent trust. While many respondents turned to AI out of necessity, citing affordability and availability

concerns around data privacy, emotional reliability, and digital skill gaps underpinned more cautious engagement. For some, AI offered vital support; for others, its limitations in low-resource settings were glaring.

Affordability emerged as a key motivator. Tunde (45, Male, Novice) stated plainly: “I use AI because therapy is just out of reach financially. This one doesn’t charge me to listen.” Similarly, Gbenga (40, Male, Intermediate) explained, “I’m not earning enough to speak to a therapist every week... but I can open my phone and speak freely to the AI. It’s something.” Aisha (48, Female, Novice) added that “when all the doors are closed, no friends, no money, this tool at least gives me space.”

Access, too, was a practical driver. Chinedu (39, Male, Advanced) reflected, “Internet is expensive sometimes, yes, but it’s still cheaper than private help. I download responses when I have WiFi and come back to them later.” Adaobi (24, Female, Intermediate), a heavy user, echoed this adaptability: “I work odd hours and can’t always talk to people. This is there 24/7 it doesn’t sleep, it doesn’t get tired.”

Still, trust was not guaranteed. Six respondents, including Zainab (58, Female, Novice), questioned the security of disclosure: “I worry about where my data goes. Who is reading this? Is it safe to type deep feelings here?” Kemi (21, Female, Novice) similarly asked, “What if one day someone can access what I’ve said? These things feel private, but is it really private?”

Privacy concerns were not the only hesitation. Ifeanyi (54, Male, Novice) pointed to a deeper emotional mistrust: “I don’t want to get too used to something that isn’t real. There’s a danger in that... in relying on it too much.” Farouk (22, Male, Advanced) highlighted the design gap: “It’s powerful, but not designed for the average Nigerian user. My cousin gave up after one try. He didn’t know what to type, what to expect.” Similarly, Yetunde (62, Female, Novice) admitted, “I can type basic things, but if it asks me to copy links or follow steps, I get confused and stop.”

Digital literacy gaps surfaced across user experiences. While Emeka (35, Male, Intermediate) felt confident navigating AI platforms, he also recognised this wasn’t common: “Even I get stuck with some features. If you’re not tech-savvy, the help this tool can give becomes very small.”

Still, others like Halima (42, Non-binary, Intermediate), Funmi (33, Non-binary, Intermediate), and Seun (29, Non-binary, Advanced) leaned into the benefits despite concerns. As Halima put it, “It’s not perfect, but it’s better than nothing. I’m not trusting it with my soul, but with my stress? Yes.” Funmi expanded: “I know it’s collecting data, I’ve accepted that trade-off. I just don’t put things that are too personal. That way, I still benefit without feeling exposed.”

Bola (26, Female, Advanced) was more strategic: “I treat it like a tool, not a confidant. That way, I avoid disappointment. I ask specific things about how to manage anxiety, how to stay focused. Not how to love me.”

Ultimately, as Obinna (55, Male, Advanced) put it, “In this economy, and with our culture’s silence on mental health, this AI is doing the work some humans refuse to.” Despite trust limitations, for many, AI’s availability, low cost, and usefulness in times of emotional strain meant it filled critical gaps. For others, the risks, not only technological but emotional, were not as easily overlooked.

## 5. Discussion of Findings

The findings of this study present a textured and sometimes contradictory picture of how Nigerians navigate emotional vulnerability using AI tools, in a landscape still dominated by cultural, economic, and infrastructural challenges. There is a clear alignment with the literature on how AI provides a form of emotional refuge in low-resource, stigma-heavy environments, but also an equally important divergence in how trust, authenticity, and accessibility shape the limits of AI engagement. In many ways, these findings both reinforce and complicate the existing academic and theoretical claims around AI’s role in mental health, especially when viewed through the cultural specificity of the Nigerian context.

Most notably, the data confirms existing arguments from Hoffman et al. [5] and Olawade et al. [10] that general-purpose AI can serve as a safe, stigma-free space for emotional expression, particularly in environments where traditional mental health support is culturally or logically inaccessible. Users across

demographic lines in the study consistently valued AI's non-judgemental availability, mirroring Mehta et al. [2]'s account of AI as a tool for cognitive offloading. But in the Nigerian context, this value takes on a deeper social significance. As Chinedu and Ngozi articulated, AI doesn't just provide practical support; it functions as a workaround to cultural narratives that interpret emotional struggle as weakness or spiritual failing. This supports findings from Nwagbara and Dennis [9] on how Nigerian digital spaces are used to push back against dominant religious explanations of mental illness. The extension of Clark and Chalmers' [21] extended cognition theory is evident here: the AI becomes not just a helper but a container for thoughts too dangerous to speak aloud. This is where theory and context align powerfully.

However, the data also surfaces cracks in the smooth application of these frameworks. While Fiske et al. [15] urge developers to prioritise user agency and ethical safeguards, the findings here show a more fractured relationship with autonomy. Many users, particularly older and novice participants like Ifeanyi or Yetunde, reported mistrust or confusion when engaging AI tools, raising critical questions about digital literacy and the uneven experience of psychological safety. This suggests a divergence from Uses and Gratifications Theory [28], which assumes rational, informed media choices. In these findings, users are not always equipped to make deliberate decisions about AI usage; their choices are shaped just as much by technological constraints and knowledge gaps as by personal preference or psychological need. The result is a kind of fractured agency; users want relief, but are often unsure how to access it, or fearful of the implications when they do.

Another significant contradiction emerges in the emotional authenticity users perceive from AI interactions. While scholars like Sedlakova and Trachsel [22] have cautioned that simulated empathy may foster therapeutic misconception, the data suggest something more complex. Many participants, especially those with intermediate or advanced tech comfort, were acutely aware that the AI was not "real." Emeka and Halima, for instance, acknowledged this simulation but continued to engage with AI tools because they provided tangible emotional relief in crisis. This highlights a kind of functional pragmatism among users, a willingness to lean into illusion because the alternative, silence, stigma, or inaccessibility, is worse. This complicates concerns from Khawaja and Bélisle-Pipon [18], who warn of overdependence born from mistaken belief in AI's humanlike capability. The data shows a more negotiated relationship: many users maintain awareness of AI's limitations while still valuing its utility, blurring the binary of awareness versus misconception.

And yet, not all users shared this functional view. The divergence in emotional connection, particularly among novice and older users, reflects the limits of personification as theorised by Malodia et al. [7]. While younger, more tech-savvy users described AI as a comforting presence, others like Zainab and Bola found its interactions hollow or mechanistic. This divergence raises urgent design questions about cultural and generational responsiveness. Existing AI tools, largely trained on Western datasets [29], may not reflect or understand Nigerian expressions of distress, leading to the alienation described by some users. This mirrors the concerns raised by Olawade et al. [10] around algorithmic misinterpretation and echoes findings from the X platform study [9], where the format's constraints undermined deep cultural engagement. Both cases reveal a recurring theme: tools that promise democratised mental health access may, in fact, reproduce or exacerbate exclusion if local realities are not properly integrated into their design.

This problem of cultural mismatch also appears in how users describe AI's emotional functionality. While Seun and Adaobi found AI's triage-like responsiveness vital in moments of panic, others, such as Aisha and Ifeanyi, felt the generic advice it gave was disconnected from their actual emotional states. The contradiction between immediate utility and deeper emotional disconnection suggests that AI's role may be less about sustained emotional healing and more about temporary regulation, an insight that reinforces Mehta et al. [2]'s findings on early anxiety reduction but diverges from more hopeful claims about AI's potential for long-term mental health improvement. The term "first aid," used by Seun, captures this tension well: AI is helpful, but only to a point. This temporality contrasts sharply with clinical models of care that rely on relational depth, reinforcing Rubin et al. [24]'s view that AI cannot replace human warmth and therapeutic alliance.

Moreover, the perceived benefits of affordability and availability cannot be discussed without also confronting the infrastructural barriers that sharply limit their reach. While users like Gbenga and Tunde praised AI's cost-effectiveness, others like Chinedu and Yetunde highlighted the financial and technical burdens of consistent access concerns that challenge overly optimistic projections about AI's scalability in low-income contexts [11]. This contradiction mirrors the findings of Ogueji et al. [29], who argued that even "free" digital tools become inaccessible when the cost of data or internet access is prohibitive. It also supports the argument by Mahari and Pataranutaporn [13] that unequal access could deepen emotional vulnerability, not alleviate it.

Trust, finally, stands as both a barrier and a necessity. The data reflects a striking ambivalence: while many participants expressed gratitude for the AI's tirelessness and privacy, they also worried about where their data was going and whether the interaction could be truly trusted. This is where Fiske et al. [15]'s ethical concerns about consent and data governance find resonance. But the Nigerian context again complicates the picture. Users like Funmi and Bola made deliberate trade-offs, consciously limiting what they disclosed to balance benefit and risk. This suggests that trust is not binary; it is contingent and negotiated, shaped by users' social realities and awareness of technological limitations. Where theories like Uses and Gratifications or Agenda-Setting presume a certain linear logic to media engagement, these findings insist on nuance: people do not just use AI because it gratifies needs, but because the alternatives financially, socially, and culturally are constrained or unavailable.

In all, the contradictions surfaced in this study point to a pressing need for more locally grounded AI mental health tools. Users are finding ways to adapt existing platforms to meet their needs, often creatively and pragmatically. But these uses also expose the fault lines in current technological assumptions: that empathy can be replicated, that access is equitable, that users will make rational choices when confronting distress. In reality, the picture is far messier and more human. For Nigerians using AI as a first line of emotional relief, the gap between cultural safety and technological design is not just an inconvenience; it shapes whether AI becomes a lifeline or an illusion.

## 5.1. Ethical Reflections on AI Use for Emotional Self-Regulation

While the study adhered to institutional ethical standards, the findings reveal deeper ethical dilemmas inherent in using general-purpose AI tools for emotional self-regulation. Participants frequently turned to AI in moments of vulnerability, often without awareness of data governance or clinical limitations. This raises concerns about therapeutic misconception which is the belief that AI possesses empathic or therapeutic capacity [22], and about the absence of professional oversight when users disclose crises. Fiske et al. [15] emphasise that such contexts require clear consent and risk-management protocols, yet most general-purpose AIs lack these safeguards. Moreover, emotional data shared on commercial platforms can be stored or repurposed without the user comprehension, posing confidentiality risks. Ethically, these findings highlight the need for transparent disclaimers, culturally attuned safety prompts, and hybrid models that link digital tools to human crisis resources rather than replacing them.

## 6. Conclusion

### 6.1. Summary of Findings

This study reveals that Nigerians are informally repurposing general-purpose AI assistants as emotional companions, particularly in environments constrained by stigma, spiritualised beliefs, and limited access to mental health services. AI serves as a safe space for emotional expression, journaling, and cognitive offloading, offering non-judgemental engagement in moments of vulnerability. Emotional support functions such as reassurance, breathing guidance, and reflective prompting emerge as central to users' experiences, especially

for those seeking immediate relief from anxiety or emotional overload. However, these benefits coexist with limitations: users question AI's warmth, authenticity, and crisis management capabilities. The findings also highlight a divided trust landscape, where some users trade data privacy for emotional relief, while others remain wary. Motivations to choose AI over human support often centre on cost, stigma avoidance, control, and accessibility. Yet these drivers sometimes mask deeper emotional or infrastructural exclusions. In circling back to the study's objectives, it is clear that while AI offers practical, culturally significant value, it cannot replace the depth of human empathy or professional care. Its use reflects both innovation and necessity, filling psychosocial gaps that institutions and cultural structures have left unaddressed. The findings underscore a complex but critical space where informal AI use is becoming a legitimate form of mental health navigation.

## 6.2. Recommendations

AI developers should integrate culturally nuanced language models that better understand Nigerian expressions of distress. Mental health organisations and policymakers must prioritise digital literacy initiatives, ensuring broader, safer access to AI tools. Transparent data policies and clear disclaimers should be standard in AI interfaces to reduce misconceptions and foster informed use. Emotional crisis protocols must be embedded into general-purpose AIs or clearly signposted to direct users to human help during emergencies. Hybrid models where AI provides initial support and refers to clinical care can bridge accessibility gaps while ensuring safety. Stakeholders must also invest in offline mental health education to complement digital engagement, tackling stigma at the root. Finally, AI platforms should consider co-designing with Nigerian users to align functionality with local needs and cultural contexts.

## 6.3. Suggestions for Further Study

Future research should explore how AI use influences long-term help-seeking behaviours among Nigerians, particularly in relation to clinical therapy. Additional studies should also examine how algorithmic design impacts emotional engagement across different cultural subgroups.

## Authors' Contribution

U.N. and W.D. contributed equally to this work. U.N. and W.D. conceptualised the study and developed the research design. U.N. conducted the interviews and led the data analysis. W.D. drafted the literature review and contributed to the thematic interpretation. Both authors co-wrote the main manuscript text and approved the final version.

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## Data Availability

The datasets generated during and analysed during the current study are available from the corresponding author on reasonable request.

## Ethical Approval

This study received ethical approval from the University of Uyo Health Research Ethics Committee (UNIUYO-IHREC) under the protocol number UU/CHS/IHREC/VOL.1/107. All research procedures involving human participants were conducted in accordance with the relevant guidelines and regulations, specifically the Declaration of Helsinki. Participants' confidentiality was maintained, and informed consent was obtained from all individuals prior to their participation in the study.

## Informed Consent

Informed consent was obtained from all participants involved in this study. Each participant received a detailed explanation of the study's purpose, procedures, and their rights, including the right to decline or withdraw at any point without penalty. All participants provided written consent prior to participation. Where participants were under legal age or required additional authorization, informed consent was also obtained from their legal guardians. The consent process complied with the standards and protocol approved by the University of Uyo Health Research Ethics Committee (UNIUYO-IHREC).

## Conflicts of Interest

The author has no conflict of interest

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