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"Words are not enough": Examining Emotional Support by Conversational AI for Caregivers

Melika Vafafar
Computer Science
Northeastern University London
London, London, United Kingdom
vafafar.m@northeastern.edu

Sian Joel-Edgar
Computer Science
Northeastern University London
London, London, United Kingdom
sian.joel-edgar@nulondon.ac.uk

Casper Harteveld
College of Arts, Media and Design
Northeastern University
Boston, Massachusetts, USA
c.harteveld@northeastern.edu

Hossein Dabbagh
Philosophy
Northeastern University London
London, London, United Kingdom
hossein.dabbagh@nulondon.ac.uk

Andrew K Martin
School of Psychology
University of Kent
Canterbury, Kent, United Kingdom
Kent Medway Medical School
Canterbury, Kent, United Kingdom
a.k.martin@kent.ac.uk

Chee Siang Ang
School of Computing, Kent and
Medway Medical School
University of Kent
Canterbury, United Kingdom
Faculty of Medicine
Imperial College London
London, United Kingdom
c.s.ang@kent.ac.uk

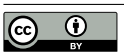
Abstract

Caregivers often experience emotional difficulties and social isolation due to their demanding caregiving duties. Conversational AI has the potential to provide emotional support, yet it lacks effective emotional-regulation support. In this study, we conducted focus groups and semi-structured interviews with mental health professionals and caregivers (n = 17) to explore the potential benefits, challenges, and concerns of users on the applications of conversational AI for caregivers' emotional support. Our findings suggest that, while current text-based conversational AI is deemed valuable for emotional support, there is a desire to have a more *empathic AI*, an AI that actively listens, takes cultural, religious, and linguistic context into consideration; and makes humans feel heard. We examined the dimensions of empathic AI in mental health, from authenticity and trust to over-reliance, misuse, and even exacerbating mental health problems, and how this can potentially be addressed to improve caregivers' well-being.

Keywords

Chatbots, Conversational AI, Caregiver, Emotional Support

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1 Introduction

Caregivers often experience physical and emotional challenges, with many caregivers experiencing high levels of stress, depression, and social isolation due to the considerable demands of caregiving responsibilities by providing sustained support for someone in need [83, 97]. In 2024, the UK reported that 70 percent of carers were living with chronic mental health conditions [17], underscoring the scale of this crisis. Ongoing strain can lead to burnout, turnover in caregiving roles, and lower quality of care. Feelings of guilt and self-criticism, especially when caregivers take time for themselves, further contribute to emotional avoidance and neglect of their own well-being [35]. Despite their central role in healthcare, caregivers' mental health remains underexplored, with research largely focused on patients [86].

While established therapy approaches [37, 54, 84] provide effective strategies for regulating emotions, access and effectiveness of these therapies are often limited by cost and availability. Mental health support more broadly remains challenging, with high financial and situational barriers [82]. For caregivers, access to mental health support is more challenging due to structural, diagnostic, and systemic barriers [3]. Moreover, forming a good therapeutic alliance and achieving the right therapy match is complicated because clients and therapists might prioritise different aspects of the relationship [4]. This can be due to the heterogeneity of therapeutic approaches for emotion regulation [55], or different preferences such as therapist characteristics [94]. Therefore, emotional support for caregivers needs careful consideration of their needs and psychological insight to establish therapeutic practices for effective support.

Different HCI approaches, including virtual reality [53, 68, 102], wearable technologies [22, 51], and conversational AI [61, 75, 120] hold great potential for supporting emotional well-being. Among emerging HCI approaches, text-based conversational AI holds unique promise for supporting caregivers' emotional well-being,

offering accessibility, scalability, and low-cost interventions. Conversational AI enables just-in-time interventions [62], psychoeducation [123], and sustainable, on-demand support [101]. Yet, current designs lack emotional nuance and often fail to account for caregivers' complex, lived realities[78].

To address these gaps, this paper asks:

- How can conversational AI be designed to resonate with the unique emotional needs of caregivers?

By getting insights through a co-design focus group followed by semi-structured interviews, this paper proposes a qualitative approach grounded in caregivers' lived experiences, enriched by psychological insights, and informed by reinterpretations with an HCI lens. This paper makes three contributions: First, it provides empirical insights into caregivers' values, expectations, and concerns regarding text-based conversational AI for emotion regulation. Second, it translates these insights into design implications across five interrelated empathic dimensions: active attentiveness, non-verbal communication and cues, trust, accessibility, and worldview according to caregivers' lived experiences and therapeutic needs. Third, it advances the metaphor of "words are not enough" for empathic AI design, highlighting how non-verbal communication patterns are deeply valued by caregivers and must be reinterpreted in text-based AI systems to meaningfully support carers' emotional well-being. Throughout the paper, we use "empathic AI" in a functional and relational sense: conversational systems that do not themselves feel, but are designed to support caregivers' emotion regulation and relational needs (feeling heard, respected, and safe).

2 Related Work

In this section, we review prior work on emotion regulation and the applications of conversational AI for well-being. We situate this work in the context of caregiving, highlighting both the opportunities and the challenges that motivate our focus on empathic conversational AI for caregivers.

2.1 Approaches in Practice to Support the Emotional Needs of Caregivers

Emotion regulation describes the everyday ways people manage their feelings, shaping when emotions arise, how they are experienced, and how they are expressed. Classic models distinguish between strategies used before emotions surface (antecedent-focused) and those applied after emotions are triggered (response-focused) [38]. Yet, these accounts often miss how emotions are shaped through cultural values and individual differences, which is particularly important in caregiving contexts.

Caregivers are particularly vulnerable to difficulties in regulating emotions, placing them at risk of emotional distress. These risks are amplified in different contexts: dementia caregivers frequently report anxiety, depression, isolation, and anticipatory grief [35]; those supporting grievers may find their own well-being diminished [23]; and caregivers of neurodivergent individuals often struggle with exhaustion, guilt, and barriers to social participation [69]. The caregiver population is often overlooked despite carrying a significant emotional burden and unmet support needs. Together, varied caregiving contexts and the emotional burden caregivers carry, and the lack of dedicated research into their emotional well-being [10] highlight a critical gap that requires further focus.

Emotion regulation (ER) strategies have been theorised in multiple ways in psychotherapy: Cognitive Behavioral Therapy (CBT) supports ER by restructuring unhelpful cognitions through techniques like cognitive reappraisal (reframe how individuals interpret a situation to alter its emotional impact) [54, 84] and perspective-taking (the ability to view a situation from another person's point of view) [6], while Emotion-Focused Therapy (EFT) emphasises awareness, expression, and transformation of emotions within a therapeutic alliance [37]. Yet, barriers of access, cost, time, and therapeutic match [14] often limit their benefits.

Different technological solutions are increasingly used to improve accessibility and reach for caregivers. For instance, ViveDe [80] is a VR-based psychoeducational program for dementia caregivers that simulates daily life from the perspective of individuals with dementia. Findings showed that VR enhanced caregivers' sense of presence and emotional attunement; however, it did not capture the complexity and variability of real-world caregiving experiences. A recent study examined the invisible work caregivers perform when juggling multiple, often conflicting roles and how technology can support this [47]. Findings from interviews indicated that caregiving extends beyond tasks to ongoing negotiation, emotional management, and shifting identities, and these dimensions are often overlooked in technology design. These insights underscore the need for co-design approaches to reflect the diversity, contexts, and lived realities of caregiving. Moreover, Milella and Bandini [78] conducted a systematic review to examine how technologies are currently used to support caregivers and revealed that while many existing systems focus on task-based assistance, such as scheduling, monitoring, or reminders, there is a notable gap in technologies that engage with the emotional needs of caregivers or simulate empathic interactions [78].

Collectively, existing approaches remain limited, focusing largely on task support while neglecting caregivers' complex emotional needs. This gap underscores the need for co-designed technologies that are psychologically grounded and responsive to the lived realities of caregiving.

2.2 Conversational AI for Emotional Support

Talking through emotions supports awareness through cognitive reappraisal [54, 84], and perspective-taking [6], where conversational exchange helps distribute and manage emotional burdens and reduce emotional intensity. This is aligned with Social Baseline Theory (SBT) [21], which posits that human beings evolved to regulate affect through the presence of others. Conversational AI can extend these benefits by providing accessible, low-cost interactions for reflection, dialogue with therapeutic benefit [45].

A growing trend in recent work has explored how conversational agents can provide emotional support across diverse contexts. Conversational AI agents such as Replika [100], Wysa [7], SERMO [26], ERICA [45], and ChatGPT [2] have been shown to support users' emotional well-being; however, these systems also face notable limitations and ethical concerns.

ERICA [45] is an embodied conversational agent example, designed to deliver a brief psychoeducational intervention for emotion regulation while using multimodal emotion recognition to

assess users' states in real time. Users reported a strong therapeutic alliance and highlighted ERICA's potential to support emotion regulation. However, important gaps, particularly in understanding which design elements drive engagement and in expanding dialogue flexibility, are needed to better capture user experiences. Another recent exploratory study evaluated the potential of MindTalker [120], a GPT-4-based conversational agent co-designed with therapists, and showed that participants appreciated the AI's adaptability and companionship value. Qualitative findings noted improvements in mood and social expression. However, the interactions also surfaced concerns about background and context sensitivity, conversation depth, and the emotional and ethical risks of using conversational AI for mental health support [120].

Another example is SERMO [26], which is a mobile chatbot that supports emotional self-regulation through CBT strategies, detecting users' emotions from text input and offering coping exercises, mindfulness activities, and psychoeducational content. Although users reported positive impressions, the study highlighted limitations in capturing emotional nuance due to reliance on lexicon-based emotion detection.

A review [67] on the effectiveness of AI-based conversational agents for mental health showed that these agents significantly reduce psychological distress and depression. However, they were not consistently effective for anxiety or overall well-being, and user experiences varied depending on the quality of empathic communication. It was highlighted that design should move beyond outcome evaluation and instead focus on mechanisms of effectiveness, such as how empathy and user engagement are enacted in human–AI interaction, emphasising co-design approaches while exploring safe integration of AI within a mental health context [67].

In summary, these studies highlight the growing potential of conversational agents to support emotion regulation across varied contexts. Systems like ERICA and SERMO demonstrate how conversational agents can have therapeutic benefits and provide psychoeducation. However, these systems face consistent limitations, including shallow emotional nuance, limited context sensitivity, and risks around ethics, dependency, and effective sustaining engagement. Importantly, none have been designed specifically with caregivers' unique emotional realities in mind. Moreover, conversational AI can be delivered through different modalities, including voice, multimodal, and text-based systems. In our work, we focus on text-based interaction, as it offers accessibility, scalability, and cost-effectiveness, while fitting the sensitive and demanding schedules and realities of caregiving. Considering the complexity and diversity of caregiving contexts, a co-design approach is essential to ensure that conversational agents are in accordance with caregivers' lived realities, reflect their values, and provide meaningful support for their well-being.

2.3 Towards Emphatic AI

As mentioned, one of the mechanisms of effectiveness for improving conversational agents is *empathy*. Empathy is one of the core components of therapeutic approaches, helping people feel understood, validated, and accepted. It creates a foundation of trust and emotional safety, which is crucial for individuals to open up, explore their experiences, and engage meaningfully in the therapeutic process [30]. Our findings also suggested that this mechanism holds particular relevance for caregivers. This aligns with established therapeutic frameworks [74]. Current state-of-the-art systems attempted to demonstrate empathy in AI to deliver more contextually sensitive and emotionally attuned support to users. Models such as GPT and LLaMA, when combined with fine-tuning on therapeutic dialogues and emotion-aware prompting, consistently showed abilities in empathy expression leading to better mental health outcomes [39]. However, there is a persisting gap in specifying empathy not as a diffuse "quality" of AI output, but as a structured set of relational functions. Researchers have typically defined empathic AI as systems that detect users' emotional states and generate supportive, context-aware responses that simulate human empathy. In this literature, empathy is treated as representational rather than genuine, which raises ethical concerns about authenticity and appropriateness in sensitive settings. These definitional inconsistencies are not only theoretical: they complicate the responsible deployment of chatbots for different user groups and clinical needs [56]. In this paper, we adopt a more functional view: empathic AI refers to conversational systems that help caregivers regulate emotion and feel heard, respected, and safe, even though the system itself does not "feel." Empathic AI is particularly essential because emotions are central to human communication, and systems that cannot interpret them risk responding in ways that feel mechanical or inappropriate to the user's experience [67]. Therefore, we shift from simulation-oriented view of empathic AI toward a functional and relational notion that treats empathy not only as a felt emotional state, but as a deliberate, adaptive skill used by therapists to promote therapeutic progress, strengthen alliance, and support caregiver's well-being [46].

In this paper, we therefore define empathic AI not as a system that "feels" or perfectly mimics human emotion, but as a functional and relational capacity to scaffold users' emotional regulation in role-specific ways. Building on psychotherapy notions of functional empathy, this capacity involves deliberately structuring interaction so that users experience attentive presence, calibrated trust, equitable access, and respectful negotiation of values, rather than merely receiving sentiment-labelled or "warm-sounding" replies. This aligns with recent work on relational norms in human–AI cooperation, which shows that what counts as appropriate emotional responsiveness depends on the social role an AI is designed to fulfil (e.g., caregiver, tutor, companion) and that misaligned expectations can foster unrealistic or unhealthy dependencies [28].

3 Methods

We used a two-phase qualitative design: (1) we involved mixed stakeholders (caregivers and mental health professionals) who explored caregivers' emotional needs and collaboratively discussed and critiqued text-based conversational AI interactions in co-design focus groups; and (2) following that, we conducted in-depth one-to-one semi-structured interviews with caregivers and mental health professionals to capture personal perspectives and concerns that may not surface in groups [101].

This sequencing allowed us to ground a socially shared setting with an iterative co-design approach [33] involving mental health

professionals (MHP) and caregiver participants, following semi-structured interviews to deepen nuance (e.g., trust boundaries, individual differences) in private, reflective interviews.

3.1 Materials

The study used several materials to enhance participants' engagement with conversational AI and to get rich reflections on this interaction:

- **Interactive prompting sessions (IPS):** IPS was developed to explore the interactions with text-based AI emotional support[31] using ChatGPT-3.5. We selected the free version ChatGPT-3.5 as our conversational AI tool not merely because it was cost-free, but because, at the time of the study, it represented the most accessible and widely used version of ChatGPT available to the general public. The initial AI chatbot prompting scenario included participants selecting a common emotional challenge (e.g., sadness, stress, or anxiety), prompting the AI chatbot with a related message (e.g., "I feel overwhelmed, what can I do?"), and observing how the AI responds.
- **Interview guide:** This guide included icebreaker questions to situate participants' caregiving or professional roles, followed by structured prompts on topics such as the similarities and differences between AI and in-person therapy, the role of AI in different stages of therapy, and how design characteristics influence AI interactions. An outline of caregiver and professional interview questions is provided in Table 1.

3.2 Procedure

We organised three focus groups, each with the same structure but focused on a different caregiving context: dementia (neurodegenerative) [117], neurodiversity (neurodevelopmental) [69], and grief (general/lived experience) [23]. This sampling allowed us to capture a wide range of challenges, including progressive decline, long-term developmental stressors, and universal experiences of loss, ensuring design insights were not related to one single caregiving domain. Moreover, we intentionally mixed caregivers and MHPs so that carers could respond directly to clinicians' perspectives (and vice versa), rather than treating them as separate stakeholder groups.

Prior to the sessions, participants completed a short pre-study survey to provide demographic data and assess their familiarity with AI tools (see Table 3 for a summary). Each focus group session was facilitated by the first author, and they guided the activities using participatory design methods, ensured balanced participation across diverse stakeholder groups [125], and helped frame reflections in terms of design opportunities for using AI for emotional support. Each began with introductions and a warm-up brainstorming activity where participants reflected on the emotional challenges of caregiving and their daily life dealing with caregiving responsibilities.

To establish a shared foundation, participants first watched a short tutorial video[1] introducing the basic principles of prompt engineering. The video was designed for general educational purposes, ensuring that all participants, regardless of their digital literacy levels, could understand how to construct effective prompts when interacting with AI. We deliberately used generic emotional prompts (e.g., "I feel overwhelmed, what can I do?") rather than condition-specific scripts so that participants could project their own caregiving realities and so that the scenarios would remain comparable across diverse caregiving roles. Moreover, since the study aimed to identify the main challenges caregivers encounter when using AI for emotional support, focusing on universally relevant emotional experiences (such as sadness, stress, and anxiety) still reflected the common emotional difficulties faced by caregivers.

After individual exploration, participants collaborated in groups to suggest improvements to the chatbot's responses and interaction styles. Facilitated by the first author, they proposed enhancements such as adjusting tone, pacing, or attentiveness markers. Groups then engaged in an activity where they co-designed new personalisation themes aimed at making ChatGPT feel more emotionally supportive, for example, asking it to act as an emotion regulation assistant that validates user feelings, suggests calming techniques (e.g., breathing exercises, quiet space). In this activity, participants collectively created and tested prompts (e.g., "I'm really frustrated and don't know how to handle my feelings right now"), analysed the chatbot's replies, and discussed strengths and limitations. Each session concluded with a critique and reflection activity where participants identified areas of improvement, highlighted strengths, and summarised key insights. Recurring challenges across caregiving contexts included social isolation, stress and anxiety, emotional fatigue, and uncertainty about providing quality care, though each caregiving context emphasised these differently.

The focus group discussions directly informed the interview design. Insights (see Table 2) shaped the interview questions (Table 1) in the thematic areas of empathic patterns in AI interactions, comparisons between AI and in-person therapy, and the perceived benefits and limitations of using AI for emotion regulation [12, 120]. This ensured that the interviews did not repeat the group discussions but instead deepened them, allowing participants to reflect individually on different topics. Participants were invited to online individual interviews. Participants took part, each lasting 40–60 minutes via Microsoft Teams. Interviews began with icebreakers about participants' backgrounds, motivations, and caregiving challenges, before moving to questions outlined in Table 1. Additional discussions probed empathy and emotional expression in AI systems, cultural and individual differences considerations, and limitations in engagement with conversational agents for emotion regulation.

3.3 Participant Details

In total, seventeen (17) participants were recruited in the United Kingdom from social media and caregiving networks for the focus group. Caregiver participants (n = 10) included adults who had experienced caregiving while supporting individuals with dementia (n = 4), neurodiversity (n = 4), or grief (n = 2). The caregiver participants included both formal and informal caregivers. Informal caregivers are unpaid family, friends, or community members providing care, whereas formal caregivers are compensated for their work and often

[1]The short tutorial video was made using https://www.synthesia.io/.

Table 1: Interview outline for caregivers and MHPs

Section	Questions
Caregivers	
Main Questions	• How do you think using AI-based chatbots (e.g., ChatGPT) can enhance emotional regulation? • How is AI similar to or different from in-person therapy methods? • How do you think the communication style of an AI agent can be most effective for emotion regulation? • What do you think about the long-term impact of using this technology for emotion regulation? • From your point of view, what are the weaknesses or challenges of AI experiences? How could these be improved? • From your point of view, what are the benefits of AI experiences? • Do you have any concerns about using AI tools for emotional regulation?
MHPs	
Main Questions	• How do you think using AI-based chatbots (e.g., ChatGPT) can enhance emotional regulation? • How is AI similar to or different from in-person therapy methods? • In your opinion, at which stage in the therapy process could AI best be integrated? • What characteristics and considerations are important when choosing a therapist for caregivers? • How do you think the characteristics of an AI agent can support emotional regulation for caregivers? • How do you currently measure the success of interventions for emotion regulation? • From your professional point of view, what are the weaknesses or challenges of AI for emotion regulation? How could these be improved? • From your professional point of view, what are the benefits of AI for emotion regulation? • Do you have any concerns about using AI tools for emotional regulation?

also hold specialised training [27]. The MHPs (n = 7) were mental health care providers, licensed counsellors, professional mental health coaches, research fellows in psychology, and psychologists from different approaches with experience in supporting emotional well-being and in working with caregivers or family systems.. The grouping of caregivers and MHPs was guided by the goal of having constructive interdisciplinary reflection and mutual learning rather than by random assignment. Specifically, each co-design session paired MHPs with caregivers who supported individuals experiencing similar emotional contexts (e.g., dementia, neurodiversity, or grief). This approach was intended to encourage empathetic dialogue, allowing MHPs to offer insights while caregivers contributed lived experiences. By aligning groups around shared caregiving domains, we aimed to enable participants to collectively explore how empathic communication challenges manifest in both human and AI-mediated emotional support.

The study was approved by the Research Ethics Advisory Group at Northeastern University London. Participants provided informed consent, and they received a £15 Amazon voucher as compensation for their participation, and were free to withdraw from the study at any time. Indeed, one caregiver participant dropped out after the focus group session. As such, 16 individuals participated in the online interview (see Table 3)

3.4 Data Collection and Analysis

Collected qualitative data from both stages of the study included: focus group data, which were video- and audio-recorded, supplemented by notes taken by the first author; and semi-structured interviews, which were audio-recorded and transcribed verbatim. All transcripts were anonymised, with participants referred to as P(number).

Data were thematically analysed following Braun and Clarke's 7-step reflexive approach [13]. Transcripts were first read for familiarisation, then systematically coded in NVivo 14 (Mac). A team of interdisciplinary HCI researchers with expertise in caregiving, pschology, health, and technology collaboratively developed an initial codebook by open-coding a subset of transcripts, together refining it through discussion. The remaining data were coded using this shared framework, with regular meetings to resolve discrepancies and ensure consistency. This approach has been widely adopted in HCI and digital health research for its flexibility and analytic process [11].

To strengthen the validity and interpretive depth of the findings, the analysis team included members with diverse disciplinary and experiential backgrounds. Specifically, one researcher had lived experience as a caregiver, while two authors brought theoretical and professional expertise in psychology. In addition, an ethicist and a social neuroscientist were involved in theme refinement to provide interdisciplinary perspectives and ensure critical interpretation of the data. The final themes focused on how participants perceived empathy in text-based AI for emotional support in caregiving contexts.

Table 2: Co-Design Sessions Overview

No.	Session Participants	Involved Activities and Purpose	Discussion Insights: Emotional Challenges and Chatbot Experience
1	MHPs (n = 2) and Caregivers of Dementia (n = 4)	Introductions and general discussions on the emotional well-being of dementia caregivers; video tutorial; hands-on chatbot interaction; group prompt session; closing reflections.	Participants shared that they especially struggle with social isolation in their caregiving roles. While they valued AI's potential for emotional support, they found the conversational patterns unclear and not representative of their individual differences.
2	MHPs (n = 3), Caregivers of Neurodivergent Individuals (n = 4)	Participant introductions and discussions on the emotional needs of caregivers for neurodivergent individuals; video tutorial; hands-on chatbot interaction; group prompt session; closing reflections.	Participants expressed anxiety and a lack of societal awareness around their emotional burdens. They found chatbot responses impersonal and often overwhelming, but appreciated the quick delivery of resources. AI was seen as potentially helpful in supportive roles (e.g., as a "friend") when prompted appropriately. They also noted the need for more personalised features, such as gender and tone.
3	MHPs (n = 3), Caregivers of Grief (n = 2)	Introductions and discussions on the emotional experience of grief caregivers; video tutorial; hands-on chatbot interaction; group prompt session; closing reflections.	Participants shared that uncertainty about how to support someone in grief causes them stress and emotional strain. While they valued AI's accessibility, they noted that in vulnerable moments, users may lack the capacity to rephrase prompts, which can potentially worsen their mental state. They also felt the AI lacked follow-up questions and genuine empathy and noted a need for more personalised tone and empathy.

4 Findings

The most common pattern across our data was the emphasis on empathy as a dynamic process in caregiver emotional support. Participants highlighted that while conversational AI shows potential, it often lacks the empathic feeling which is central to human therapeutic interactions [30]. Our analysis revealed five interrelated themes that capture how caregivers and mental health professionals perceive empathic interactions with AI: active listening dynamics, communication beyond words, trust and self-disclosure, access and ethics, and worldviews and belief systems. Each theme included subthemes detailing specific challenges and design considerations, which are summarised in Table 4.

4.1 Active Listening Dynamics with Conversational Agents

Our findings showed that participants consistently framed active listening as key to feeling heard and emotionally regulated. They contrasted human therapists' co-regulating engagement with AI's tendency to miss nuance, leaving interactions feeling less empathic.

4.1.1 Introducing Active Listening. Throughout our analysis, elements of active listening were absent; therefore, participants felt less understood and perceived the AI as less empathetic.

> "I think listening or giving the illusion of listening and giving the illusion of kind of getting all of the information first before responding, I think that would help [sic]." (P15–Caregiver)

This statement highlights how important active listening is for users in their therapeutic bond. By creating a supportive atmosphere, active listening helps to ensure that clients feel heard and understood. Existing literature suggests that active listening involves attentively processing and responding to both verbal and non-verbal cues, leading to a stronger bond with the therapist, and promoting more emotionally aware, engaging interactions [8, 36, 111].

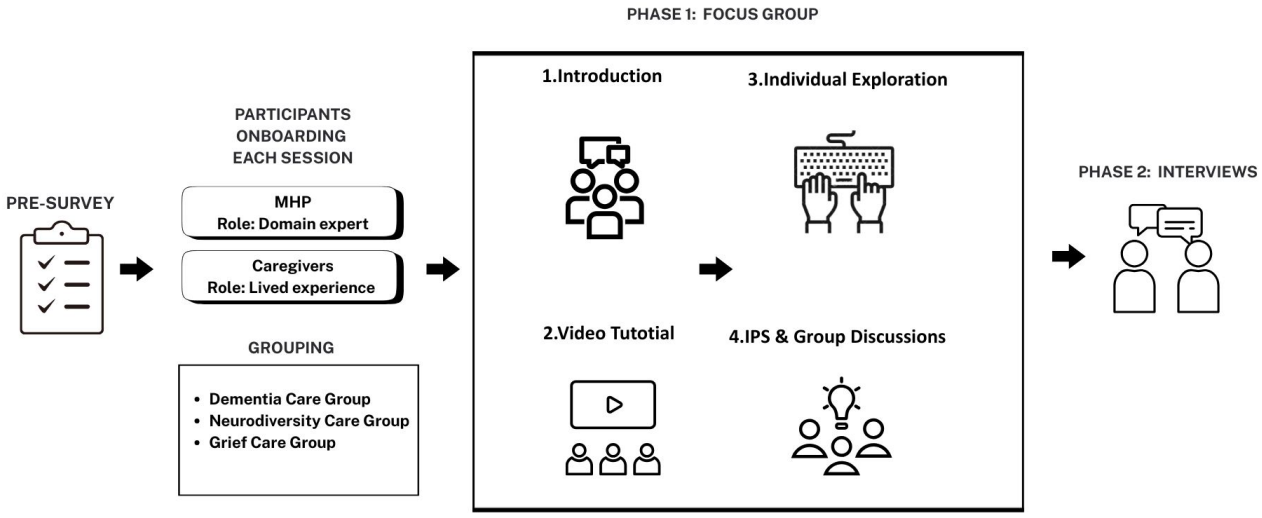


Figure 1: Overview of the methods showing participant onboarding, focus-group activities, and follow-up interviews.

Table 3: Participant Demographics

ID	Gender/Age	Occupation	Caregiving Context	Weekly AI Tool Usage
P1	Male/28	Caregiver	Informal caregiver of individuals with neurodiversity	7-15 hours
P2	Male/28	Caregiver	Informal caregiver of individuals with dementia	2-7 hours
P3	Nonbinary/27	Lecturer	Informal caregiver of individuals with neurodiversity	<2 hours
P4	Female/25	Social Worker	Formal caregiver of individuals with dementia	7-15 hours
P5	Female/30	Care Manager	Formal caregiver of individuals with dementia	7-15 hours
P6	Male/27	Trainee Pharmacist	Informal caregiver of individuals experiencing grief	>15 hours
P7	Male/26	Community Mental Healthcare Provider	Not applicable	7-15 hours
P8	Male/28	Caregiver	Informal caregiver of individuals experiencing grief	7-15 hours
P9	Male/25	Student	Formal caregiver of individuals experiencing dementia	7-15 hours
P10	Female/29	Licensed Professional Counselor	Not applicable	7-15 hours
P11	Female/30	Caregiver	Formal caregiver of individuals with neurodiversity	2-7 hours
P12	Female/30	Researcher and Mental Health Advocate	Not applicable	7-15 hours
P13	Female/28	AI Mental Health Researcher	Not applicable	2-7 hours
P14	Male/55	Digital Mental Health Strategist / Coach	N/A	>15 hours
P15	Female/N.A.	Assoc. Professor	Informal caregiver of individuals with neurodiversity	N/A
P16	Female/37	Researcher in Psychology and AI	N/A	>15 hours

On the one hand, previous studies [66, 106] on attentiveness in providing therapeutic emotional support suggest that authentic attentiveness is a deliberately developed skill that goes beyond the passive reception of client information. Through intentional regulation of attention, therapists can shift the interaction dynamic toward an open and non-judgmental view of the person, withdrawing from concentrated focus at will and redirecting or broadening

Table 4: Themes and Subthemes from Focus Groups and Interviews

Theme	Subthemes
Active Listening Dynamics with Conversational Agents	• Introducing active listening • Feedback as acknowledgement • Sensing user's mental state
Beyond Words: Communicating Empathic Care	• Understanding non-verbal communication patterns • Adaptive and affective conversational tone • Moments of silence
Trust and Self-Disclosure	• Role of trust in emotion regulation therapy • Selective trust • Anonymity and self-disclosure
Access and Ethical Use of AI in Therapy	• Expanding access to mental health support • Privacy, bias, and ethical concerns • Ensuring safety and responsible integration
Understanding Users' Worldviews and Belief Systems	• Cultural and religious sensitivity • Emotion expression as personal experience • Demographic and worldview considerations

attention if it becomes inappropriately fixed, or allowing the attention to naturally shift in intensity without trying to control it [106]. On the other hand, perceived attentiveness is the client's subjective experience of the therapist's attentiveness. This process is influenced by the extent to which individuals perceive themselves as understood and actively engaged in the therapeutic interaction [66].

Throughout our analysis, we identified that AI-facilitated emotion regulation lacks some dimensions of active listening, leading participants to feel less empathic in their interactions with AI:

> "The problem with AI is that it doesn't really engage in active listening; it doesn't pick up on the nuances of what is being said beyond the words." (P16–MHP)

This statement shows that in listening patterns, AI was inattentive to subtext, which reduced the perceived sense of empathy. Therapeutic interaction is a dynamic interplay of verbal and non-verbal communication, shaped by the therapist's attentional stance based on theoretical orientation, and the client's perceptions of receptiveness. Meaning is continually negotiated or altered through factors extending beyond spoken language [40]. Active listening supports this process by helping in accurate understanding, validating the client's experience, and reducing distortions in the co-construction of meaning of the interaction [9, 110].

Active listening involves different strategies, including the following verbal strategies: *Paraphrasing*, where therapists restate clients' messages in their own words to enhance clarity and demonstrate understanding; *clarifying questions*, which encourages further conversations, aiding comprehension of the patients' thoughts and emotions; and *reflective responding*, which mirrors both the content and emotional tone of a client's statements, validating their experiences and reinforcing empathetic engagement [50]. Thus, as highlighted by participants, the perception of attentiveness could enhance user experience with AI for emotional support.

4.1.2 Feedback as a Form of Acknowledgement for Active Listening. Our findings indicated that participants experienced a lack of meaningful feedback from the AI, which weakened its ability to demonstrate active listening.

> "Active listening is something that we expect from a human therapist. When we talk, we want feedback like things like, yeah, I hear you, or like phrases like this." (P10–MHP)

This quote highlights the role of backchanneling as a form of active listening. Short verbal responses such as *'hmm'* or *'yes'* function as signals of engagement and provide encouragement for the speaker to continue their emotional expression, leading to a sense of being heard and supported[49]. Using verbal affirmations, listeners can support the speaker in continuing their story, aiding in emotional processing [25]. This can support narrative development, through which individuals construct and articulate their experiences by telling their story, which can help individuals self-disclosure and expression, leading to regulating their emotions [85].

Moreover, providing reflective feedback is an important key form of active listening in understanding the clients' emotional struggles and needs. P10 mentioned: "I think not just being passive in the sense of interactions because you can ask questions so that the other person kind of develops and says more and more and more, but you can kind of also ask questions which make you reflect." This quote reflects participants' perception of the AI chatbot's limited role in actively engaging with the conversation, particularly in asking reflective questions that could support narrative building. It highlights the potential ability for the chatbot to be able to assess the stage of the narrative, in order to solicit more information for a better emotional engagement.

Previous work suggested that voice-based conversational agents such as Alexa can perform as active listeners by using backchanneling cues [19]. However, giving empathetic, well-timed, and context-aware responses can keep the users engaged over time for a trusted companionship rather than just command-based tools.

> "It [AI] is not actually follow up like a therapist, a real therapist would do with questions such as how are you feeling now? Are you getting better? Was my help actually useful? Was my response useful, just like a real therapist would do?" (P11–Caregiver).

This quote highlights that the AI lacks reflective, responsive questioning. AI is already well-suited to track conversational context; however, empathy requires going beyond recall to ask deeper, adaptive questions and to recognise when disclosure signals risk. This requires the conversational AI to close conversational gaps, which in turn can facilitate the user's emotional expression for richer narrative development.

Therefore, providing reflective feedback through backchanneling affirmation signals (e.g., *'hmm'*, *'yes'*, and follow-up or clarifying questions) helps close conversational gaps, support deeper emotional reflection, build empathy, and potentially enable the identification of risks.

4.1.3 Sensing User's Mental State to Demonstrate In-Depth Active Listening. To provide effective emotion regulation support, therapists must gather key emotional cues to have a better understanding of the patient's mental state. Our findings indicated that AI often fails to pick up on these subtle signals, resulting in responses that feel misaligned with the user's emotional needs.

> "AI answers questions in the general sense. Doesn't just narrow down the questions to your needs so it[AI] answers your question in a general sense." (P1–Caregiver)
>
> "AI can also struggle with nuanced emotional contexts, potentially giving responses that aren't as helpful or appropriate." (P2–Caregiver)

The above quotes show that the chatbot had difficulty in understanding subtle emotional cues, which can lead to responses that lack appropriateness or relevance in certain situations and personalisation. Active listening by exploring more personalised support and validating the patient's current state of emotions, which enhances therapeutic effectiveness [105]. P2 added: "Humans are able to recognise emotions very quickly without me explaining everything. I think it [AI]should be ahead of me. It should have that capability of reading my mind through what I put down." This quote demonstrates the need for the AI to be able to detect the emotional cues to have a better understanding of users' mental state and how they feel.

Overall, active listening is not a static skill but a dynamic, ongoing process of emotional support. This involves consciously shifting between narrow and panoramic focus (zooming in for detail, then zooming out to understand the bigger relational picture), selectively engaging or withdrawing empathy, and redirecting attention when it becomes unproductive [106]. It requires sensing and adapting to the user's shifting emotional states, moving between focused attention on specific cues and a broader awareness of the relational context to validate the user's feelings. Overall, active listening ensures that support remains responsive, empathic, and personally relevant, rather than generic, detached, or even harmful when the advice is poorly safeguarded and contextualised.

4.2 Beyond Words: Communicating Empathic Care Beyond Language

Our findings showed that words alone were not enough for empathic AI interactions. Throughout the analysis, participants emphasised the need for support beyond verbal exchanges.

4.2.1 Understanding Non-Verbal Communication Patterns. Results revealed that current text-based conversational AI design cannot access non-verbal cues, yet these signals are central to therapy for creating empathy, validation, and emotional attunement, helping individuals feel understood and supported [116].

> "Empathy can be shown through non-verbal means like eye contact, hand touching, or gestures, which help build relational communication and autonomy, especially in therapeutic spaces" (P14–MHP).

These quotes show the critical role of non-verbal communication for empathic interactions in psychotherapy, emphasising how different non-verbal cues can help in building relational communication and emotional support. The Eye-contact, Muscles of facial expression, Posture, Affect, Tone of Voice, Hearing the Whole Patient, Your responses (E.M.P.A.T.H.Y.) is a framework which is structured to help clinicians enhance their non-verbal communication and notice the non-verbal components, which play a crucial role in building empathic engagement with patients [93]. Each component highlights an essential aspect of non-verbal engagement; however, this framework needs reinterpretation when it comes to text-based conversational AI due to practical limitations.

> "Body language, such as looking away or gestures, often reveals embarrassment or hesitation, which are critical in understanding the client's emotional state." (P7–MHP)
>
> "If I'm feeling sad or angry or anxious, the therapist can just recognise it on my face and tell me what to do or tell me OK, you're feeling anxious. This is what you should do without me having to say, actually, AI does not have facial recognition. Probably, I don't have to say anything to my therapist. I don't have to type; he just has to look at my face and understand my facial expressions." (P4–Caregiver)

These quotes illustrate how clients and MHPs view non-verbal communication as essential in therapy, highlighting the desire to be understood through gestures and expressions without always relying on explicit verbal input. P11(Caregiver) noted: "When you talk about your emotions, sometimes your words are not enough." This highlights that words alone may be insufficient for conveying emotions, highlighting the vital role of non-verbal cues in emotional support for caregivers. Non-verbal communication in providing emotional support is a two-way process: clients express emotions through facial cues, posture, and tone, and therapists, while noticing the clients' non-verbal cues, respond with eye contact, gestures,

and vocal attunement to signal empathy. These reciprocal cues can build trust and safety, strengthening the therapeutic bond [63, 90]. These cues are processed more rapidly than verbal communication and strongly influence the level of trust patients place in their clinicians [72]. Current text-based AI design, however, lacks this bidirectional loop, lacking both to read subtle cues and to perform empathic non-verbal responses, which limits their effectiveness as emotional support providers for caregivers. Designing conversational AI to reinterpret non-verbal cues within text-based interactions, even partially, could help approximate this layer of communication.

4.2.2 Adaptive and Affective Conversational Tone. From our data, we find that the tone of communication was brought up as a gap in how the conversational AI communicates to help caregivers with emotion regulation.

> "Tone, pace and quality of voice, syntax, linguistic syntax, all of these things kind of layer into, you know, then you have implicit associations." (P14–MHP)

> "Non-verbal cues like tone, pitch, and pace of voice provide additional layers of meaning that enhance conversational interactions, but current technology lacks full understanding". (P12–MHP)

The quotes indicate the important role of adaptive tone for providing emotional support by conveying emotional nuances and how we get a sense of the meaning of our interactions. Current text-based AI designs struggle to provide this adaptive tone, which is an important aspect of providing emotional support. Indeed, the literature suggests that a therapist may slow their pace and soften their voice when a client is anxious, or shift to warmth instead of formality to create safety and openness [104]. Moreover, therapists adjust their speech pace, slowing down with shorter sentences, pauses, and a softer tone to help clients explore emotions more deeply, especially when they seem disconnected or overwhelmed. Conversely, when clients were ready and engaged, therapists sped up, using a more energetic tone and rhythm to challenge defences or introduce new skills [118].

P1 noted: "What comes having a conversation with my therapist, I do not like the professional tone because it actually represents distance, and I don't feel like secure to talk about my emotions." This quote represents the importance of different user's preferences about the tone characteristics of their emotional support provider. However, these preferences might not always be prioritised in psychotherapy. If therapists only used a consistently pleasant or empathic tone, it might support the client's avoidance instead of helping them face difficult feelings, which might not be pleasant for the client at that very moment [112]. Flexibility enables therapists to shift tone and pace to help surface hidden emotions [104, 112]. By contrast, current AI often delivers flat, formal responses, missing these adaptive, context-sensitive shifts essential for emotional support. Our findings highlight a different nuance in AI. Participants expected personalised verbal qualities to feel secure and emotionally supported. Thus, what functions as a therapeutic tool in human therapy may become a design requirement for personalisation, but it raises ethical questions that will be addressed in the discussion section.

4.2.3 Moments of Silence. Another recurring experience through our analysis was diverse opinions about participants' experiences related to moments of silence.

> "What is interesting for me now in our session is those moments of silence. Those moments of silence, sometimes they can say it is more enriched than when the therapist's trying to talk".(P6–Caregiver)

This quote highlights the significance of silence in providing emotional support, suggesting that moments of silence can be more meaningful than verbal communication. P6 reported: "Silence is something that shows that authenticity to me, which is exactly something that doesn't exist and doesn't apply to AI". This quote suggests that silence is perceived as a marker of authenticity in their subjective human interactions, conveying presence, reflection, and promoting meaningful interaction. Silence is a strategic therapeutic tool used by psychotherapists to facilitate reflection, enhance emotional expression, and strengthen the therapeutic alliance. It allows clients to process their thoughts, take responsibility for their experiences, and engage in deeper self-exploration [58]. Silence can challenge patients in the therapy process to take responsibility for their thoughts and emotions, encouraging them to engage more actively in the session. Therapists use silence to reflect on interventions and adjust their approach accordingly [43]. In in-person therapy, silence is accompanied by the therapist's physical presence, eye contact, posture, and attentiveness, which makes it feel authentic and safe [65]. However, silence in the context of AI-based emotional support is challenging. P9 (caregiver) noted: "The very moment that it [AI] is silent, you think that it is a technical error." This quote suggests that, unlike in human therapy, where silence is supported by the therapist's embodied presence, silence in AI interactions is often misread as a technical failure. The absence of social presence cues (e.g., eye contact, posture, attentiveness) [41]means that pauses lack interpretive grounding, which limits the chance for self-exploration and deeper emotional processing [96]. With text-based AI, however, these contextual cues are absent, so designing "social silent presence" may require alternative signals to ensure that pauses are experienced as meaningful rather than as system failure.

4.3 Trust and Self Disclosure

Our results show that while conversational AI can support disclosure by offering reliability and anonymity, it lacks the relational depth that comes from empathy, reciprocity, and contextual attunement.

4.3.1 The Role of Trust in Emotion Regulation Therapy. Throughout the analysis, trust was found as a multifaceted theme in providing emotional support.

> "Especially dealing with mental health, that's sort of an implicit level of trust you have to have in the person that you're talking to about it". (P14–MHP)

This quote highlights the crucial role of interpersonal trust in mental health therapy, emphasising that trust is fundamental for individuals to feel safe to talk about their emotions. An individual's belief in the goodwill, reliability, and benevolence of their therapist encourages them to engage with the therapeutic process.

This interpersonal trust is affective and relational, and promotes emotional safety to clients to open up about their feelings, and without this, clients may feel unsafe or hesitant to disclose emotions or experiences [32, 48]. P1 (caregiver) noted: "I have concerns about the inaccuracy in information AI provides, and it [AI] could give you wrong information". This quote indicates that there is a lack of trust in the truthfulness of the information that the chatbot provides. This epistemic trust in psychotherapy involves the client's willingness to accept and internalize information from the therapist [32], leading to effective communication and success in treatment strategies [57]. Thus, therapeutic trust with AI does not merely mirror human trust, but is refracted through expectations of technological precision and reliability, creating a narrower margin for error.

4.3.2 Selective Trust. Another recurring theme in findings was that participants perceived AI's accuracy and reliability differently across domains.

> "There was someone who was in a news article quite recently... was kind of confessing suicidal thoughts, then AI kind of ... convinced them to act on these thoughts instead of trying to stop doing that, but I'm normally asking it [AI] to help me with code, or research. I think it's very helpful." (P16–MHP)[2]

While raising safeguarding concerns, this quote shows selective trust in AI: the MHP tends to trust AI for technical or academic tasks but is cautious in sensitive areas like mental health. It highlights the need for domain-specific safeguards and careful deployment in mental health. P16 also noted: "A clinician might record things about a patient, you know, just in terms of, for example, with psychosis patients, we look for things like involuntary movements. People with the same diagnosis might have very different symptoms, but AI observes them at one time point. You know, it's not very representative at necessarily the patient as a whole." This quote highlights that the MHP is cautious because AI's observations are limited, context-dependent, and may not capture the full variability of a patient's symptoms over time, which can lead to misdiagnosing or categorising the user's input. It shows that while AI can provide a useful overview, clinicians may trust it less for holistic or nuanced assessments where understanding the full patient context is critical [52]. Therefore, there is a need for a multimodal conversational AI for emotional support.

4.3.3 Anonymity and Self-Disclosure . Although participants were less tolerant of AI errors than human mistakes, our findings also showed a contrasting view that some participants felt greater security and trust with AI.

> "Wherever you're talking to an AI, you don't feel shy, you give full information as much as you can, and like having a therapy session with a therapist, like having in-person therapy sessions, you feel, you know, sometimes you hide some of the things because you feel embarrassed. (P2–Caregiver)

> "When you're talking with AI, you tend to be very open because you will know it's not someone real, someone who will just go out there and disclose information. AI you can tell it anything without being shy". (P1–Caregiver)

These quotes highlight that due to perceived non-judgmental AI, participants experienced it as a safer space for disclosure because it created a sense of anonymity and confidentiality. By feeling that their identity was concealed, clients might be able to share more openly, particularly around sensitive or emotionally difficult topics. This aligns with prior research showing that when users perceive themselves as anonymous, they are more likely to disclose personal information and emotions in digital environments [20]. This dynamic suggests that anonymity can act as a facilitator of openness, enabling individuals to access and articulate experiences that might otherwise remain unspoken. Moreover, P13 (MHP) noted: "I also like AI for its anonymity because I like to share ideas without fear of judgment, and AI offers me that exactly". This quote highlights that AI's anonymity provides a safe space for open expression, allowing participants to share ideas freely without concern for evaluation. However, this comfort may stem from false beliefs about AI's neutrality or memory. Overall, while AI may provide anonymity, it struggles to replicate the human connection and authenticity that underpin trust in therapy.

4.4 Access and Ethical Use of AI in Therapy

Throughout our analysis, we identified different ways in which AI can expand access, while also raising new ethical, privacy, and safety concerns that shape its role in therapeutic contexts.

4.4.1 The Role of AI in Expanding Access to Mental Health Support. Our findings suggest that accessibility to a human therapist remains a major barrier in getting emotional support for caregivers, as long waiting times and financial constraints limit the ability of users to receive timely emotional care; however, conversational AI can provide an opportunity to tackle this issue.

> "The ability to get access to therapeutic approaches when another human being is not unavailable, like at 2:00 in the morning if I'm sitting in bed having a panic attack." (P16–MHP)

> "This is just another thing to go home to, I'm stressed. You could just sit in your car for a bit, do 15 minutes of meditation by AI or something before you head home, or it could be linked to that sort of thing, and you could do your exercise routine". (P3–Caregiver)

These quotes highlight that AI has the potential to expand access to mental health support by providing timely, convenient, and flexible emotional support, particularly when human therapists are unavailable. P2 added "for the therapy sessions you have to book and stuff like that. But now when it comes to like AI, it's available, it's reliable, like 24/7." This can be linked to prudential accessibility in mental health as a practical ability to obtain timely, appropriate, and effective care. Accessibility is influenced by spatial and social factors, including geographic proximity to the health provider, stigma, and cultural understanding. Chatbots can expand access, particularly for marginalised groups, but require careful attention to

[2]This refers to a recent Guardian report: *ChatGPT reportedly encouraged suicidal thoughts in a user, raising concerns over safeguards.* The Guardian, August 29, 2025. Retrieved from https://www.theguardian.com/us-news/2025/aug/29/chatgpt-suicide-openai-sam-altman-adam-raine.

usability, inclusivity, and disability accommodations [59]. Addressing these challenges through digital innovation, policy reforms, and equity-focused strategies is essential to ensure that mental health support can be both practically reachable and effective.

4.4.2 Privacy, Bias, and Ethical Concerns in Accessible AI Emotional Support. Our findings suggested that although caregivers appreciated the immediate access to mental health assistance by AI , the integration of AI into psychotherapy has several ethical challenges that need careful investigation and consideration.

> "The responses that the chat will give will also be very biased. It won't be that very effective because it has shown that proportionally there's not enough information about certain marginalised populations that are going into the training data of these algorithms". (P14–MHP)

The quote highlights that AI can be biased and less effective for marginalised groups because training data often underrepresents them, raising ethical concerns about equitable care in accessible tools. This is also linked to interpersonal trust, since users may doubt the fairness and reliability of AI support, weakening their confidence in the tool as a trustworthy support.

Moreover, participants raised concerns around the privacy of the data they provide to the chatbot. P3 (caregiver) noted:"I think it just kills that trust that you have. You don't want to be directly connected to forms of authority like police and ambulance without your permission". This quote highlights the importance of moral accessibility [71] because fear of unwanted data sharing erodes trust and autonomy of the user. P4 (caregiver) noted "who has access to this data? Who owns the data? Is it being created by these private companies? Are they selling the data?". This quote relates to moral accessibility because uncertainty about data use and ownership undermines autonomy, privacy, and trust, making the service ethically not accessible. However, some of these concerns are also present in human-delivered therapy. P14 noted " I think that it's easier to train an AI to be non-biased and to respond to a human being in a universally empathetic and compassionate manner than it is to train another human being". This quote suggests that AI designs can potentially be trained to provide unbiased and universally empathetic responses more easily than human therapists. Given that psychotherapy itself is prone to biases [121], therapeutic AI has the potential to safeguard for dignity and privacy when embedding data from minoritised caregiver groups.

4.4.3 Ensuring Safety and Responsible AI Integration in Psychotherapy . Throughout our analysis, critical concerns, especially regarding physical and psychological safety, have been raised by caregivers.

> "I want to go play football, and if I had to go, if I don't go see a physical therapist and get more opinion, I could only depend on AI could just go hurt myself, Go do things that will be detrimental to my health". (P1–Caregiver)

The quote highlights concern about relying solely on AI for healthcare decisions, suggesting that without human oversight, AI could lead to harmful choices. Moreover, P3 (caregiver) expressed their worry: "I think people who are going through some emotional issues, they can opt to like, you know, kill themselves or harm themselves". This quote highlights the need for strong AI safeguards in mental health to ensure crisis detection and ethical interventions. Previous research on using AI for mental health support also reflects the importance of accountability, non-maleficence, and safeguards, including crisis detection, ethical intervention, and transparent guidance [18, 115]. The current AI chatbot design lacks the assessment of mental and physician health, and decision-making capacity of the user, which in psychotherapy is essential to ensure that they can comprehend, appreciate, and reason about their treatment options [5].

4.5 Understating the Worldview of the User's and Belief Systems

Our findings showed that cultural beliefs, worldviews, and individual values were important for caregivers in shaping how they experienced support. Throughout our analysis, this theme emerged as one of the central themes for caregivers' emotional support, yet current AI design lack the ability to recognise or adapt to them.

4.5.1 The Role of Cultural and Religious Sensitivity in Psychotherapy. Our findings suggest that caregivers' cultural backgrounds shape how they express emotions, requiring their emotional support provider, either AI or human therapies, to adapt their approach for more inclusive and supportive care.

> "I would love to make use of someone from a black community, it will be OK for me because you tend to understand me better and other members of my community." (P8–Caregiver)

> "People of colour don't usually want a white therapist or someone who is of a certain religious tradition; they don't want a therapist outside of their religious tradition." (P14–MHP)

These quotes highlight the importance of cultural understanding in therapy, emphasising that individuals often feel more comfortable with therapists who share and understand their worldview. Many patients would like their therapist to have an understanding of their cultural and belief background, as this reduces bias, supports epistemic trust, and strengthens therapeutic alliance [107]. Therefore, patients tend to choose therapists with a similar background to ensure their struggles and perspectives are accurately recognised, enabling therapists to recognise and appreciate their clients' cultural backgrounds [113]. Caregivers reported that they did not see AI supporting their emotional needs based on their cultural understanding.

4.5.2 Emotion Expression as a Personal Experience. Our findings also highlighted that individual differences also play a role in emotional expression, influencing the psychological well-being of caregivers.

> "Mental illness looks different depending on what you grew up believing" (P17–MHP)

This quote suggests that individuals' upbringing and personal beliefs shape the way they perceive, experience, and interpret mental health issue symptoms. P4 (caregiver) noted, "I was really surprised to find that most of the world doesn't even think about or see

mental health the way we do in the West, in our scientific materialistic well, right there, then makes it even more complex when you start thinking about how to take these technologies outside of the West". This quote suggests that in different parts of the world, mental health is understood, perceived and expressed in different ways, with Western settings favouring openness and Eastern settings valuing emotional restraint. The cultural logic of emotions suggests that emotional experiences are shaped by sociocultural norms, affecting both therapist expression and client perception [72, 91]. Understanding these variations allows the support provider to tailor interventions to effectively manage emotional intensity in different therapeutic and caregiving settings.

4.5.3 Demographic and Worldview Considerations in Therapeutic Engagement. Our findings indicate that demographic factors such as age, gender, and professional background, together with individual worldviews and belief systems, significantly shape how caregivers engage with emotional support. For example, P9 (caregiver) mentioned, "The one thing I think I look for in the therapist is I want them to be open-minded," then they continued explaining by saying, "in terms of political things, in terms of sexuality, in terms of the kind of diet you may have, they need to be open-minded." Moreover, P6 (caregiver) noted, "as long as the therapist understands secularism. I'm fine because already that understanding the concept allows her to enter into it and come into my world." These quotes highlight the importance of understanding therapists from diverse perspectives, including the politics and worldview of the client in therapy, as political views can shape the therapeutic relationship and its outcomes[103]. Our findings suggest that for AI to be effective as an emotional support tool, it must be sensitive and adaptive to users' worldviews and belief systems. Additionally, demographic factors such as gender can significantly influence the therapist-client relationship [87]. Same-gender pairings and female therapists are often linked to higher satisfaction and better outcomes [87]. Our findings suggest that AI for emotional support should move beyond single-axis categories and instead account for overlapping factors that shape emotional needs, aligning therapeutic goals with users' diverse backgrounds and expectations.

5 Discussion

From our findings, a recurring need emerged for more empathic forms of AI, particularly in text-based emotional support for caregivers. Participants described how current systems often miss attentiveness, relational depth, or cultural sensitivity. Building on these insights, we suggest a set of design implications that highlight how conversational AI can better support caregivers' emotion regulation. Together, these implications operationalise a functional conception of empathic AI introduced in the Related Work. We organise these into four interrelated dimensions of empathic AI: (1) empathy as attentive presence, (2) empathy as trust-work relation, (3) empathy as equitable and responsible accessibility, and (4) empathy as negotiating worldviews. These categories, discussed in the following section and summarised in Table 5, provide a framework for the HCI community to consider when developing empathic AI for caregiving contexts. These dimensions are particularly important for caregivers because they continually navigate emotional intensity, relational complexity, and high-stakes responsibilities, and therefore depend on systems that can genuinely support attuned communication, culturally sensitive care, and safe, trustworthy interaction.

5.1 Empathic AI as Attentive Presence, Not Just Word Recognition

The majority of caregivers understood empathic AI not as the ability to generate the "right words," but as the feeling of being present. Participants repeatedly highlighted that they valued cues such as timing, rhythm, silence, and adaptive tone, which are important components of empathic interactions in therapeutic settings [58]. However, our results suggest that these cues are often absent or misinterpreted as system failures in current text-based conversational AI models.

Recent advances in large language models introduced "thinking pauses," where the system delays its response to an answer. However, in our results, pause was not only a simulated cognitive delay on the AI's side, but a deliberately signalled moment of silence designed to give caregivers space for self-reflection aligned with existing literature on conversational pauses in psychotherapy as moments required for of cognitive processing and emotional regulation, rather than as mere gaps in talk [58]. Therapists adapt tone and pacing to deepen reflection or introduce new skills [118]. In therapy, silence is not just a pause; it carries meaning and signals presence and deepens self-reflection for the client [58]. Merleau-Ponty [77] describes silence not as an absence of words but as part of embodied communication, such as gestures, pauses, and subtle cues and rhythms that carry meaning beyond language. In therapy, such silences can signal presence, openness, and attentiveness [58]. Similarly, Buber [15] distinguishes between two forms of relationships: the dialogical 'I–Thou', where we recognise the other as a moral subject deserving care, and the instrumental 'I–It', where we treat the other as an object to be processed. Current chatbots risk reducing silence to mere system latency rather than a sign of presence, stripping it of this relational depth. As suggested in Table 5, designing symbolic silences, such as animated ellipses, textual markers like 'I'm here with you,' or user-controlled pauses, AI can make silence feel intentional and supportive. While this does not replicate the full richness of human presence, it enables conversational agents to approximate some of the relational qualities of attentive listening that make silence therapeutically meaningful. Moreover, caregivers reported that these signals can still function pragmatically as signals of attentiveness, and digital silence as a form of "Quiet AI" can feel intentional rather than a technical failure.

"Quiet AI" reframes empathic AI not as a constant and static stream of verbal output, but as an attentive and sometimes deliberately quiet presence that incorporates features such as user-configurable visual or textual equivalents of attentive cues. While it may be technically possible to approximate silence through design cues, careful consideration is needed to ensure such features are technically feasible to feel meaningful rather than artificial or disruptive. By incorporating designed silences accompanied by presence cues and adaptive pacing, text-based systems can mirror the rhythms of empathic human dialogue. Such "Quiet AI" is not passive but actively supports emotional processing, offering

space for reflection while maintaining a sense of companionship. Foregrounding quietness in design has important implications: it challenges dominant assumptions that conversational agents must always respond instantly and verbosely, and instead positions silence as a therapeutic resource. For caregivers, AI chatbots can resist superficial interactions, build deeper emotional regulation, create a felt sense of relational presence that words alone cannot achieve, and create a felt sense of being-with, aligning with Social Presence Theory [76], which emphasises being-with as central to empathy.

5.2 Empathic AI as Trust-Work in Human–AI Relations

Caregivers' judgments of whether the conversational AI felt empathic were inseparable from whether they trusted it. Unlike human interactions, where occasional mistakes are tolerated, AI is held to a stricter standard: even minor errors or context-free replies can rapidly question credibility [64]. This heightened expectation leaves little room for fault—where a human therapist's minor misstep might still be forgiven or contextualised, an AI's slip can feel like a fundamental failure of reliability.

Many caregivers reported feeling safer disclosing emotions to AI, perceiving it as less judgmental than humans; however, this comfort also carried risks of misplaced trust, since the current design cannot fully reciprocate based on social or ethical norms of empathic care [114]. Collectively, our results showed that "feeling cared for" depended less on emotive wording and more on whether the AI created conditions of safety, dignity, and control, such as clear limits, memory boundaries, and escalation paths.

In addition, future design could also consider not to mimic human-like caring, but to perform trust-work that actively empowers the relational conditions that make disclosure and regulation feel safe. Illustrated in Table 5 this includes (a) transparency about what the system can and cannot do; (b) privacy-by-design, including local processing where possible, user-controlled memory, and legible data use; (c) calibrated expectation-setting and trust [60], offering signals that establish appropriate reliance rather than over-reliance and over-promising therapeutic reciprocity; and (d) quiet transparency, where disclosures clarify limits without breaking users' trust (e.g., "I'm a support tool, not a clinician. We can slow down, and I can connect you with a clinician if this feels acute."). This also means flagging domains of competence and limitations. It is important to note that relational harm is an emerging risk in companionship AI [124]. While light safeguards may suffice for such systems, therapeutic AI demands stricter oversight, including competence disclosure and crisis protocols [99]. To minimise these harms, we suggest autonomy-supportive design grounded in Self-Determination Theory [95], emphasising psychological needs to support user agency, safety, and long-term well-being.

Previous research showed that empathic behaviours strengthen trust, therapeutic alliance, and improve outcomes through attentiveness and perspective-taking [119]. In parallel, HCI literature on trust in automation shows that calibrated trust is key to appropriate reliance (ability/integrity/benevolence; transparency; expectation management [44, 73]). Our contribution, inspired by these elements, reframes the problem: in conversational AI, perceived empathy arises from successful trust-work accompanied by affective phrasing. Designing empathic AI, therefore, is proposing designing trustworthy conditions: making competence and limits legible (ability), maintaining honest boundaries (integrity), and demonstrating care for user interests through privacy and escalation safeguards when necessary (benevolence). This reframing provides testable design claims for HCI, suggesting that the empathic impact of conversational AI should be measured via trust calibration and safety affordances, not simply whether the chatbot "sounded empathic." These safety affordances shift some of the safeguarding load away from caregivers, reducing stress and improving care quality.

5.3 Empathic AI for Equitable and Responsible Accessibility

Accessibility, like trust, was highly valued but also contested. Caregivers welcomed the potential of AI to provide timely, low-barrier support, especially in situations where human therapists were unavailable or resources were limited, framing AI as a practical extension of care that could fit flexibly into their lives.

We distinguish between two complementary forms of accessibility, which together are essential for designing empathic AI. Prudential accessibility [81] focuses on practical availability, such as systems that are low-cost, on-demand, and easy to use when caregivers need them. For example, caregivers valued the ability to access conversational AI late at night during moments of anxiety or between caregiving tasks when human therapists were unavailable. Moral accessibility [109], however, goes beyond convenience to consider the ethics of access: whether systems respect users' autonomy, dignity, and privacy, ensure informed consent, and safeguard against dependency or harm. Therefore, future design would embed safeguards such as dynamic consent flows (e.g., brief, in-context prompts before sensitive disclosures rather than one-off consent screens), adaptive age-gating (e.g., lightweight onboarding that detects potential minors and routes them to age-appropriate content or human support), transparent data dashboards (e.g., allowing caregivers to see in real time what data is stored, how it is used, and providing easy options to revoke or delete it), and context-triggered escalation protocols (e.g., automatic switches from chatbot-only support to connecting with trained professionals when high-risk markers like self-harm or abuse are detected). Without these safeguards, conversational AI may remain technically available but ethically unavailable. Therefore, design suggestion on Table 5 makes sure empathic AI does not simply increase reach but does so responsibly, protecting caregivers' rights, emotional safety, and overall well-being.

Moreover, accessibility is further shaped by social and spatial factors such as stigma, distance from services, and cultural understanding, with deficiencies linked to higher mental [108]. Ensuring equity requires recognising the diverse needs of caregivers, including those with dyslexia, visual or hearing impairments, and cognitive processing challenges, who often face additional barriers when using conversational AI. Empathic AI should embed inclusive design practices, such as multimodal interfaces (e.g., voice options for visually impaired users, adaptive text for dyslexia, and captions for hearing impairments), while involving minoritised caregiver

groups, including those with disabilities, in participatory co-design. Systems should also flag their limitations so users know when human expertise is needed. Finally, while our focus is on adult caregivers, accessibility for minors remains a concern, as most systems lack age verification and decision-making capacity checks [16], raising risks of compromised autonomy.

Collectively, framing accessibility through both practical reach and moral responsibility helps avoid designing AI systems that are "always available" but ethically unavailable. By embedding safeguards for dignity, fairness, and privacy alongside usability and inclusivity, AI chatbots can expand access without leading to dependency, reproducing inequities, or breaking trust. Empathy in this context means not only being present whenever caregivers need support but also ensuring that such presence is responsible, equitable, and safe.

5.4 Empathic AI Through Negotiating Worldviews and Overlapping Identities

Findings showed that caregivers did not simply want "culturally tailored" conversational AI for emotional support; instead, they highlighted the difficulty of negotiating multiple worldviews at once. For some, alignment with faith, politics, or community values was essential to feeling emotionally safe with their therapist, while others emphasised openness to diverse or secular perspectives. Women of colour caregivers described compounded stressors arising from the intersection of race, gender, and caregiving roles, which made one-size-fits-all responses feel not representative and useful for their needs. Moreover, the same emotional expression could carry different meanings depending on cultural background or gender norms, yet current AI systems misread these contextualised cues. Therefore, empathy was experienced not as static cultural recognition, but as responsiveness to layered identities, shifting priorities, and overlapping worldviews. Collectively, empathic AI should be designed as a negotiation of worldviews rather than a fixed cultural "fit." This suggests moving beyond demographic matching to create systems that flexibly accommodate plural values, respectfully address the complexity of identity, and avoid over-pathologising cultural norms. Literature in psychotherapy suggests that Socratic dialogue [1] can facilitate knowing another person's values and encourage the client to talk about their values and understanding of the world constructively [42]. Socratic dialogue can promote emotional regulation through open-ended questions about an individual's values and worldview [29].

The design elements in Table 5 include configurable metaphors, narrative framing options based on Socratic dialogue, giving users control over cultural, linguistic, or faith-sensitive modes that allow users to shape how their worldview is engaged. Adding cultural limitation disclaimers can also help manage system constraints while aligning with caregivers' expectations shaped by their worldviews.

This perspective shifts the design agenda from "cultural customisation" to identity negotiation. By supporting caregivers in choosing how their cultural or moral frameworks are acknowledged, empathic AI can better accommodate caregivers who move between overlapping identities and shifting value systems, and allow them to explore beyond that by providing opt-in options. Empathy is thus redefined as dynamic and situated rather than prescripted, helping prevent the reproduction of structural inequities in digital care.

5.5 Limitations and Further Considerations

This study, while offering important insights into how caregivers perceive and negotiate empathic AI, has several limitations. First, the participant sample was relatively small and may not capture the full diversity of caregiver experiences, values, and cultural backgrounds. While we observed thematic saturation across interviews, expanding the sample in future work could yield additional nuances, particularly across different caregiving roles, cultural traditions, and global regions. Cultural and religious logics of emotion, as well as intersectional identities such as gender, race, and class, strongly shaped participants' perspectives, and broader representation would help to ensure that AI design guidelines do not reproduce narrow cultural assumptions.

Second, our study relied on short-term interactions and reflective accounts, rather than longitudinal engagements. As a result, we may not fully capture how trust, accessibility, or empathic engagement evolve over extended use of AI systems. Future research should consider long-term deployments.

Third, our methodological focus was limited to self-reported experiences and expectations. Although valuable, what participants state they want or value may differ from how they act in real-time interactions. Observational studies, experiments, or mixed-methods approaches could therefore complement our findings and validate design strategies in practice.

Fourth, our design implications are situated primarily in the context of text-based conversational AI. While we discussed non-verbal and multimodal cues, future work should explicitly investigate modality differences across voice, embodied avatars, and mixed reality systems, as these formats allow richer forms of empathic communication.

Fifth, while some of our findings could, in abstract, apply to the general population beyond caregivers, our data make clear that caregivers are not starting from the same place as many other users. Drawing loosely on Maslow's hierarchy [89], many caregivers are still struggling at the level of basic needs: chronic exhaustion, lack of rest, financial strain, and constant vigilance over another person's safety. For them, empathic AI is not primarily a route to "self-actualisation", but a way to obtain minimal emotional containment in the small gaps between caregiving tasks. This means that how these dimensions are implemented must differ from generic wellbeing tools: for example, a five-minute decompression after a dementia episode might be very different from a reflective journal for a non-caregiver user.

At the same time, our findings show there is no one-size-fits-all empathic AI even within caregiving. The meanings of "being listened to", "accessible", or "supportive" varied substantially across dementia, neurodiversity, and grief contexts, and across cultural, religious, and gendered identities. The aspects we propose should therefore be read as functional dimensions—ways in which AI can perform empathic, relational work—rather than as a fixed template of what "good caregiving support" must look like. They can inform

Table 5: Positioning Constructs, Issues, and Design Implications from Findings regarding Caregiving and Across Contexts

Theme (Construct)	What the Theme Addresses	How This Work Advances the Field	Links to literature and Caregiving
Active Listening	Lack of attentiveness and conversational depth in AI; absence of reflective feedback and adaptive responses. Principle: Conversational AI should reflect, validate, elicit, and offer support in a staged, user-driven way.	• Prioritise listening before advising. • Use backchanneling cues (e.g., "I hear you") • Track conversational stages (opening → exploration → options → closure) and time paraphrasing, clarifying questions, and reflective responses accordingly. • Offer emotion detection as an opt-in feature based on linguistic cues, with clear explanations. • Enable dynamic attentional shifts (narrow ↔ panoramic focus).	Rogers' active listening [66, 106]; Empathic feedback [50]; Caregiver's need for active listening [92]
Communicating Empathic Care Beyond Language	Missing non-verbal and paralinguistic cues; flat or formal tone; silence as system failure or empathic response. Principle: Empathic care goes beyond words but should avoid deceptive cues and respect user agency.	• Translate non-verbal cues into user-configurable visual or textual equivalents (e.g., staggered typing indicators, emotive punctuation, breathing icons). • Incorporate multimodal sensing (word stress, typing speed). • Implement adaptive tone modulation and personalisation options (e.g., soothing, neutral, directive) • Provide explicit supportive pause prompts ("I'm here, take your time") with configurable pause settings.	Non-verbal empathy [93]; Silence as therapeutic tool [43, 58]; Nonverbal emotional patterns for carers [70]
Trust and Self-Disclosure	Multilayered trust due to high accuracy expectations; domain trust (technical vs. emotional); openness through anonymity but risk of false recognition. Principle: Trust must be calibrated, not maximised, by being transparent about AI capabilities and limits.	• Flag system limitations and domains of competence, communicate where AI can provide reliable support and where human expertise is necessary. Use capability banners to set expectations. • Integrate real-time detection of high-risk disclosures (e.g., self-harm, abuse) and route users to human professionals. • Build feedback loops ("Did this help?"). • Be explicit that current AI can simulate limited attentiveness • Offer anonymous modes and consent refreshes before storing sensitive information.	Trust frameworks [48]; Anonymity and disclosure [20]; Trust in Caregiving [122]
Access and Ethical Use of AI in Therapy	Limited human therapist availability; risks of dependency, bias, and unsafe reliance on AI without oversight. Principle: AI should augment, not replace human care, while safeguarding autonomy and equity.	• Encourage structured micro-sessions with natural boundaries (e.g., reflection breaks, session cooldowns) to avoid dependency. • Ensure moral accessibility (privacy, fairness, dignity). • Require human oversight for all high-risk contexts or decisions, ensuring clear accountability. • Prioritise inclusive usability (disability support) and maintain access for low-resource environments. • Use privacy-by-design principles • Ensure crisis detection protocols have immediate signposting to trusted professionals where risk signals arise.	Accessibility in Digital Mental Health [59]; Value Sensitive Design [34]; Caregiver Wellbeing Access Barriers [79]
Worldview and Belief Systems	Lack of cultural, religious, demographic, and intersectional sensitivity in AI emotional support. Principle: Design for cultural humility, not cultural essentialism—support user agency in shaping emotional frameworks.	• Allow users to specify cultural, linguistic, or faith-sensitive frameworks without inferring identity traits. • Let users choose conversational styles to match their cultural norms. • Frame emotions within cultural logics of expression. • Embed participatory co-design with minority communities. • Recognise and explore overlapping factors (e.g., gender, race, caregiving status) through Socratic dialogue. • Include an in-app disclaimer acknowledging potential cultural limitations	Intersectionality [24]; Multicultural counselling [113]; Socratic dialogue[1]; Caregivers cultural insights [98]

recommendations for the general population, but the concrete instantiations we discuss are tailored to caregivers' realities: irregular schedules, anticipatory grief, role conflict, and limited cognitive and emotional bandwidth. We therefore frame each dimension not only at a general HCI level, but explicitly in terms of caregiver-specific situations (e.g., late-night worry about a dementia episode, guilt about taking a break, or emotional overload after a challenging interaction) and spell out actionable design steps for conversational systems that aim to support this population. Although the constructs in Table 5 could, in principle, inform AI-mediated emotional support for other user groups, our data show that they take on specific meanings in caregiving contexts and are operationalised there in caregiver-specific ways. For instance, active listening must tolerate fragmented, stop–start conversations; calibrated trust must account for fears of being judged as a "bad carer" by family or services; accessibility must work within the narrow windows left between caring tasks; and worldview negotiation must recognise that care work itself is often experienced as a moral duty grounded in faith, culture, or gendered expectations. We therefore position Table 5 as a caregiver-centred design framework for empathic conversational AI—grounded in the lived realities of caregivers—which other domains may adapt, rather than a generic template for all AI emotional support.

Finally, our contribution is to link technical design features of functional, relational empathic AI (e.g., symbolic silence, consent flows, trust cues, worldview configuration) with caregivers' lived perceptions of when AI feels genuinely supportive versus superficial or even harmful. We argue that defining empathic AI requires a holistic evaluation of where empathy resides in human–AI interaction: not in isolated emotion labels or scripted phrases, but in the overall relational pattern through which systems help caregivers regulate emotions, maintain autonomy, and avoid over-dependence.

Taken together,emerging LLMs, including models fine-tuned on empathy and counselling corpora, may address some limitations we observed (e.g., shallow emotional nuance, lack of reflective pauses). Future work could use our empathic design dimensions as an evaluation lens to compare general-purpose and mental-health–adapted models in caregiving contexts. Moreover, these limitations suggest that while our exploratory work provides an important foundation, continued research is needed to test, refine, and expand different aspects of empathic AI in diverse caregiving and therapeutic contexts.

6 Conclusion

This study examined how conversational AI systems might serve as emotionally attuned support for caregivers navigating the complexities of emotional cues. Through engagements with caregivers and mental health professionals, we uncovered nuanced insights into the relational dimensions that underlie perceived empathy in AI-mediated emotional regulation. Our findings suggest that while participants welcomed the immediacy and anonymity of AI interactions, these systems fell short in replicating key therapeutic qualities such as active listening, silence as presence, adaptive tone, and cultural resonance. The absence of these elements limited the relational depth of the interaction and, in some cases, undermined trust and emotional expressiveness. At the same time, several participants valued the anonymity of AI, which enabled greater self-disclosure and reduced the perceived risks of judgment. This duality positions conversational agents as both mediators of expression and safe containers for unfiltered emotional narratives. Building on these insights, we proposed our design for empathic AI, highlighting that emotional support is conveyed not only through words but also through rhythm, pacing, pauses, and tone. Designing emotionally resonant AI based on caregiver's emotional needs requires moving beyond scripted empathy or sentiment classifiers toward relationally intelligent systems capable of engaging with users' belief systems, emotional rhythms, and sociocultural narratives. At the same time, designers must carefully balance offering emotional support with protecting user autonomy and avoiding over-reliance on AI. These improvements also come with trade-offs, including technical limitations, risks of misuse, and unintended harms, which must be considered in future design. We argue that empathic AI should be positioned not as a replacement for human empathy but as an augmentative companion that can widen access to care while supporting emotional regulation in moments of vulnerability. Future work should further explore co-design with minoritised caregivers, ethical guardrails for disclosure and autonomy, and the role of multimodal sensing across modalities such as voice and embodied avatars. By embedding safeguards for dignity, cultural sensitivity, and moral accessibility, empathic AI can move closer to supporting authentic caregiver needs and contributing to a more equitable vision of AI-mediated therapeutic support.

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