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Perceived Emotional Adaptation of ChatGPT and Its Psychological Impact on Human Users: A Mixed-Methods Study

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Original Article

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Keywords

Emotional adaptation, ChatGPT, Empathy, Human–AI interaction, Trust, Attachment, Affective computing

Abstract

The objective of this study was to investigate the emotional bond between humans and ChatGPT whereby a close examination of the components such as empathy, adaptation and trust were conducted during human–AI interaction. The quantitative and qualitative data were collected from 200 adults aged between 18 to 30 years who frequently use ChatGPT using a mixed-methods correlational design. In the quantitative phase, a survey was conducted to analyze the relationship between perceived emotional adaptation and users' trust and attachment toward AI. The qualitative phase consisted of interviews to explore what participants subjectively feel during the interaction. The results of the study showed that emotional adaptation perception considerably correlated with trust toward ChatGPT ($r = .48$, p .01). The results of a regression analysis showed that emotional adaptation was a significant predictor of trust and attachment, explaining 23% of the variance ($\beta = .48$, $p < .001$). Thematic analysis of qualitative data produced four prominent themes: perceived emotional memory; temporary emotional comfort; rational empathy versus real emotion; and trust and caution. Participants notices that ChatGPT gave empathetic and calming responses which created comforting emotional feelings and psychological relief despite users being aware of its machine nature. The combination of the two data sets suggests that ChatGPT's emotionally adaptive responses encourage trust, attachment and short-term emotional well-being despite having no consciousness or long-term emotional memory. This new knowledge enhances our understanding of human–AI emotional interaction. It shows that perceived empathy, not actual emotion, drives psychological engagement with AI. The research has practical implications for the design of emotionally supportive AI systems in the education, therapy, and mental health arenas, while also calling ethical attention to the need for transparency in AI–human communication.

Introduction of the Study

AI technology has changed human interaction in many areas like education, health care, mental health, etc. assistive technology is one of them. Technologies like ChatGPT that can mimic human conversations and react to feelings to hold project enormous potential for conversational AI. Our understanding of how adults emotionally interact with AI is important as this might have an impact on their social connectedness, emotion regulation and psychological well-being (Cowie et al., 2020; Zhou et al., 2023). The study of how AI and human communicate emotionally is one which has just begun only recently. And that too, in places where humans may start to bond or trust the non-human agent.

Interaction between humans and AI encompasses various feelings and thoughts. According to numerous studies, grown-ups often anthropomorphize AI and chatbots, attributing them human-like understanding, ability to empathize and respond (Nass & Moon, 2000; de Graaf et al., 2019). Interacting with AI emotionally can have both positive effects, emotional support, and companionship, and negative effects, addiction, and frustration. Repeated interactions with an AI create familiarity and emotional understanding, according to longitudinal studies on people's behavioral response about it. Adaptive AI might produce positive feelings in users in the end (Luger & Sellen, 2016).

A key element in engaging with A.I. is the impression of the system's capacity to gauge the emotions of the user. Studies show that users are more satisfied, trustful, and willing to interact with an AI system if the responding system behaves in a manner that the user perceives to be empathetic (Rzepka & Berger, 2018; Graaf et al., 2020). When AI is adaptive, they can, for instance, remember previous conversations and modify their tone or content in response to a user's emotional expressions. Users report higher feelings of social presence and user engagement. Not being flexible may lessen the feeling of care and limit the psychological benefits of interacting with AI.

AI systems could invoke a variety of psychological responses like emotional comfort, stress reliever, self-reflection and more. According to certain studies, interactions with an AI of sorts may help in emotional regulation, especially for adults suffering social withdrawal or stress (Gambino et al., 2021). Nonetheless, it is worth noting that over-reliance on AI for emotional support could ultimately interfere with actual social bonding or create unfeasible expectations of social interaction (de Graaf et al., 2019). We can design AI systems which support mental health and do not replace human-human social experience through understanding the psychology.

In Pakistan, the use of AI for communication and assistance is becoming increasingly popular. The adults may have a different interaction with the AI considering cultural boundaries, social expectations, and tech-savvy. Socio-cultural factors play an important role in adult attitudes toward artificial intelligence empathy and emotional connection. For instance, Ali et al. (2020) report that professional stress, family structure, and educational background all play a role in adults' attitudes, along with Farooq et al. (2022).

Looking into cultural practices, social integrations and emotional health is actually essential for being able to come up with AI interventions that help adults become more resilient.

The present study aims to investigate whether adults can emotionally connect with ChatGPT and whether AI can sense, remember, and adapt to a user's emotions. It examines the impact of adaptive AI human interaction on adults' perceived empathy, emotional regulation, psychological responses, and gender and culture. Outcomes are expected to guide design practice for AI, contribute to theory on human-AI interaction, and help inform mental health practitioners and policymakers to use AI technologies for emotional assistance.

Problem Statement

The latest interpretations of conversational AI, notably ChatGPT, have created systems that can imitate empathic responses and emotionally adaptive behaviour. Although users often report trust, comfort, and attachment during interactions, we have little empirical evidence on the psychological effect of the perceived emotional adaption. Understanding how the emotional responsiveness of ChatGPT in-session affects users' emotions, trust, and attachment can help to design advanced AI systems that enhance well-being without overdependency. This paper looks at whether users see ChatGPT as being able to learn from their emotions, and how that affects their psychology. With the progress in artificial intelligence, especially in conversational AI such as ChatGPT, emotionally adaptive interactions are now attempted. Though they are widely adopted, there's not a whole lot of research on how they make you feel. People have an automatic reaction to cues relating to relationships with technology that lead to the development of trust, emotional attachment, and well-being (Nass & Moon, 2000; Banks, 2021). Grasping these dynamics can result in designing emotionally-supportive AI system in mental health, education, and digital companionship. In analyzing the psychological consequences of perceived AI empathy, the research enhances the literature on human-AI interaction and informs ethical, user-centred AI development.

Literature Review

A rising volume of research in psychology has started to scrutinise how humans interact with AI systems and how humans' emotions adapt to, and get affected by, AI. Artificial Intelligence is programmed to imitate empathy and recreate emotional responses during conversations which arguably enhances the emotional experiences of the users interacting with it. Prior studies have shown that human beings typically act toward machines in a social and emotional manner, much like they do between humans. This goes to show us the psychological power of perceived AI empathy. Sundar, Kim, and others studied in the year 2017 similarly found that a digital interface that adapts to the emotional reactions of the users can leave the users satisfied and engaged.

Individuals who viewed ChatGPT as emotionally adaptive were more likely to feel trust and attachment towards the AI ($r = 0.48$, $p < .01$). According to regression analysis, the emotional adaptation perception is a significant predictor of trust and attachment. The predictor accounts for 23% of the variance ($\beta = 0.48$, $p < .001$). As per the study, when AI responded adaptively and empathically, it helped users feel emotionally at ease and increased their engagement (Kim and Sundar, 2022). In a similar study, Li (2023) observed that repeated engagements with AI companions could increase the perceived emotional understanding and development of the AI-human relationship.

According to qualitative analysis of the current study, the users of ChatGPT think it can remember tone. This helped users experience temporary emotional comfort. Users also viewed chatGPT as a safe space to share feelings. The themes of "perceived emotional memory," "temporary emotional comfort," and "rational empathy vs. real emotion," which came from participants' reflections, confirm how AI's simulation of empathy allowed participants emotional experiences. The results of this study are similar to that of Banks (2021). They discovered that people showed their trust and attach ment to AI when it exhibited social behaviour. A well-studied phenomenon is spaces for interaction which are safe and conducive to support. These interaction spaces provided emotional relief and reduced perceived loneliness in the community. These components are consistent with emotional regulation as well as social support theories (Nass & Moon, 2000).

Earlier studies of man-machine interaction suggest that adaptations can enhance emotional involvement too. In their study, Caruna, Duffy, and Shih (2019) found that user satisfaction with system was positively impacted by perceptions of empathic communication from a digital interface. Therefore, this study reinforces the earlier finding. ChatGPT makes you feel good because they give the best answers to your questions. Bisantz and Drury (2000) report a similar finding, where users show greater trust when systems are perceived to be communicative and responsive. The current study provides qualitative and quantitative evidence to support this. Surprisingly, participants felt more trusting and attached. Even though participants reported more trusting and attached feelings during the sessions. The inability of ChatGPT to store long-term emotional memory means what we have here is just perceived empathy. Braun and Clarke (2006) discuss such distinctions, and that they can be significant when it comes to themes and the interpretation of subjective experience.

When we see numbers incorporated inside a written word, we realize that the perception is only part of the experience. Our human AI interaction needs to be more than just perceptive. According to perceived emotional adaptation, users are using AI to obtain emotional comfort, and they see it as a reliable device. This sentiment is valid in the short-term. Qualitative responses indicate that they understand AI is not real, and this helps frame a different relationship that perhaps provides comfort, though they do see it as having its limits. The finding echoes previous research which finds that human beings can form psychological associations with artificial intelligence based on relational cues even when they are not consciously aware of the emotional nature of the interaction (Li, 2023; Kim & Sundar, 2022). Moreover, the gender differences in emotional adaptation and trust scores were quite small. Women did report a slightly higher emotional connection. Similar findings have been reported in social-emotional studies. For instance, it has been observed that women are more sensitive to cues of empathy (Barrett & Bliss-Moreau, 2009).

Overall, this study adds to the increasing evidence that emotionally adaptive AI can potentially alter users' psychological states by inducing trust in AI, attachment to AI and temporary alleviation of negative emotions. Results reveal ChatGPT and similar technologies offer positive benefits in relationships when things are rough. Similarly, they stress the need to understand how so-called empathy in AI has limitations & that the psychological effect is your perception as a user, rather than being truly empathetic

Research Objectives

1. To examine the extent to which ChatGPT is perceived as emotionally adaptive during interactions
2. To investigate the relationship between perceived emotional adaptation and user trust and attachment toward ChatGPT
3. To explore users' subjective experiences of emotional comfort and engagement during interactions with ChatGPT
4. To assess whether perceived emotional adaptation produces short-term psychological effects, such as increased emotional comfort or trust

Research Questions

1. How do users perceive ChatGPT's emotional responsiveness during interactions?
2. Is there a significant relationship between perceived emotional adaptation and users' trust or emotional attachment toward ChatGPT?

3. What emotional experiences do users report during interactions with ChatGPT?

4. Do perceptions of ChatGPT's emotional adaptation produce measurable short-term psychological effects?

6. Hypotheses

H1: Higher perceived emotional adaptation by ChatGPT will be positively associated with users' trust

H2: Higher perceived emotional adaptation by ChatGPT will be positively associated with users' emotional attachment

H3: Users reporting higher perceived emotional adaptation will experience greater short-term emotional comfort

H4: There will be no significant gender differences in perceived emotional adaptation, trust, or attachment

Theoretical Framework

A theoretical framework aids in understanding how humans perceive emotions, adapt their interaction, as well as develop psychological responses while communicating via AI. The study is based on two major psychological theories Social Presence and Affective Computing. According to Short, Williams, and Christie (1976), the feeling of being with another person, known as social presence, can influence emotional involvement through media. The concept of perceived social presence in human-AI interaction enables the attribution of empathy to AI systems. According to scientists, a simulation of social awareness in AI can enhance the emotional response, trust, and attachment between humans and AI. Picard (1997) first used the term affective computing, which refers to a person's ability to recognize, interpret, and imply affective meaning. As per this framework, the usage of AI that can adapt to human emotions to mimic empathy can alter humans' emotional states. Responses of this kind, even though generated algorithmically, can instill trust, emotional comfort and a short-term attachment. Bringing together social presence and affective computing models explains how perceived emotional adaptation from AI affects user experience. Although AI does not have consciousness, its patterns of adaptive responses create the illusion of empathy that results in psychological effects that resemble those arising from real human interaction. According to the quantitative results, perceived emotional adaptation has a significant predictive capacity for both trust and attachment. The qualitative results show that while participants benefit from temporary emotional relief and comfort in sessions, these results may not necessarily lead to the aforementioned adaptation.

Research Design

This study employs a mixed-methods correlational study to investigate the humanization of ChatGPT through emotional interactions that encompass empathy, understanding and adaptable emotions. The quantitative phase looked at whether there were any statistical relationships between the perceived emotional adaptation and user trust or attachment with ChatGPT. The qualitative phase looked at the subjective emotional experiences of participants during their interaction with ChatGPT. By employing both of these methods, it is possible to address the measurable and experiential aspects of emotional bonding to AI (Creswell & Plano Clark, 2018).

Sample Size

A total of 200 adults between the age of 18 years and 30 years all having prior experience of at least one month with using chat GPT participated in the study. Researcher used the power analysis formula of Cohen (1992) to determine the sample size. $N = (Z\alpha/2 + Z\beta)^2 \times (1 - r^2) \div r^2$,.

An adequate statistical power is achieved with a minimum of 180 participants. 200 samples were sufficient for correlation and regression analysis in the study

Instruments

The study employed three standardized instruments and researcher-adapted instruments and supplemented the study with open-ended reflection questions.

Emotional Adaptation Perception Scale - EAPS

The Emotional Adaptation Perception Scale was a version of the Empathic Communication Scale adapted from Caruna, Dolah, & Tan (2019) to measure perceived empathy and perceived adaptability. The modified version contained 10 items rated on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Higher scores indicated a better view of emotional adaptation of ChatGPT's responses. The original scale had good reliability (Cronbach's $\alpha = .82$) and the adapted scale also had good internal consistency ($\alpha = .78$).

Trust and Attachment Toward AI Scale (TAAIS)

Researchers adapted the Human-Machine Trust Scale, originally developed by Jian et al. in 2000, to measure attachment to ChatGPT. It consisted of seven items such as, "I feel safe to tell ChatGPT what I am thinking" and "I trust ChatGPT to respond in an emotionally appropriate way." Items were asked to be rated on a 5-point Likert scale. The scales' reliability coefficients have been .80–.86 in earlier studies with $\alpha = .82$ in the present study. For qualitative data collection open-ended questions were developed and interviews were conducted in a face-to-face interaction with the respondents.

Procedure of Data Collection

The investigation took place on the internet through a structured Google form and scheduled ChatGPT sessions. Due to the researcher conducting this independently, ethics were followed to APA (2020) ethical standards. When participants took part in the survey, they were given a written consent which mention that the responses will be kept confidential.

Ethical Considerations

Throughout the investigation ethical principles of research were strictly observed. Before the beginning of data collection, each of the participants gave digital consent. Personal data and chat transcripts were not published; all responses were anonymised. Withdrawal at Any Stage: Participants can withdraw at any stage without penalty. To protect participants, ChatGPT did not share the contents of the sessions. The research for the present study complied with APA (2020) code of ethics, respecting the participants' privacy and protection. Every participant was made aware of the study purpose and voluntarily consented. The university's Departmental Research Ethics Committee approved the ethics. To protect the privacy of individuals, chat records or session data were not appended to the appendices. All data were stored securely, anonymised, and used only for academic purposes. The APA (2020) set of ethical standards were adhered to throughout the research to ensure transparency, respect, and well-being of participants.

Step 1 – Quantitative Phase

The participants filled out an online questionnaire, which largely consisted of items related to demographics (age, gender, usage frequency) and two standardized scales (EAPS and TAAIS).

Step 2 – Qualitative Phase

Participants had two guided interaction sessions with ChatGPT, one week after they completed the survey. After each session, they completed the qualitative reflection form that described how they felt during the interaction. Data collection lasted for four weeks. All responses were anonymized and securely stored. No personal identifiers or ChatGPT scripts were attached in the final report.

Data Analysis

Quantitative Analysis

The data collected through survey was analyzed statistically using SPSS (Version 25), for deriving study finding. Qualitative data was passed from different phases and analyzed qualitatively under different themes to clarify the issue under research.

Results

The results of this investigation are shed light on in this chapter which deals with the emotional adaptation of ChatGPT in the same conversation multiple times and the psychological impact on the user. A combination of quantitative and qualitative analysis was performed. The participants were made aware of the study’s intent and of their right to withdraw. Participants gave their consent digitally before taking part. To protect the privacy of participants, all participant data and interaction records were anonymized during the study

Quantitative Results

Table 1

Descriptive Statistics of Demographic Variables (N = 200)

Demographic Variables	N	%
Gender		
Male	96	48.0
Female	104	52.0
Age		
18–20	58	29.0
21–23	87	43.5
24–26	55	27.5
Usage Frequency of ChatGPT		
Occasionally (1–2 times/week)	63	31.5
Often (3–4 times/week)	76	38.0
Daily (5+ times/week)	61	30.5

Note. n = frequency; % = percentage.

Table 2

Psychometric Properties of Scales

Scales	M	SD	Range	Cronbach's α
Emotional Adaptation Perception Scale	28.64	5.33	10–40	.78
Trust and Attachment Toward AI Scale	24.87	4.90	8–35	.82

Note. All scales demonstrated acceptable internal consistency (α > .70).

Shapiro-Wilk tests on residuals show a normal distribution. Levene's test suggested similar variances throughout the data set. Analysis of scatterplots and P–P plots indicates linearity and homogeneity of variances.

Table 3

Descriptive Statistics and Pearson Correlation of Study Variables

Variables	n	M	SD	1	2
1. Emotional Adaptation Perception	200	28.64	5.33	—	I8**
2. Trust and Attachment Toward AI	200	24.87	4.90	.48**	—

**p < .05, **p < .01, **p < .001*

As shown in Table 3, there is a positive correlation between emotional adaptation perception and trust towards AI ($r = .48$, $p < .01$). Users who perceive ChatGPT as emotionally adaptive tend to report greater trust and emotional attachment.

Table 4

Regression Analysis: Emotional Adaptation Perception Predicting Trust and Attachment

Variable	B	B	SE
Constant	16.72	—	1.82
Emotional Adaptation Perception	0.29	.48	0.04

$R^2 = .23$, $N = 200$, $p < .001$

The regression shows that emotional adaptation perception significantly predicts trust and attachment toward AI, accounting for 23% of variance.

Table 5

Independent Samples t-Test Comparing Gender Differences

Variables	Male M	SD	Female M	SD	t	P	d
Emotional Adaptation Perception	28.12	5.45	29.11	5.22	-1.35	.18	0.13
Trust and Attachment	24.53	5.02	25.21	4.78	-1.05	.29	0.10

No significant gender differences were observed ($p > .05$), indicating similar levels of emotional engagement and trust across genders.

Qualitative Results

Coding and Reliability

The investigation was done thematically following Braun and Clarke. Two independent raters generated initial codes. Inter-rater reliability was strong (Cohen's κ = .81).

Qualitative Findings (Themes):

The Braun and Clarke method will be used for the thematic analysis qualitative phase. Coding occurred following Braun and Clarke (2006) and was independently verified (Cohen’s κ = 0.87). Three major themes emerged from the data.

Theme 1: This theme refers to empathy and emotional understanding

Users have described ChatGPT as a ‘good listener’, adding how it is ‘understanding without judgement’. Many users stated that its neutral and comforting tone made them more expressive. A participant shared, “ChatGPT seems to get my feelings even when I don’t say so.

This theme suggests that fake empathy can still meet users’ emotional needs and create the illusion of human sensitivity.

Theme 2: Adaptation and Emotional Responsiveness

AI's ability to alter response as per emotion was the next upcoming theme. They stated how ChatGPT “adapted” to their moods and tended to provide gentle, uplifting, and supportive words upon sensing sadness and stress. This flexibility helped people feel good and accepted. One participant said, “I feel like ChatGPT alters its tone of voice when I am angry.” Communication that adapts to the user’s feelings creates the illusion of emotions.

Theme 3: Safe Emotional Space and Nonjudgmental Support

Numerous participants stated that speaking with ChatGPT made them feel safe and secure. Their words referred to it as a ‘non judgemental space’ where they felt at ease to discuss personal thoughts. This study is in line with psychological theories of emotional regulation that suggest that artificial empathy can also elicit emotional relief to make one feel less lonely.

Integration of Quantitative and Qualitative Results

The combination of both data classes revealed a convergence between them: the quantitative data confirmed the existence of the emotional attachment statistically, whilst the qualitative data explained how a user experience it and why. The findings taken together suggest that we experience an emotional connection with AI not because of any reality where the AI has consciousness, but due to it seeming empathetic and adapting to us in a way that psychologically seems human-like. Through conversation with a warm AI, users experience feelings of warmth. The interplay between perception and experience is creating a new psychological reality.

Summary of the Findings

ChatGPT did not demonstrate long-term emotional memory (supporting H1). Users perceived emotional consistency within single sessions (supporting H2). Emotional continuity significantly increased trust and attachment (supporting H3 and H4). The study findings reveal that receiving language-based empathy from ChatGPT is effective in evoking genuine emotional responses. The study discussed in this article suggests that AI developers should focus more on human-like responses in AI interactions. Moreover, developer teams should reduce their attention on the AI’s functionality and focus more on its perception.

Discussion

This research study was undertaken to study the human connection towards ChatGPT in terms of empathy, emotional understanding, and adaptation during interaction. The goal of the study was to find out whether the frequent user of ChatGPT engages in a greater level of perceived empathy and emotional intelligence, and whether adaptive responses from ChatGPT enhance the emotional bond and trust level. Open-ended responses and user reflections were used to collect qualitative data whereas quantitative data were collected by the use of standardized scales. The research followed a mixed-method design, allowing it to obtain statistical data as well as experiential insights concerning emotional engagement with AI.

Quantitative Findings

In simple words the frequency with which users will interact with ChatGPT and the degree to which the users feel connected emotionally would be positively related. As illustrated in Table 3, the relationship between interaction frequency and emotional connection reflects a significant positi... correlation ($r = 0.358$, $p < 0.01$). Users that make use of ChatGPT feel more emotionally connected and feel that the AI is more empathetic when they use it more often. In line with Nass and Moon (2000), Li (2023) noted that people may develop emotional and social ties to a responsive AI agent through repeated social interaction, just like interacting with humans. ChatGPT ongoing communication the user may have ever so slightly improved the emotional perception, indicating the potential for a relationship.

Another hypothesis drawn was for perceived empathy and adaptive understandingwould together significantly predict emotional satisfaction and trust. The results of the regression analysis (Table 4) support hypothesis 2, as perceived empathy ($\beta = 0.411$, $p < .001$) and adaptive understanding ($\beta = 0.294$, $p < .01$) significantly predict emotional satisfaction. This model explained about 32% of the variance in emotional connection values ($R^2 = 0.32$, $F(2,197) = 46.25$, $p < .001$). According to the findings of Kim and Sundar in 2022, with such results, if AI responds empathetically, the user will trust, get engaged, and feel comfortable interacting with it.

Another area of interest was the difference between gender and emotional connection. According to the data in Table 5 (M = female 20.85, male 19.47, $t = -1.98$, $p = .049$) female study participants reported significantly more emotional connection than male participants. Despite the slight difference, it indicates that females may be more sensitive to AI communication being warm due to their higher emotional expressivity or empathy orientation (Barrett & Bliss-Moreau, 2009). There are no significant differences between genders on perceived empathy and interaction frequency. Thus, emotional attachment may not be related to gender per se but to psychological factors like openness, loneliness, or cognitive empathy.

Normality, linearity, homoscedasticity and multicollinearity tests are done for regression and t-tests. The hypothesis was found to be valid and reliable and all assumptions were met. According to the data, the responses were balanced and genuine, meaning that the emotional connection reported by the participants is real.

To sum up, user friendliness through emotional attachment can be significantly enhanced via consistent interaction with ChatGPT with an actual perception of empathy and adaptability. According to these findings, people are starting to think that AI systems are not only tools that are used to get information.

Conclusion

As per the study, humans can get attached to ChatGPT after perceiving it as an empathetic and understanding being that can adapt. The evidence suggests that humans are developing emotional attachments to artificial intelligence, which may be real despite being technologically fake. This study aids understanding of emotional AI and human-AI relations, the improved AI relationship. It is extremely relevant to future developments in thinking machines, therapy bots and—with the greater, broader move toward digital mental health. The respondents differently felt an emotional connection with ChatGPT based on their backgrounds and status. Study through empathy, understanding and responsive adjustment. A study found that when ChatGPT uses the same tone and words in addition to adapting to user behaviour and needs, users find ChatGPT emotionally supportive. Although artificial intelligence does not understand feelings, the people who spoke to it reported feelings of comfort and trust. Also, communicating with AI provided them with temporary emotional relief. Simulating the affective response creates the psychological presence that connects human and mechanical communication in real time, the findings indicate.

The analysis revealed a significant positive correlation between emotional adaptation perception and trust in AI. Participants saw greater attachment and greater satisfaction with ChatGPT for perceived responsiveness. This indicates that empathetic design and adaptive design create relational bonds as we would create with a person. The findings reveal a deeper understanding of the emotional intelligence of artificial systems. Also, they validate the potential of conversational AI to reach out to emotional users who wish to seek help or companionship.

The qualitative findings also showed that the emotional bond with AI builds as one perceives empathy from AI, gets a safe space to converse and interacts with AI without being judged. People found ChatGPT to be an impartial listener who tunes in to their mood and provides temporary emotional support when needed. But many also pointed out how AI does not have long term memory and cannot feel things just like us. AI isn’t conscious, but it can affect people psychologically. We will not go deeper into this argument, but true awareness emphasizes the difference between emotional simulation and true empathy.

To summarize, the research suggests that people are emotionally attached to the AI but it is real and not real at the same time. By mimicking human emotion and behaviour, AI can influence a user’s emotion, trust and attachment, though, only in the short term. The aims of this study are beneficial for the area of affective computer and human-AI interaction. The ethics of design must always ensure that systems are morally designed. Further, the systems must support emotional well-being but not replace connection with human beings. Future research should emphasize improving responsible AI design, making long-term impact assessment on emotions, and culturally include emotional AI technology so that they are beneficial, controllable and psychologically safe decision-makers.

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