

Perceptions of Artificial Intelligence–Based Psychotherapy: A Mixed-Methods Study

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ABSTRACT: Artificial intelligence (AI) has increasingly been integrated into various domains, including psychotherapy. Individuals' perceptions of AI play a critical role in shaping the acceptance, perceived effectiveness, and trustworthiness of AI-supported therapeutic processes. Given the limited number of studies on this topic, public perceptions of AI-based psychotherapy remain insufficiently explored. This mixed-methods study examined attitudes toward AI-based psychotherapies. In the quantitative phase, 317 adults aged 18–65 ($M = 41.52$, $SD = 12.30$) completed the Attitudes Toward AI-Based Psychotherapy Scale (ATAIP), the AI Anxiety Scale, and the Attitudes Toward Artificial Intelligence Scale. In the qualitative phase, semi-structured interviews were conducted with 10 participants. Overall, 42.0% of respondents were “unsure” about preferring an AI therapist, and 56.8% reported greater trust in human therapists regarding data security. Correlational analyses showed that attitudes toward AI-based psychotherapy were negatively associated with learning anxiety and AI configuration anxiety, and positively associated with general attitudes toward AI. Qualitative findings indicated that AI-based therapy offers advantages such as low cost, time efficiency, easy accessibility, large-scale data processing, reduced fear of judgment, and reduced human bias. However, concerns emerged regarding data security, information accuracy, lack of face-to-face interaction, and limited emotional authenticity. Overall, participants perceived AI-supported psychotherapy as practically useful yet emotionally limited.

KEYWORDS: Social and Behavioral Science, Clinical Psychology, Artificial Intelligence, Psychotherapy, Perception.

■ Introduction

In recent years, digitalization has increasingly influenced all aspects of daily life, including mental health services, which are undergoing a notable transformation. Systems that can provide support independent of time and place have been developed, thereby improving accessibility and contributing to new models of service delivery.¹ One reason for the rapid expansion of artificial intelligence (AI)–supported systems is the global burden posed by psychiatric disorders, which constitute a major source of morbidity worldwide. Managing these conditions is especially challenging in low-resource settings, where access to mental health professionals is limited. AI has therefore emerged as a promising technology offering innovative and feasible solutions for the diagnosis and management of such disorders.¹

Pioneering studies have demonstrated that AI-based therapeutic tools may yield psychological benefits within relatively short periods. For example, Woebot, a system grounded in Cognitive Behavioral Therapy (CBT), has been shown to reduce depression and anxiety symptoms among young adults.² Similarly, a systematic review by Li *et al.*³ found that AI-based chatbots provide therapeutic benefits across various modalities, including CBT, Acceptance and Commitment Therapy (ACT), and skills-training programs. Additional evidence indicates that chatbot-delivered psychotherapy supports symptom improvement,⁴ and interventions such as Vivibot have reduced anxiety among young adults following cancer treatment.⁵ Moreover, interacting with an empathy-based chatbot after periods of social isolation has been shown to en-

hance mood.⁶ Collectively, these results highlight the potential of AI-supported conversational systems to promote emotional well-being.

Despite these promising outcomes, several studies have emphasized the ethical, emotional, and technical risks associated with AI-based psychotherapy. Users frequently express concerns regarding privacy, data security, confidentiality, lack of human contact, and insufficient empathy.¹ For instance, Aktan *et al.*⁷ reported that participants overwhelmingly trusted human therapists more than AI systems when sharing personal information, with only 14% expressing trust in AI-based psychotherapy. This underscores the continued importance of the human element in therapeutic relationships. Existing literature suggests that while individuals perceive certain advantages of AI-supported psychotherapy—such as enhanced privacy, reduced fear of judgment, 24/7 accessibility, and lower cost—they also identify significant limitations, including reduced empathy, limited human understanding, ethical ambiguities, and data privacy concerns.^{7,8}

Recent findings further indicate that individuals' general attitudes toward AI and their levels of AI-related anxiety play an important role in shaping their acceptance of AI-based therapeutic systems. For example, Keung and So⁹ found that individuals with frequent exposure to AI may develop more negative attitudes toward it during emotionally intense experiences, which in turn influences their preferences for psychological support. Similarly, Wagner and Schwind¹⁰ showed that therapists' AI-related anxieties are directly associated with their intentions to use such systems, and Cecil *et al.*¹¹ reported

a negative association between AI anxiety and technology-use intentions.

Taken together, the existing literature indicates that AI-supported psychotherapy systems possess both strengths and limitations; however, empirical research in this area remains scarce. The present study aims to evaluate perceptions of AI-based psychotherapy, examine ethical, emotional, and technical factors influencing these perceptions, and assess overall acceptability. By integrating quantitative and qualitative methods, the study seeks to provide a comprehensive and nuanced understanding of individuals' perceptions. The quantitative phase investigates associations between AI anxiety, general attitudes toward AI, and attitudes toward AI-supported psychotherapy. In contrast, the qualitative phase explores participants' in-depth evaluations and lived perspectives through semi-structured interviews.

■ Methods

This study employed a mixed-methods design. Eligibility criteria for participation were: (1) being between 18 and 65 years of age, and (2) being a citizen of Turkey. In the quantitative phase, data were collected from 321 individuals; however, four participants were excluded for not meeting the age criterion. The final sample consisted of 317 adults aged 18–65. The following instruments were used in the data collection process:

1. Attitudes Toward AI-Based Psychotherapy Scale (Aktan *et al.*;⁷ ATAIP): This 6-item, 5-point Likert-type scale assesses attitudes toward AI-supported psychotherapy. Higher scores indicate more favorable attitudes (e.g., “AI-based psychotherapy systems can empathize”). In the present study, Cronbach's α was .85.

2. AI Anxiety Scale (Wang & Wang;¹² Turkish adaptation: Terzi¹³): This 21-item, 7-point Likert-type measure assesses anxiety related to artificial intelligence. Higher scores reflect higher levels of anxiety. The scale includes four subdimensions: Learning anxiety (e.g., “Learning to use AI techniques/products makes me anxious.”), Job-replacement anxiety (e.g., “I am afraid that an AI technique/product may make us dependent.”), Sociotechnical blindness (e.g., “I am afraid that an AI technique/product may be misused.”), Structural/physical appearance anxiety (e.g., “I find humanoid AI techniques/products (e.g., humanoid robots) scary.”). In the present study, Cronbach's α was .95.

3. Attitudes Toward Artificial Intelligence Scale (Grassini;¹⁴ Turkish adaptation: Arslan *et al.*¹⁵): This single-factor, 4-item instrument uses a 10-point Likert format. Higher scores indicate more positive attitudes toward AI and greater acceptance (e.g., “I believe that AI will improve my life.”). In the present study, Cronbach's α was .93.

In the qualitative phase, semi-structured interviews were conducted with 10 participants aged 18–65 (see Appendix A for interview questions). Each interview lasted approximately 15 minutes. The sample size for the qualitative phase was guided by the principle of thematic saturation, whereby data collection continues until no substantially new themes emerge. Given the relatively focused research aim and the convergence of responses across participants, the final sample of 10 inter-

views was considered sufficient to achieve depth and thematic coverage.

The participants in the qualitative phase were recruited as a separate sample using a purposive sampling strategy. The qualitative and quantitative phases were conducted with independent samples. The qualitative phase aimed to provide a deeper understanding of participants' perceptions and to complement the quantitative findings by exploring underlying experiences and meanings.

Quantitative data were analyzed using SPSS. Descriptive statistics were computed for sociodemographic variables, and relationships among variables were examined through Pearson correlation analyses. Qualitative data were analyzed using MAXQDA, following a thematic analysis approach. The analysis process involved initial coding of the data, followed by the identification and refinement of themes based on recurring patterns. To ensure consistency and reliability, two researchers independently coded the data and compared their coding. Any discrepancies were discussed until a consensus was reached.

■ Results and Discussion

Descriptive Analysis:

The majority of the participants were women (68.8%, $n = 218$), and the mean age was 41.52 years ($SD = 12.30$). Most participants held an undergraduate degree (62.8%), followed by those with a graduate degree (30.9%). The mean perceived socioeconomic status was 6.04 on a 1–10 scale ($SD = 1.40$). Additionally, 53% of the participants had previously received support from a therapist, whereas 47% had not. When asked whether they would prefer an AI therapist, 42.0% responded “unsure,” followed by 28.8% indicating “yes” and 19.2% indicating “no.” Finally, regarding data security, 56.8% of participants reported that they would trust a human therapist over an AI system (see Table 1).

Table 1: Sociodemographic characteristics of participants.

The sample was predominantly female and highly educated, and nearly half had previous therapy experience. A substantial portion of participants remained unsure about whether they would prefer an AI-based therapist, reflecting the general ambivalence observed in the study.

	n/M	%/SD
Gender		
Women	218	68.8
Men	99	31.2
Education Level		
Middle School	1	.3
High School	19	6.0
Undergraduate	199	62.8
Graduate	98	30.9
Previous Therapy Experience		
Yes	168	53.0
No	149	47.0
Previous Use of AI Tools		
Yes	281	88.6
No	36	11.4
AI Therapist Preference		
Yes	123	28.8
No	61	19.2
Unsure	133	42.0
Data Security Preference		
Human Therapist	180	56.8
AI Therapist	21	6.6
None	116	36.6
Age (18-65)	41.52	12.296
Socioeconomic State (1-10)	6.04	1.400

Correlational Analysis:

Bivariate correlation analyses were conducted to examine the relationships among the variables (see Table 2). The

results indicated significant associations between attitudes toward AI-based psychotherapy and several dimensions of AI anxiety. Specifically, attitudes toward AI-based psychotherapy were negatively and weakly associated with learning anxiety ($r = -.115, p < .05$). In addition, a negative and significant association was observed between AI configuration anxiety and attitudes toward AI-based psychotherapy ($r = -.163, p < .01$). However, attitudes toward AI-based psychotherapy were not significantly related to job-replacement anxiety or sociotechnical blindness ($p > .05$). Furthermore, attitudes toward AI-based psychotherapy were moderately and positively associated with general attitudes toward AI ($r = .500, p < .01$).

General attitudes toward AI were also significantly related to all dimensions of AI anxiety. Job-replacement anxiety was negatively and weakly associated with general AI attitudes ($r = -.181, p < .01$). Learning anxiety showed a negative and moderate association with general AI attitudes ($r = -.375, p < .01$). Sociotechnical blindness was negatively and weakly associated with general AI attitudes ($r = -.188, p < .01$). Finally, AI configuration anxiety demonstrated a negative and moderate association with general AI attitudes ($r = -.330, p < .01$).

Table 2: Bivariate correlation of the main variables.
AI-therapy attitude showed negative associations with learning anxiety and AI configuration anxiety, and a positive association with general AI attitude. General AI attitude demonstrated consistent negative correlations with all AI-anxiety subdimensions, indicating that anxiety plays a central role in shaping AI-related perceptions.

	M	SD	1	2	3	4	5	6
1. AI-Therapy Attitude	2.75	.82	1	-.036	-.115*	-.083	-.163**	.500**
2. Job Replacement	4.34	1.58		1	.447**	.768**	.687**	-.181**
3. Learning	2.63	1.28			1	.405**	.440**	-.376**
4. Sociotechnical blindness	4.74	1.55				1	.748**	-.188**
5. AI Configuration	4.19	1.88					1	-.330**
6. AIAS-4	6.86	2.06						1

*AIAS-4: AI attitude scale

Qualitative Findings:

THEME 1: Positive Aspects of AI-Based Psychotherapy:

The first theme emerging from the thematic analysis highlights the perceived positive aspects of AI-based psychotherapy. This theme comprises two categories: (1) Technical and practical benefits, and (2) Therapeutic and perceptual benefits.

Category 1) Technical and Practical Benefits of AI Therapy:

Several participants emphasized that AI-based therapists possess extensive, data-driven knowledge structures, which they viewed as a major advantage. According to these participants, AI systems can analyze information drawn from numerous scientific sources, allowing them to operate with a broader and more up-to-date knowledge base. This capability was perceived as enabling more systematic and accurate identification of problems. One participant noted:

“We all graduate from a school, and we can only develop ourselves to a certain extent. But AI filters data from so many articles and sources that it may identify some things more clearly.” (Participant 3, Position 26)

Another participant similarly highlighted the computational benefits of AI:

“It may reduce human error because it works systematically. An AI system processes large datasets. A human can only see a limited number of clients and receive a limited amount of training in their lifetime. AI can analyze vast amounts of data simultaneously and detect better patterns.” (Participant 5, Position 24)

Participants also emphasized cost as a significant advantage. One participant stated:

“Cost is very important. Psychologists have become very expensive recently, while we use ChatGPT for free.” (Participant 10, Position 24)

Thus, rising therapy costs were perceived as limiting access, whereas AI-based services—being low-cost or free—were viewed as increasing accessibility for broader populations.

Another frequently mentioned advantage concerned time efficiency and ease of access. Participants noted that scheduling appointments and adhering to specific time slots can make therapy difficult to access. In contrast, AI tools offer immediate support:

“When you feel upset at that moment, you can ask something without making an appointment.” (Participant 1, Position 72)

Another participant described the potential shift in accessibility dynamics:

“I think human therapists may become a kind of luxury. Therapy is not something easily accessible. As with everything, there will be a widely accessible version and a hard-to-access version. This may affect the value of human therapists and make access more difficult.” (Participant 5, Position 26)

Category 2) Therapeutic and Perceptual Benefits of AI-Based Therapy:

Participants also emphasized several therapeutic and perceptual advantages of AI-based psychotherapy. One commonly mentioned benefit concerned reduced fear of judgment. Some individuals reported that societal stigma surrounding psychotherapy may prevent people from seeking help; therefore, consulting an AI-based therapist could feel safer. As one participant explained:

“If someone does not want to tell others they are going to therapy, or if they do not trust a third person enough to share these things, the barriers become significant.” (Participant 6, Position 25)

Another perceived benefit involved the absence of emotional reactions in AI systems. Participants suggested that human therapists might unintentionally bring their own emotions into the session, whereas AI-based tools are free from such influences. One participant stated:

“Therapists are not supposed to bring their own emotions into the process. Since AI is a machine, it is automatically free of emotions.” (Participant 11, Position 11)

Participants also highlighted that AI systems may approach clients with less bias compared to human therapists. They noted that human therapists, like all individuals, can be influenced by their personal beliefs, experiences, or social norms, which may shape their interpretations or responses—even unintentionally. One participant expressed this:

"People are always biased, even the least biased ones. If you see someone with tattoos, you might not think they are polite before speaking to them. ChatGPT doesn't have that bias. Even therapists can be influenced by such judgments." (Participant 7, Position 23)

Similarly, another participant described the issue in terms of objectivity:

"Every therapist has a different style, worldview, and way of perceiving things, and these vary depending on their training. Even if they try not to, they can still impose their own perspective. Everyone interprets life through their own lens. But with AI, this part could be prevented if the technology is well designed." (Participant 8, Position 25)

Overall, participants perceived AI-based therapy as potentially more neutral and less judgmental, offering a therapeutic space less influenced by human bias or emotional interference.

THEME 2: Negative Aspects of AI-Based Psychotherapy:

Based on the thematic analysis, the second theme identified was the negative aspects of AI-based psychotherapy. Similar to the first theme, two distinct categories emerged under this theme: Category 1 focused on ethical and security-related disadvantages, while Category 2 highlighted concerns related to the therapeutic process and emotional experience.

Category 1) Ethical, Privacy, and Trust-Related Concerns in AI Therapy:

Participants frequently expressed concerns about data privacy in the context of AI-based psychotherapy. Many reported apprehension about the storage of personal and emotional information in digital environments or the possibility that such information might be shared with third parties. One participant stated:

"When I go to a human therapist, I know they will keep my information confidential, but when I give it to an AI system, there may be a data leak. It doesn't give me that sense of security." (Participant 3, Position 24)

These concerns became especially salient when discussing highly sensitive personal matters. As another participant explained:

"Our data are leaked and stolen so often nowadays. So I wouldn't want to share very personal details; I would keep it more superficial." (Participant 4, Position 22)

A different participant described how a negative prior experience shaped her perceptions of AI-based systems:

"Once, while sharing a text, I accidentally mentioned my daughter's name. Now whenever I ask something, she responds by using her name. I really regret saying it; I wish I could make it forget, but it doesn't. It makes me very uncomfortable because it even notifies you that your data has been updated when you share personal information." (Participant 1, Position 56)

While most participants expressed strong concerns about data security, a minority reported that they were not particularly worried about privacy issues. These individuals felt that the vast amount of data processed by AI systems diluted the personal risk:

"I don't worry. I think millions of people use this system—my data is just a drop in the ocean. I actually share personal things, but I don't have security concerns. If there were a leak, I'm sure my data wouldn't be the one anyone cared about. But if I were a famous person, I might have such concerns." (Participant 7, Position 19)

Another recurring issue involved doubts about the reliability and accuracy of information provided by AI systems. Participants questioned whether AI-generated responses could be trusted, especially when compared to those of trained therapists. One participant explained:

"Even psychotherapists who receive extensive training often need years of experience to become truly effective. AI often gives incorrect information. I've seen this many times in my own experience." (Participant 1, Position 66)

Category 2) Therapeutic and Perceptual Disadvantages of AI Therapy:

The primary disadvantage emphasized by participants in this category was the lack of human interaction and relational connection. Human therapists were perceived as advantageous due to their ability to engage in face-to-face interaction and demonstrate emotional understanding. Several participants noted that, through their training, human therapists can interpret nonverbal cues—such as tone of voice, facial expressions, and body language—and can even sense emotions that clients struggle to articulate. Participants stated that AI systems currently lack this level of nuance. As one participant explained:

"I don't think it would understand, because the human mind is very complex. Even if people seem similar, they differ in very subtle ways, and these subtle things carry great meaning. Sometimes, even if you cannot fully articulate it, you can feel it based on past experiences. An AI system cannot have that sensitivity." (Participant 5, Position 18)

Another disadvantage frequently mentioned was the absence of in-person interaction itself. Participants emphasized the value of being physically present with another human being in the therapy room, suggesting that such interaction contributes to a stronger therapeutic alliance. One participant stated:

"Psychology is one of those fields where you really need human-to-human interaction—conversation, flow, and presence—so that the person can feel understood. Looking into someone's eyes, seeing their face, seeing someone like yourself... that makes people feel better. That's why human psychotherapy is very important." (Participant 8, Position 28)

Several participants also pointed to the lack of authenticity and realism in AI-based interactions. They felt that AI systems tend to avoid confrontation and may respond indirectly even when a user expresses clearly incorrect statements. As one participant described:

"Even if it sees something completely wrong, I don't think it would say, 'This is wrong.' It's not in a mode to challenge people. For example, Grok used to argue with users, but ChatGPT and similar systems are not at a level where they insist that something is wrong—they keep trying to soften or redirect the conversation. So it doesn't behave like an expert." (Participant 7, Position 21)

Another participant reflected on the idea that, although AI may not truly understand emotions, it can still create a feeling of being understood:

"It's debatable what 'understanding' really means, but it can make the other person feel understood. We all need to feel understood, and it doesn't need to give major solutions—just framing and reflective questions like 'I understand you' or 'You seem worn out.' Even if it doesn't actually understand, I would still feel understood, so in that sense, yes, it understands." (Participant 6, Position 16)

■ Discussion

This study aimed to examine individuals' perceptions of AI-based psychotherapy using a mixed-methods approach. In the quantitative phase, descriptive findings indicated that the mean age of the sample ($M = 41.52$, $SD = 12.00$) reflected a wide age range; however, the relatively higher average age may have contributed to more cautious attitudes toward AI. Supporting this interpretation, Kubovics¹⁶ found that age is a significant predictor of attitudes toward AI, with older adults reporting more negative views and lower willingness to share data with AI systems. Nearly half of the participants had prior therapy experience, which likely enabled them to compare AI-supported interventions with human-delivered psychotherapy. Conversely, participants without therapy experience may have responded more speculatively.

Correlation analyses demonstrated meaningful associations between attitudes toward AI-based therapy and several psychological and cognitive factors. Learning anxiety was negatively associated with attitudes toward AI-based therapy, indicating that higher levels of learning-related anxiety correspond to lower willingness to engage with AI-supported psychotherapy. This finding highlights the importance of user-friendly interfaces and simplified system design to reduce user-related concerns (see also Kleine¹⁷). Similarly, AI configuration anxiety was also negatively associated with attitudes toward AI-based therapy, suggesting that concerns related to the technical functioning, transparency, and reliability of AI systems may undermine acceptance of AI-supported interventions. This interpretation is consistent with qualitative findings highlighting fears related to data security, privacy breaches, and the possibility of inaccurate information.

Moreover, general attitudes toward AI were positively associated with attitudes toward AI-based psychotherapy. Individuals who held favorable views of AI in general also evaluated AI-supported therapy more positively. Practically, this suggests that broader efforts to improve public understanding and acceptance of AI technologies may indirectly enhance openness toward AI-based mental health interventions.

Importantly, the qualitative findings help contextualize these quantitative associations by elucidating the underlying reasons behind participants' attitudes. Specifically, the themes derived from the interviews indicate that participants' ambivalence and trust-related concerns are primarily driven by perceived limitations in emotional authenticity, data security, and the absence of human interaction, thereby providing a deeper explanation

for the observed relationships between AI anxiety and attitudes toward AI-based psychotherapy.

Building on this integration, the qualitative findings further illustrate how these concerns are reflected in participants' concrete evaluations of AI-based psychotherapy. These findings indicate that participants primarily emphasized technical and practical advantages of AI—such as cost-effectiveness, time efficiency, accessibility, and large-scale data processing—while describing emotional and relational limitations as key disadvantages. Although AI-based therapy was perceived as convenient and functionally helpful, participants expressed reservations about forming an emotional connection or fully “internalizing” the therapeutic process. On the therapeutic side, the absence of emotional reactions, reduced fear of judgment, and freedom from human bias were perceived as potential benefits. Conversely, concerns regarding data privacy, doubts about the accuracy of information provided by AI, and risks of misinformation were prominent barriers. Participants also frequently noted the lack of face-to-face interaction, emotional depth, and authenticity in AI-based therapy, indicating that such systems cannot yet replicate the interpersonal and relational qualities of human psychotherapy.

Similarly, most participants had previous experience using AI tools, suggesting that attitudes toward AI are shaped by prior exposure. Regarding preferences for AI-based therapy, most participants reported uncertainty; still, 28% indicated they would consider using an AI therapist, whereas 19% stated they would not—an overall pattern consistent with the dual structure observed in the qualitative findings. This ambivalence can be understood as stemming less from a lack of familiarity with AI and more from concerns related to the nature of the therapeutic process itself. Given that the majority of participants reported prior experience with AI tools, the uncertainty is unlikely to reflect low AI literacy. Rather, the qualitative findings suggest that participants' hesitation is rooted in issues such as data security, limited emotional authenticity, and the absence of face-to-face interaction. These factors indicate that participants may recognize the practical advantages of AI-based psychotherapy while simultaneously questioning its ability to meet relational and emotional needs. Thus, the “unsure” responses may reflect a tension between perceived utility and perceived limitations, rather than simple unfamiliarity with the technology. Previous research by Aktan *et al.*¹⁷ reported that 50% of participants preferred an AI therapist; however, their study did not include an “unsure” response option, which may partly explain the discrepancy. In terms of data security, more than half of the participants trusted human therapists, while only 6% trusted AI systems—again aligning with our qualitative results. Overall, both quantitative and qualitative data suggest limited trust in AI-based psychotherapy, though not a complete absence of trust.

An additional noteworthy finding is the discrepancy between participants' willingness to consider AI-based psychotherapy and their low level of trust in AI systems regarding data security. This “trust gap” suggests that individuals may be willing to use AI-based services despite reservations about privacy and security. One possible explanation is the distinction

between perceived utility and trust: participants may recognize the practical benefits of AI—such as accessibility, cost-effectiveness, and immediacy—while simultaneously maintaining concerns about how their data are handled. In this sense, usage intentions may be driven by convenience and situational needs rather than full confidence in the system.

Furthermore, qualitative findings indicate that participants may regulate their use of AI by limiting the depth or sensitivity of the information they share, thereby managing perceived risks. This selective engagement allows individuals to benefit from AI-based support while minimizing potential privacy concerns. Thus, the observed trust gap does not necessarily reflect a contradiction, but rather a pragmatic adaptation to the perceived trade-offs between utility and risk.

These findings should also be interpreted in light of the sample characteristics. The predominantly female and highly educated composition of the sample may have influenced perceptions of both data security and AI-related risks. Prior research suggests that women tend to report higher levels of AI-related anxiety and greater sensitivity to potential risks, particularly in contexts involving personal data. Similarly, individuals with higher education levels may be more aware of issues related to data privacy, algorithmic bias, and technological limitations, which could lead to more cautious or critical evaluations of AI-based psychotherapy. In contrast, more diverse or less technologically informed populations may exhibit different patterns of trust and concern, potentially placing greater emphasis on accessibility and convenience over perceived risks. Therefore, the observed levels of uncertainty and limited trust in AI systems should be interpreted within this demographic context.

■ Limitation

This study has several limitations. First, the sample consisted predominantly of women. Prior research indicates that women tend to report higher levels of AI-related anxiety and hold more negative attitudes toward AI compared to men (Russo *et al.*¹⁸; Sindermann *et al.*¹⁹). Therefore, our findings may reflect a female-dominant pattern of attitudes. The gender imbalance in the sample also limits the generalizability of AI-related attitudes. Additionally, most participants had undergraduate or graduate education and perceived their socioeconomic status to be above average, which may confer an advantage in terms of AI literacy and understanding of technological concepts (e.g., Sebetci²⁰). Hence, our findings cannot be generalized to individuals with lower socioeconomic and educational backgrounds. Another limitation concerns the potential cultural specificity of AI-related attitudes. As all participants in our study were Turkish, the findings may be influenced by cultural factors that shape perceptions and expectations of AI-based therapies, thereby restricting generalizability (Yam *et al.*²¹). Finally, the correlational and cross-sectional nature of the study limits the extent to which causal inferences and broader generalizations can be made. Future studies should include broader age groups, clinical populations, and individuals with no prior experience with AI to enhance the generalizability of the find-

ings. Moreover, experimental and longitudinal designs would provide valuable insight into the long-term effectiveness of AI-based therapies and the processes through which users adapt to such systems.

■ Conclusion

This study provides a comprehensive contribution to the limited body of literature by examining societal perceptions of AI-based psychotherapy through both quantitative and qualitative data. The findings indicate that levels of AI-related anxiety and general attitudes toward AI are closely linked to attitudes toward AI-supported psychotherapy. Additionally, although participants acknowledged the practical advantages offered by AI, they emphasized that AI systems cannot fully replace human therapists in the emotional and relational dimensions of the therapeutic process.

If AI is to be integrated as a supportive tool within psychotherapy services, it will be essential to design user-friendly interfaces, enhance transparency regarding data security, and strengthen AI's capacity for emotional closeness or empathic communication. Furthermore, developing hybrid human-AI therapeutic models may allow individuals to benefit from the practical conveniences of AI while also meeting their need for a meaningful therapeutic relationship.

From a practical perspective, the findings of this study carry important implications for multiple stakeholders. For mental health practitioners, the results highlight the continued importance of the human element in therapeutic processes, suggesting that AI should be integrated as a supportive rather than a substitutive tool. For developers of AI-based mental health applications, the findings emphasize the need to enhance transparency, data security, and the capacity for emotionally responsive interactions. Addressing users' concerns regarding privacy and emotional authenticity may increase trust and acceptance of such systems. Finally, for policymakers and institutions, the results underscore the importance of establishing ethical guidelines and regulatory frameworks to ensure the safe and responsible use of AI in mental health services.

In sum, this study highlights both the potential and the limitations of AI-based psychotherapy and offers important insights into the future of digital mental health services.

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