

Personality, Attachment, and Help-Seeking as Predictors of Attitudes Toward AI in Psychotherapy

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ABSTRACT

Objective: The present study aimed to predict attitudes toward the use of artificial intelligence in psychological treatment based on maladaptive personality traits and attachment styles, with the mediating role of attitudes toward professional psychological help-seeking.

Methods and Materials: This descriptive-correlational study employed a path modeling approach. The statistical population consisted of students from the Islamic Azad University, Science and Research Branch, aged 18 to 35, selected through convenience sampling. The research instruments included the Attitudes toward the Use of Artificial Intelligence in Therapy Scale, attachment styles and the short form of the Personality Inventory for DSM-5–Brief Form (PID-5-BF), and the Professional Psychological Help-Seeking Attitude Scale.

Findings: The results of the structural model analysis indicated that certain personality traits, such as negative affect, were significantly associated with attitudes toward the use of artificial intelligence. Additionally, complex and significant relationships between attachment styles and attitudes toward AI in therapy were revealed. Moreover, the mediating role of attitudes toward professional help-seeking revealed an interesting pattern in explaining these relationships.

Conclusion: The findings suggested that individuals' psychological characteristics played a crucial role in shaping their attitudes toward emerging therapeutic technologies. These insights can guide future research aimed at designing interventions that are better suited to individuals' psychological needs.

Keywords: Artificial Intelligence; Help-Seeking Behavior; Object Attachment; Patient Acceptance of Health Care; Personality Disorders; Psychotherapy

1. Introduction

Artificial intelligence (AI) has moved rapidly from a specialized computational technology to a pervasive

component of contemporary social, educational, health, and decision-making environments. Digital technologies increasingly mediate how individuals obtain information, communicate, learn, make decisions, and access

professional services, while AI-based systems have expanded these possibilities through automated prediction, personalization, conversational interaction, and decision support (Xolmuxamatovich et al., 2025). The growing visibility of AI has also altered the psychological meaning of technology use: individuals are no longer merely interacting with passive digital tools but are increasingly encountering systems that communicate, recommend, interpret, and sometimes participate in decisions traditionally associated with human expertise. The relevance of this transition extends beyond healthcare, as evidence from other consequential decision contexts indicates that changes in the identity or default role of a decision-making agent can influence judgments and outcomes, highlighting the importance of understanding how people respond to different forms of agency in high-stakes settings (Knes et al., 2026). Mental health care represents an especially important context for this transition because psychotherapy depends not only on information processing but also on trust, disclosure, emotional responsiveness, perceived understanding, confidentiality, accountability, and the therapeutic relationship. AI therefore creates both opportunities and psychological tensions when introduced into psychotherapy. Potential applications range from screening and symptom monitoring to conversational support, treatment recommendations, psychoeducation, and adjunctive therapeutic interventions; however, the incorporation of AI into mental health care simultaneously raises ethical concerns regarding privacy, responsibility, transparency, empathy, autonomy, safety, and the possibility of replacing or transforming human therapeutic relationships (Fiske et al., 2019). Consequently, the successful integration of AI into psychotherapy cannot be understood solely as a technical problem. It is equally a problem of human acceptance, psychological readiness, interpersonal expectations, and attitudes toward both technology and professional care.

Research on attitudes toward AI suggests that acceptance is multidimensional rather than reducible to simple enthusiasm for technological innovation. People may simultaneously appreciate the speed, accessibility, consistency, and informational capabilities of AI while expressing reservations about impersonal interaction, errors, data security, accountability, and the absence of human judgment. Patient-centered research has demonstrated that perceptions of AI in health-related contexts are shaped by the perceived advantages and limitations of the technology and by expectations concerning the appropriate balance

between technological assistance and human professional involvement (Benda et al., 2024; Temple et al., 2023). These tensions become particularly salient in mental health care, where users may evaluate AI not only according to functional efficiency but also according to whether it appears emotionally safe, trustworthy, confidential, and capable of supporting psychologically vulnerable individuals. Research specifically addressing preferences for AI in psychotherapy has shown that individuals hold differentiated attitudes toward the incorporation of such systems into therapeutic services, indicating that willingness to use AI-assisted psychotherapy is not uniform across potential users (Aktan et al., 2022). Within the Iranian context, the components underlying attitudes toward AI in psychological treatment have likewise received increasing attention, suggesting the need to examine how individuals prioritize different aspects of AI-supported care rather than treating acceptance as a single undifferentiated reaction (Bayrami & Yekita, 2024). More recent studies of young adults and students also indicate that attitudes toward AI-based mental health support are associated with psychological and help-seeking factors. For example, self-stigma has been examined in relation to young adults' willingness to use AI chatbots for psychotherapy, suggesting that the perceived social and personal costs of conventional help-seeking may influence openness to alternative digital formats (Hoffman et al., 2024). Similarly, research among nursing students has linked perceptions of AI-driven mental health support with emotional symptoms and attitudes toward seeking professional psychological help, further indicating that evaluations of AI-based support are embedded within individuals' broader orientations toward mental health care (Albikawi et al., 2025).

One important source of individual variability in attitudes toward AI is personality. Contemporary research increasingly demonstrates that acceptance, fear, anxiety, and evaluations of AI are partly associated with relatively stable individual differences. Large-scale investigations of attitudes toward AI have found meaningful relationships between personality characteristics and both positive and negative evaluations of AI, supporting the proposition that attitudes toward emerging technologies are psychologically patterned rather than random (Stein et al., 2024). Research examining the Big Five similarly indicates that personality dimensions contribute to differences in technology acceptance among university students (Joy & Venkatachalam, 2024). Park and Woo also demonstrated that personality characteristics can predict attitudes toward

artificial intelligence, reinforcing the idea that some individuals may be dispositionally more receptive to AI whereas others may approach it with skepticism, threat sensitivity, or resistance (Park & Woo, 2022). Moreover, cross-cultural evidence from German and Chinese samples has shown that personality relates to both acceptance and fear of AI and that these associations may differ across cultural contexts, emphasizing the importance of studying such relationships within specific populations rather than assuming universal patterns (Sindermann et al., 2022). Additional research has highlighted the role of honesty–humility in shaping attitudes toward AI, extending the personality literature beyond the conventional Big Five and suggesting that moral-interpersonal dispositions may also contribute to evaluations of intelligent technologies (Zabel et al., 2025).

The psychological mechanisms linking personality to AI attitudes may be particularly relevant when AI is used in psychotherapy. General attitudes toward technological systems can involve concerns about unpredictability, loss of control, competence, privacy, and human replacement, but psychotherapy adds the additional demands of vulnerability, self-disclosure, interpersonal trust, and emotional engagement. Personality traits associated with emotional instability, interpersonal withdrawal, suspiciousness, impulsivity, or antagonistic orientations may therefore influence reactions to AI-assisted therapy in ways that differ from their influence on ordinary consumer technologies. Research has specifically identified AI anxiety as an important correlate of attitudes toward artificial intelligence and has shown that neuroticism is related to more apprehensive evaluations of AI (Stănescu & Romaşcanu, 2024). Kaya and colleagues similarly demonstrated that personality traits, AI anxiety, and demographic characteristics jointly contribute to attitudes toward AI, suggesting that emotional responses to technological change may serve as an important pathway through which personality shapes acceptance (Kaya et al., 2024). These findings are especially relevant to the Alternative Model for Personality Disorders and the maladaptive personality domains represented by negative affectivity, detachment, antagonism, disinhibition, and psychoticism. Although much previous research has focused on normative personality traits, maladaptive domains may provide a more clinically informative framework for explaining attitudes toward AI in psychotherapy because they capture patterns involving heightened negative emotion, interpersonal disengagement, antagonistic behavior, behavioral

dysregulation, and unusual cognition or perception. Examining these dimensions may therefore clarify why some individuals perceive AI-based therapeutic tools as useful and accessible while others experience them as threatening, impersonal, untrustworthy, or unsuitable for psychological care.

Attachment represents another theoretically important framework for understanding reactions to AI-mediated psychotherapy. Attachment theory proposes that individuals develop relatively stable expectations regarding the availability, responsiveness, safety, and trustworthiness of attachment figures, and these expectations influence emotional regulation and interpersonal behavior across relationships. Attachment-related differences have been associated with psychological functioning and interpersonal self-organization, supporting their relevance to how individuals approach supportive relationships and sources of assistance (Topchi et al., 2023). As communication increasingly occurs through digital systems, researchers have begun to investigate whether attachment processes also shape interactions with technologies. A narrative review of attachment styles and digital connectivity has suggested systematic associations between attachment orientations and patterns of engagement with or disengagement from digital technology, indicating that attachment dynamics may extend into technologically mediated behavior (Kolhe, 2024). This possibility is especially pertinent to conversational and relational AI systems, which can simulate responsiveness, continuity, availability, and personalized interaction. Unlike conventional software, such systems may be experienced by users as quasi-social agents, thereby activating expectations that resemble those operating in interpersonal relationships.

Empirical research increasingly supports this extension of attachment theory into human–AI interaction. Gillath and colleagues demonstrated meaningful relationships between attachment and trust in artificial intelligence, providing evidence that attachment-related representations can influence how individuals perceive and rely on AI systems (Gillath et al., 2021). More recently, Yang and Oshio explicitly applied attachment theory to human–AI relationships and developed a framework for conceptualizing attachment-like experiences with AI, demonstrating that dimensions analogous to attachment anxiety and avoidance can emerge in interactions with artificial agents (Yang & Oshio, 2025). Such findings suggest that AI may occupy psychologically meaningful relational roles even when users are fully aware that the system is nonhuman. In digital counseling specifically, trust

and anxious attachment have been examined as predictors of intentions to adopt conversational AI, indicating that attachment processes may influence whether individuals are willing to engage with AI for psychologically sensitive purposes (Wu et al., 2025). Nevertheless, the direction of these relationships may not be straightforward. Securely attached individuals may be more willing to trust new systems because of generally positive expectations regarding support and responsiveness, whereas avoidantly attached individuals might value the interpersonal distance afforded by AI while simultaneously resisting reliance on any external source of help. Anxiously attached individuals may appreciate the immediate availability and responsiveness of conversational systems but may also exhibit heightened concerns about reliability or abandonment-like discontinuity. These potentially competing mechanisms make attachment styles particularly important variables to examine empirically rather than assuming that one style necessarily produces greater acceptance of AI-based psychotherapy.

Attitudes toward professional psychological help-seeking may constitute a central mechanism connecting personality and attachment characteristics with attitudes toward AI in psychotherapy. Seeking psychological help is itself a psychologically complex behavior requiring problem recognition, perceived need, willingness to disclose personal concerns, trust in professional expertise, expectations of benefit, and acceptance of the social and emotional implications of receiving care. Personality characteristics can shape these processes. For example, research among university students has demonstrated that extraversion and neuroticism can moderate associations between stigma and psychological help-seeking, showing that the pathway from perceived barriers to willingness to obtain professional assistance varies according to personality (Abbasi & Beiranvand, 2020). Attachment styles are similarly relevant because help-seeking requires reliance on another person or system during periods of vulnerability. Individuals who expect others to be responsive and trustworthy may experience fewer psychological barriers to seeking support, whereas those characterized by avoidance, distrust, or discomfort with dependence may be less willing to engage professional services. Accordingly, the same dispositional and relational characteristics that influence traditional help-seeking may also shape willingness to consider AI-mediated psychological services.

The mediating role of help-seeking attitudes is particularly plausible because AI psychotherapy exists at the

intersection of two forms of acceptance: acceptance of psychological assistance and acceptance of artificial intelligence. A person who is generally unwilling to seek psychological help may reject both conventional and AI-assisted treatment regardless of technological familiarity, whereas a person with favorable attitudes toward professional help may be more willing to evaluate AI as an additional or complementary avenue of care. Conversely, certain individuals who experience stigma or interpersonal barriers to conventional psychotherapy may regard AI as a more private or less socially threatening alternative. Research on young adults' attitudes toward AI chatbots has highlighted the relevance of self-stigma to willingness to use such systems (Hoffman et al., 2024), while findings among nursing students indicate that attitudes toward seeking professional psychological help are directly relevant to perceptions of AI-driven mental health support (Albikawi et al., 2025). Patient-perspective research further suggests that willingness to use AI in mental health care depends on how users interpret its role, limitations, and relationship to human professionals rather than on technical capability alone (Benda et al., 2024). Thus, help-seeking attitudes may function as a psychologically meaningful bridge through which deeper personality and attachment characteristics influence acceptance of AI in therapeutic contexts.

Despite increasing empirical attention to AI attitudes, important gaps remain. Much of the literature has investigated general attitudes toward AI, technology acceptance, AI anxiety, or isolated personality traits rather than examining maladaptive personality domains specifically in the context of psychotherapy (Kaya et al., 2024; Stănescu & Romaşcanu, 2024; Stein et al., 2024). Other studies have examined attachment and trust in AI or attachment-like experiences with artificial agents but have not simultaneously incorporated maladaptive personality traits and professional help-seeking attitudes into an integrated explanatory model (Gillath et al., 2021; Wu et al., 2025; Yang & Oshio, 2025). Research on psychotherapy preferences has established that attitudes toward AI-based treatment are heterogeneous (Aktan et al., 2022), while studies of patient and student populations demonstrate that trust, psychological concerns, stigma, prior orientations toward care, and perceived limitations of AI remain important considerations (Albikawi et al., 2025; Benda et al., 2024; Temple et al., 2023). At the same time, cross-cultural findings indicate that personality–AI relationships are not necessarily identical across populations (Sindermann et al., 2022), making locally grounded investigation particularly

important. Taken together, this literature supports an integrated approach in which maladaptive personality traits and attachment styles are examined not only as direct predictors of attitudes toward AI-assisted psychotherapy but also as variables whose effects may operate through individuals' willingness to seek professional psychological help.

Accordingly, the aim of the present study was to predict attitudes toward the use of artificial intelligence in psychological treatment based on maladaptive personality traits and attachment styles, with attitudes toward professional psychological help-seeking examined as a mediating variable.

2. Methods and Materials

2.1. Study Design and Participants

The present study is applied in nature and, based on the type of investigation, is a cross-sectional correlational study. Methodologically, it is a descriptive-correlational study employing path analysis. The data collected are quantitative. The statistical population of this research comprises all students enrolled at the University of Science and Research, Tehran, during the 2025–2026 academic year. To determine the sample size, Klein's (2010) recommendation was followed, which states that a minimum of 200 participants is defensible for path analysis models. To account for potential attrition, the target sample size was set at 263 participants; however, 274 individuals ultimately completed the questionnaires.

The inclusion criteria consisted of students from the Islamic Azad University, Science and Research Branch, aged between 18 and 35 years (based on the age range defined by the Supreme Youth Council), who had familiarity or prior experience with artificial intelligence technologies as well as mental health service platforms, and who expressed willingness and consent to participate in the study. Participants were excluded if they self-reported having active or acute psychiatric disorders that could interfere with completing the questionnaires, including psychotic disorders (such as schizophrenia or schizoaffective disorder), bipolar disorder in the acute phase (accompanied by mania or severe depression), or substance use disorders that impaired cognitive functioning.

All questionnaires in this study were self-report instruments and were distributed online via social media platforms (student groups of the University of Science and Research on WhatsApp and Telegram). At the beginning of

each questionnaire, participants were asked to respond as carefully and honestly as possible. All respondents provided informed consent before completing the questionnaires, indicating their agreement to participate in the study and their consent for the use of their responses. The collected data were exported and entered into software for analysis.

2.2. Instruments

The variable "attitude toward the use of AI in treatment" is measured using the standardized Attitudes toward the Use of Artificial Intelligence in Treatment Questionnaire developed by Ongna (2020). This questionnaire consists of 39 items and assesses attitudes toward AI-based treatment across five subscales: distrust and accountability, procedural awareness, personal interaction, efficiency, and being informed. It captures patients' perspectives regarding AI and is also highly applicable for evaluating the use of AI in laboratory procedures and imaging processes, such as radiology. The items of this questionnaire are rated on a 5-point Likert scale, ranging from strongly agree to strongly disagree. Furthermore, a study conducted in Iran in 2024 by Bayrami et al. reported a Cronbach's alpha of 0.795.

To assess maladaptive personality trait domains, the short form of the Personality Inventory for DSM-5–Brief Form (PID-5-BF), developed by Krueger et al. (2012), was used. This instrument is designed to evaluate maladaptive personality traits in adults aged 18 and above. The scale includes 25 items and assesses five major dimensions: negative affectivity, psychoticism, detachment, antagonism, and disinhibition. Responses are rated on a 4-point Likert scale ranging from "completely false" (0) to "completely true" (3). Higher scores in each dimension indicate greater severity of the respective personality trait. The instrument demonstrates satisfactory reliability and validity.

The Adult Attachment Scale (RAAS), developed by Collins and Read, is a self-report measure assessing individuals' abilities to form relationships and their patterns of attachment toward close attachment figures. The instrument consists of three main dimensions: Dependence, Closeness, and Anxiety. The questionnaire includes 18 items in total, rated on a 5-point Likert scale ranging from "Not at all characteristic of me" (1) to "Very characteristic of me" (5). Higher scores indicate a greater intensity of the attachment-related characteristics within each dimension. This tool demonstrates good reliability and validity (all coefficients equal to or greater than 0.80) and is widely used

in research on interpersonal relationships, adult attachment, and mental health.

The Attitudes toward Professional Psychological Help-Seeking Questionnaire, developed by Fischer and Farina (1995), is used to measure individuals' attitudes toward seeking professional psychological assistance. The questionnaire consists of 10 items, scored on a 4-point Likert scale from "strongly disagree" (0) to "strongly agree" (3). Five items (2, 4, 8, 9, and 10) are reverse-scored. The total score represents the individual's overall attitude toward professional psychological help-seeking, with higher scores indicating a more positive attitude toward receiving psychological services. This instrument has been widely used in research related to the acceptance and effectiveness of seeking help from mental health professionals such as psychologists, counselors, and psychiatrists.

2.3. Data analysis

To describe and analyze the questionnaire data, both descriptive and inferential statistical methods were employed. Descriptive statistics, including mean, standard deviation, minimum, and maximum values, were used to present the demographic characteristics of the participants and to describe the research variables. In the inferential section, analytical examinations of the data and path analysis

modeling were conducted using SPSS and LISREL version 8.8 software.

3. Findings and Results

A total of 274 students participated in the study. Their mean age was 27.16 years ($SD = 5.52$), with an age range of 18–35 years. Of the participants, 210 (76.6%) were female and 64 (23.4%) were male. Regarding educational level, 132 participants (48.1%) were bachelor's students, 121 (44.2%) were master's students, and 21 (7.7%) were doctoral students. Psychology students constituted 46.0% ($n = 126$) of the sample, whereas 54.0% ($n = 148$) were studying in other fields. Most participants were single (64.6%, $n = 177$), while 35.4% ($n = 97$) were married. Nearly all participants reported familiarity with artificial intelligence (99.6%, $n = 273$), and 93.4% ($n = 256$) had previously used AI. Moreover, 191 participants (69.7%) had used mental health services, 79 (28.8%) reported a history of psychiatric disorders, and 30 (10.9%) reported a history of psychiatric medication use. Among participants with previous mental health service use, 138 (50.4%) had received in-person psychotherapy, 72 (26.3%) had used online or telephone counseling, 55 (20.1%) had consulted a psychiatrist, 26 (9.5%) had used mental health applications, and 35 (12.8%) reported other forms of mental health care.

Table 1

Descriptive Statistics of the Study Variables

Variable	Mean	SD	Minimum	Maximum
Negative Affectivity	5.09	2.86	0	15
Psychoticism	4.65	3.31	0	14
Detachment	3.53	2.52	0	11
Antagonism	3.99	2.81	0	12
Disinhibition	4.48	2.79	0	15
Secure Attachment	12.79	2.69	3	20
Avoidant Attachment	13.26	2.49	7	20
Anxious Attachment	10.77	5.68	0	24
Attitude Toward Professional Psychological Help-Seeking	21.70	4.99	6	30
Attitude Toward the Use of AI in Psychological Treatment	141.58	12.17	112	181

As shown in Table 1, the mean scores for the maladaptive personality dimensions ranged from 3.53 ($SD = 2.52$) for detachment to 5.09 ($SD = 2.86$) for negative affectivity. Among the attachment dimensions, avoidant attachment had the highest mean ($M = 13.26$, $SD = 2.49$), followed by secure attachment ($M = 12.79$, $SD = 2.69$) and anxious attachment ($M = 10.77$, $SD = 5.68$). The mean score for attitude toward professional psychological help-seeking was 21.70 ($SD = 4.99$), whereas the mean attitude toward the use of AI in

psychological treatment was 141.58 ($SD = 12.17$). The observed score ranges also indicated adequate variability across all study variables for subsequent correlational and path analyses.

Before conducting path analysis, the statistical assumptions were examined. Multivariate outliers were evaluated using Mahalanobis distance. With nine predictor variables, the critical χ^2 value at $p = .001$ was 27.88, whereas the maximum observed Mahalanobis distance was 25.174;

therefore, no multivariate outliers were detected. Examination of univariate normality showed that all skewness and kurtosis coefficients were within ± 2 , with skewness ranging from -0.44 to 0.67 and kurtosis from -1.02 to 0.47 , supporting approximate normality. Multicollinearity was also not problematic, as tolerance

values ranged from 0.440 to 0.850 and VIF values ranged from 1.176 to 2.270 . Finally, inspection of the standardized residual plots indicated that the residuals were approximately normally distributed and showed no serious systematic pattern, supporting the assumptions of normality and homoscedasticity.

Table 2

Correlations Among the Study Variables

Variable	1	2	3	4	5	6	7	8	9	10
1. Negative Affectivity	1									
2. Psychoticism	.55**	1								
3. Detachment	.51**	.53**	1							
4. Antagonism	.57**	.49**	.48**	1						
5. Disinhibition	.66**	.36**	.56**	.54**	1					
6. Secure Attachment	-.28**	-.32**	-.26**	.16**	-.39**	1				
7. Avoidant Attachment	.33**	.27**	.31**	.43**	.27**	-.25**	1			
8. Anxious Attachment	.69**	.45**	.40**	.46**	.34**	-.37**	-.43**	1		
9. Attitude Toward Help-Seeking	-.23**	-.17**	-.31**	-.41**	-.18**	.36**	-.31**	-.27**	1	
10. Attitude Toward AI Use	-.20**	-.06	-.21**	-.10	-.13*	.14*	-.15*	.09	.29**	1

Table 2 shows that attitude toward AI use in psychological treatment was positively correlated with attitude toward professional psychological help-seeking ($r = .29$, $p < .01$) and secure attachment ($r = .14$, $p < .05$), whereas it was negatively correlated with negative affectivity ($r = -.20$, $p < .01$), detachment ($r = -.21$, $p < .01$), disinhibition ($r = -.13$, $p < .05$), and avoidant attachment ($r = -.15$, $p < .05$). Its correlations with psychoticism, antagonism, and anxious attachment were not statistically significant. Among

all correlations in the matrix, the strongest positive association was found between negative affectivity and anxious attachment ($r = .69$, $p < .01$), followed closely by the relationship between negative affectivity and disinhibition ($r = .66$, $p < .01$). Attitude toward professional help-seeking was negatively associated with all five maladaptive personality dimensions and with avoidant and anxious attachment, but positively associated with secure attachment.

Table 3

Standardized Direct, Indirect, and Total Effects in the Path Model

Predictor	Outcome	Direct Effect (β)	t	Indirect Effect on AI (β)	t	Total Effect on AI (β)
Negative Affectivity	Help-Seeking	-.19**	-2.66	—	—	—
Negative Affectivity	AI Use	-.16*	-2.21	-.05**	-2.58	-.21
Psychoticism	Help-Seeking	-.12	-1.54	—	—	—
Psychoticism	AI Use	-.01	-0.18	-.03	-1.83	-.04
Detachment	Help-Seeking	-.26**	-3.62	—	—	—
Detachment	AI Use	-.15*	-2.07	-.06**	-2.85	-.21
Antagonism	Help-Seeking	-.36**	-4.89	—	—	—
Antagonism	AI Use	-.04	-0.54	-.09**	-3.64	-.13
Disinhibition	Help-Seeking	-.12	-1.50	—	—	—
Disinhibition	AI Use	-.08	-0.93	-.03	-1.89	-.11
Secure Attachment	Help-Seeking	.32**	4.38	—	—	—
Secure Attachment	AI Use	.08	1.30	.08**	3.38	.16
Avoidant Attachment	Help-Seeking	-.27**	-3.75	—	—	—
Avoidant Attachment	AI Use	-.10	-1.52	-.07**	-3.12	-.17
Anxious Attachment	Help-Seeking	.21**	2.93	—	—	—
Anxious Attachment	AI Use	.03	0.42	.05*	2.53	.08
Help-Seeking	AI Use	.29**	3.78	—	—	.29

As presented in Table 3, negative affectivity ($\beta = -.19$, $t = -2.66$), detachment ($\beta = -.26$, $t = -3.62$), and antagonism ($\beta = -.36$, $t = -4.89$) had significant negative direct effects on professional psychological help-seeking, whereas secure attachment ($\beta = .32$, $t = 4.38$) and anxious attachment ($\beta = .21$, $t = 2.93$) had significant positive effects and avoidant attachment had a significant negative effect ($\beta = -.27$, $t = -3.75$). Psychoticism and disinhibition did not significantly predict help-seeking. Regarding attitude toward AI use, only negative affectivity ($\beta = -.16$, $t = -2.21$) and detachment ($\beta = -.15$, $t = -2.07$) showed significant negative direct effects among the personality dimensions, while none of the three attachment styles had a significant direct effect. Attitude

toward professional help-seeking itself positively predicted attitude toward AI use ($\beta = .29$, $t = 3.78$). Significant indirect effects through help-seeking were observed for negative affectivity ($\beta = -.05$), detachment ($\beta = -.06$), antagonism ($\beta = -.09$), secure attachment ($\beta = .08$), avoidant attachment ($\beta = -.07$), and anxious attachment ($\beta = .05$), whereas the indirect effects of psychoticism and disinhibition were not significant. These findings indicate that professional psychological help-seeking functioned as an important mediating mechanism linking several personality and attachment characteristics to attitudes toward AI-based psychological treatment.

Table 4

Model Fit Indices and Explained Variance

Model Criterion	Index / Endogenous Variable	Value
Model Fit	Chi-Square (χ^2)	0.000
Model Fit	Degrees of Freedom (df)	0
Model Fit	p-value	1.000
Model Fit	RMSEA	0.000
Explained Variance	Attitude Toward Professional Psychological Help-Seeking, R^2	.25
Explained Variance	Attitude Toward the Use of AI in Psychological Treatment, R^2	.20

Figure 1

Standardized Path Model Predicting Attitudes Toward the Use of Artificial Intelligence in Psychological Treatment

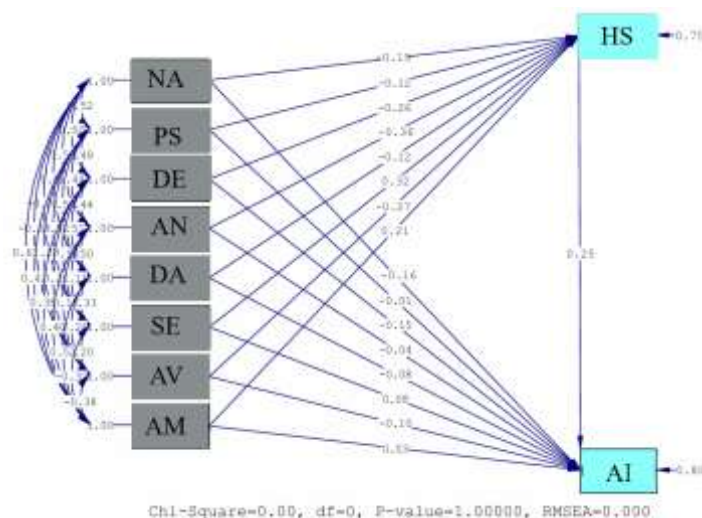
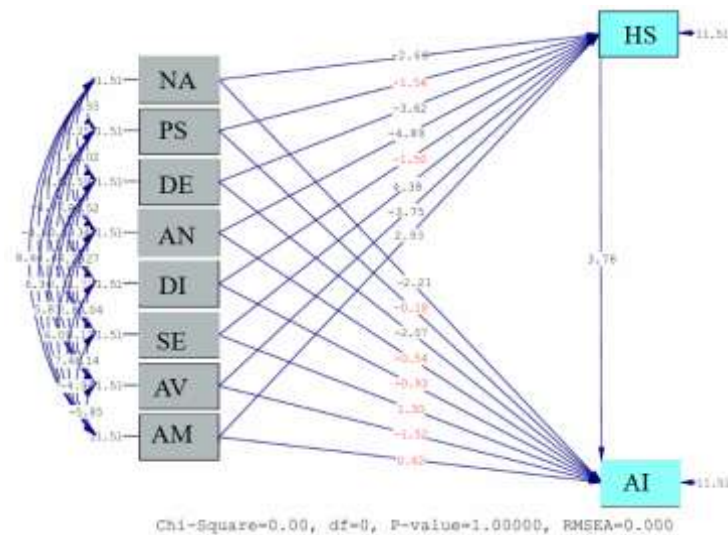


Figure 2

Path Model Predicting Attitudes Toward the Use of Artificial Intelligence in Psychological Treatment Based on t-Values



As shown in Table 4, the model accounted for 25% of the variance in attitudes toward professional psychological help-seeking ($R^2 = .25$) and 20% of the variance in attitudes toward the use of AI in psychological treatment ($R^2 = .20$). The specified path model was saturated, with $\chi^2 = 0$, $df = 0$, $p = 1.000$, and $RMSEA = .000$. Therefore, conventional global fit indices cannot be interpreted in the same manner as in an overidentified structural model because the saturated model reproduces the observed covariance matrix exactly. The explained-variance coefficients nevertheless indicate that the set of maladaptive personality traits and attachment dimensions accounted for one-quarter of the variability in help-seeking attitudes, while the complete structural model accounted for one-fifth of the variability in attitudes toward AI use in psychological treatment.

4. Discussion

The present study examined whether maladaptive personality traits and attachment styles predict attitudes toward the use of artificial intelligence in psychological treatment, with attitudes toward professional psychological help-seeking considered as a mediating mechanism. Overall, the findings showed that psychological characteristics were meaningfully associated with attitudes toward AI-assisted psychotherapy, although the pattern differed across personality and attachment dimensions. Negative affectivity and detachment had significant negative direct effects on attitudes toward AI use in psychological treatment, whereas psychoticism, antagonism, and disinhibition did not show significant direct effects. In addition, negative affectivity, detachment, and antagonism significantly predicted less favorable attitudes toward professional psychological help-seeking. Regarding attachment, secure attachment positively

predicted help-seeking attitudes, avoidant attachment negatively predicted help-seeking attitudes, and anxious attachment showed a positive direct association with help-seeking. However, none of the three attachment styles directly predicted attitudes toward AI use in psychotherapy. Most importantly, attitudes toward professional psychological help-seeking positively predicted attitudes toward AI use and mediated several relationships between personality or attachment variables and attitudes toward AI. The model explained 25% of the variance in attitudes toward professional psychological help-seeking and 20% of the variance in attitudes toward AI use in psychological treatment.

The significant negative direct effect of negative affectivity on attitudes toward AI use is consistent with the broader literature indicating that emotionally vulnerable personality characteristics can contribute to apprehensive or unfavorable evaluations of artificial intelligence. Negative affectivity is characterized by a tendency to experience anxiety, worry, emotional instability, distress, and heightened sensitivity to potential threats. Such individuals may therefore interpret unfamiliar or rapidly developing technologies as uncertain, difficult to control, or potentially harmful. This interpretation is supported by research showing that neuroticism and related emotional traits are associated with greater AI anxiety and less favorable attitudes toward artificial intelligence (Kaya et al., 2024; Stănescu & Romaşcanu, 2024). Similarly, Stein et al. demonstrated meaningful associations between personality and attitudes toward AI, confirming that acceptance of artificial intelligence cannot be separated from stable psychological differences among users (Stein et al., 2024). Cross-cultural findings also indicate that personality is related to both acceptance and fear of AI, with emotionally

unstable individuals showing greater concern about artificial intelligence (Sindermann et al., 2022). The present findings extend these observations to the context of psychotherapy, where uncertainty may be especially salient because individuals are expected to disclose sensitive information and rely on a technological system during psychologically vulnerable situations.

Detachment also showed a significant negative direct effect on attitudes toward AI in psychological treatment. This finding may initially appear counterintuitive because individuals who are socially withdrawn or uncomfortable with interpersonal closeness could theoretically prefer a nonhuman therapeutic interface. However, detachment involves more than avoidance of face-to-face interaction; it also encompasses reduced interest in social relationships, emotional disengagement, restricted affectivity, and reluctance to form supportive connections. Therefore, such individuals may resist not only human interaction but also technology-mediated therapeutic engagement. Previous research on attachment and digital behavior provides indirect support for this explanation. Kolhe reported that attachment-related avoidance is associated with distinctive patterns of digital engagement and withdrawal, suggesting that avoidance tendencies can influence whether individuals approach or distance themselves from technology-mediated relationships (Kolhe, 2024). Research on trust in AI has similarly indicated that relational dispositions influence confidence in artificial agents (Gillath et al., 2021). In psychotherapy, where perceived connection and responsiveness are central, individuals high in detachment may regard an AI system as insufficiently meaningful, emotionally irrelevant, or intrusive rather than as a comfortable substitute for a therapist.

In contrast, psychoticism, antagonism, and disinhibition did not significantly predict attitudes toward AI use directly. One possible explanation is that the participants were university students rather than a clinical sample with severe manifestations of maladaptive personality characteristics. In such a population, variability in pathological traits may be sufficient to detect associations with some psychological processes but not strong enough to produce direct effects on technology-related attitudes. The absence of direct effects is also consistent with evidence that not all personality dimensions are equally relevant to AI acceptance. Park and Woo showed that some personality characteristics are more strongly associated with attitudes toward AI than others (Park & Woo, 2022), while Stein et al. similarly found a differentiated pattern rather than uniform effects across

personality dimensions (Stein et al., 2024). Research among university students has also demonstrated that personality dimensions vary in their contribution to technology acceptance (Joy & Venkatachalam, 2024). Furthermore, Zabel et al. emphasized that even personality characteristics outside the conventional Big Five framework can shape attitudes toward AI in distinct ways, reinforcing the view that AI acceptance reflects a selective configuration of personality influences rather than a generalized personality effect (Zabel et al., 2025).

An important finding was that negative affectivity, detachment, and antagonism significantly predicted less favorable attitudes toward professional psychological help-seeking. This pattern is psychologically plausible because these traits may interfere with willingness to acknowledge vulnerability, trust professionals, disclose personal concerns, or depend on external assistance. Negative affectivity may increase distress while simultaneously magnifying concerns about evaluation or treatment; detachment may reduce interest in interpersonal support; and antagonism may involve distrust, interpersonal defensiveness, or resistance to professional authority. Previous research has established that personality can influence the process of seeking psychological assistance. Abbasi and Beiranvand showed that personality traits such as neuroticism and extraversion modify the relationship between stigma and psychological help-seeking, demonstrating that willingness to obtain professional support is partly dependent on dispositional characteristics (Abbasi & Beiranvand, 2020). The present results extend this literature by suggesting that maladaptive personality traits may influence acceptance of professional support and may subsequently shape receptivity to AI-based forms of psychological treatment.

Among the maladaptive personality traits, antagonism had the strongest negative effect on help-seeking attitudes but did not exert a significant direct effect on attitudes toward AI. Instead, its indirect effect through professional help-seeking was significant. This pattern is theoretically important because it suggests that antagonism may influence AI acceptance primarily through the individual's broader orientation toward psychological assistance rather than through technology-specific evaluations. Individuals high in antagonistic tendencies may be skeptical of professional care, distrustful of experts, or resistant to receiving guidance, and such attitudes may generalize to AI-based therapeutic systems when these systems are perceived as extensions of professional mental health services. This finding is

compatible with research showing that attitudes toward AI-based psychotherapy are shaped not only by general technology acceptance but also by users' beliefs about psychological care, stigma, and the role of professional support (Albikawi et al., 2025; Hoffman et al., 2024). It also highlights the importance of distinguishing direct technological acceptance from the psychological context in which a technology is offered.

The attachment findings revealed a similarly differentiated pattern. Secure attachment positively predicted attitudes toward professional psychological help-seeking, whereas avoidant attachment negatively predicted help-seeking. These results correspond with attachment theory, according to which securely attached individuals generally hold more positive expectations regarding the availability and responsiveness of others, while avoidantly attached individuals are more likely to emphasize self-reliance and distance themselves from dependence on others. Evidence from previous research confirms that attachment style is meaningfully associated with psychological functioning and interpersonal expectations (Topchi et al., 2023). In the context of AI, Gillath et al. showed that attachment characteristics are related to trust in artificial intelligence, providing evidence that relational expectations can extend beyond traditional human relationships (Gillath et al., 2021). More recently, Yang and Oshio demonstrated that human–AI relationships can contain attachment-like dimensions, including anxiety and avoidance, further supporting the relevance of attachment theory to interactions with conversational and relational technologies (Yang & Oshio, 2025).

Anxious attachment showed a significant positive association with professional psychological help-seeking. Although attachment anxiety is typically associated with insecurity, individuals with an anxious attachment orientation may be especially likely to seek reassurance, proximity, rapid support, and responsiveness when distressed. Therefore, their insecurity may increase rather than decrease motivation to obtain psychological assistance. This interpretation is compatible with research on conversational AI in digital counseling, where anxious attachment has been examined as a factor in adoption intentions and patterns of engagement with AI-mediated support (Wu et al., 2025). Yang and Oshio also indicated that attachment anxiety can be meaningfully expressed in human–AI relationships, suggesting that individuals who strongly desire accessible and responsive support may form distinctive patterns of engagement with AI systems (Yang &

Oshio, 2025). Thus, anxious attachment may facilitate help-seeking because of a heightened need for reassurance even when it does not directly increase favorable evaluations of AI psychotherapy.

None of the attachment styles significantly predicted attitudes toward AI use directly. This result suggests that attachment may not influence acceptance of AI-based psychotherapy automatically or independently of other psychological processes. Instead, attachment may shape more proximal relational behaviors, such as willingness to seek help, which subsequently influence attitudes toward specific therapeutic technologies. This interpretation is consistent with the significant indirect effects observed for secure, avoidant, and anxious attachment. Research has shown that attachment affects trust in AI (Gillath et al., 2021), while more recent work demonstrates that trust and attachment characteristics can contribute to intentions to adopt conversational AI for counseling (Wu et al., 2025). However, the relationship between attachment and AI acceptance may be contingent on context, familiarity, expectations of support, and perceived usefulness. Kolhe's review similarly suggests that attachment styles produce complex rather than uniformly positive or negative patterns of digital engagement (Kolhe, 2024). Consequently, the absence of direct effects in the present study does not imply that attachment is irrelevant; rather, it indicates that its influence may operate through mediating psychological mechanisms.

The central finding of the study was the significant positive effect of professional psychological help-seeking attitudes on attitudes toward AI use in psychological treatment. Participants who held more favorable views of seeking professional psychological assistance were more likely to evaluate AI-based psychotherapy positively. This finding supports the view that acceptance of AI in mental health care is partly embedded within a broader readiness to engage with psychological services. Individuals who acknowledge the value of psychological support, feel comfortable receiving assistance, and perceive therapeutic intervention as legitimate may be more open to alternative delivery formats, including AI-assisted systems. Albikawi et al. reported a relationship between perceptions of AI-driven mental health support and psychological help-seeking, providing particularly relevant support for the current finding (Albikawi et al., 2025). Hoffman et al. also demonstrated that self-stigma is relevant to young adults' attitudes toward AI chatbots for psychotherapy, indicating that attitudes toward help-seeking and perceived barriers to

conventional care contribute to acceptance of digital therapeutic options (Hoffman et al., 2024). Aktan et al. further showed that individuals hold differentiated preferences toward AI in psychotherapy, suggesting that acceptance depends on psychological and contextual evaluations rather than technological availability alone (Aktan et al., 2022).

The significant mediating effects provide additional insight into the mechanism underlying these relationships. Professional help-seeking attitudes significantly mediated the associations of negative affectivity, detachment, and antagonism with attitudes toward AI. Individuals with higher levels of these maladaptive characteristics tended to hold less favorable attitudes toward professional help-seeking, which in turn were associated with less favorable attitudes toward AI-assisted psychological treatment. This pathway helps explain why some personality traits may influence AI acceptance even when their direct effects are weak or nonsignificant. It also accords with broader findings showing that personality traits influence AI attitudes through emotional and cognitive mechanisms rather than exclusively through direct effects (Kaya et al., 2024; Stănescu & Romaşcanu, 2024). Similarly, studies of patient perspectives indicate that attitudes toward AI in mental health services depend on perceived trustworthiness, usefulness, human involvement, and acceptability of care delivery (Benda et al., 2024). In other healthcare settings, patients also express nuanced views regarding the implementation of AI, reinforcing the importance of perceived acceptability and appropriate human oversight (Temple et al., 2023).

Help-seeking also significantly mediated the effects of all three attachment styles on attitudes toward AI. Secure attachment was associated with more favorable help-seeking attitudes and, indirectly, more positive attitudes toward AI, whereas avoidant attachment was associated with lower help-seeking and indirectly less favorable AI attitudes. Anxious attachment demonstrated a positive indirect pathway through help-seeking. These findings support a process-oriented interpretation in which attachment styles affect openness to psychological support, and this openness subsequently influences willingness to accept AI as part of the therapeutic environment. Previous research showing that attachment influences trust in AI (Gillath et al., 2021), attachment-like experiences with AI (Yang & Oshio, 2025), and adoption intentions toward conversational AI counseling (Wu et al., 2025) provides converging support for the relevance of relational dispositions in technology-mediated mental health care.

5. Conclusion

Overall, the present findings reinforce the proposition that attitudes toward AI are multidimensional and psychologically embedded. AI acceptance in psychotherapy cannot be reduced to digital literacy or technological familiarity. Rather, users bring stable personality characteristics, attachment-related expectations, emotional concerns, and preexisting attitudes toward professional care into their interactions with AI systems. Studies of general AI acceptance demonstrate the importance of personality and AI anxiety (Kaya et al., 2024; Stein et al., 2024), while research in psychotherapy and mental health emphasizes trust, stigma, patient preferences, and perceived relational adequacy (Aktan et al., 2022; Benda et al., 2024; Fiske et al., 2019). The results are also consistent with the increasing expansion of digital technologies into educational and social contexts, where users are required to adapt psychologically as well as technically to new forms of human–technology interaction (Xolmuxamatovich et al., 2025). Furthermore, the importance of attitudes toward the identity and role of decision-making agents across other domains illustrates that people respond differently when authority or judgment is delegated to nontraditional agents, underscoring the broader relevance of perceived agency in technology-mediated decisions (Knes et al., 2026). Within psychotherapy, these issues are especially consequential because AI systems may be perceived simultaneously as technological tools, sources of information, quasi-social agents, and potential participants in therapeutic decision-making. The present study therefore contributes to the literature by integrating maladaptive personality traits, attachment styles, professional help-seeking attitudes, and attitudes toward AI-assisted psychotherapy within a single explanatory model.

6. Limitations & Suggestions

Several limitations should be considered when interpreting the findings. First, the cross-sectional correlational design does not permit causal conclusions regarding the relationships among personality, attachment, help-seeking attitudes, and attitudes toward AI in psychotherapy, even though the hypothesized pathways were examined through path analysis. Second, participants were recruited through convenience sampling from students at one university and were restricted to the age range of 18–35 years; therefore, the findings may not generalize to older adults, clinical populations, individuals with lower educational attainment, or people from different

geographical and cultural settings. Third, all variables were measured using self-report questionnaires, increasing the possibility of common-method variance, social desirability, recall bias, and response-style effects. Fourth, the study focused on attitudes toward AI-based psychological treatment rather than actual engagement with a specific AI therapeutic system, and favorable attitudes may not necessarily translate into real-world use. Fifth, familiarity with AI, type and frequency of AI use, digital literacy, previous psychotherapy experience, severity of psychological distress, trust in technology, privacy concerns, and perceived AI competence were not incorporated as control or explanatory variables. Finally, because the structural model was saturated, conventional global fit indices could not provide a stringent test of model adequacy, and replication using an overidentified theoretically constrained model would strengthen confidence in the structural relationships.

Future studies should replicate the model in larger and more heterogeneous samples, including clinical populations, different age groups, practicing mental health service users, and participants from multiple universities and regions. Longitudinal designs would be particularly valuable for determining whether personality and attachment characteristics prospectively predict changes in AI attitudes and whether help-seeking attitudes function as a temporal mediator. Experimental studies could expose participants to standardized AI-based therapeutic interactions and examine whether actual experience modifies the observed relationships. Future research should also differentiate among types of AI mental health applications, such as screening systems, conversational agents, automated psychoeducation, clinical decision-support tools, and fully interactive therapeutic systems, because attitudes may vary substantially across applications. Variables such as AI literacy, privacy concerns, perceived empathy, trust, self-stigma, mental health literacy, previous treatment experience, perceived usefulness, perceived risk, and therapeutic alliance expectations should also be incorporated into more comprehensive models. Multi-group analyses across gender, educational level, prior AI experience, prior psychotherapy use, and cultural contexts could identify important moderators. Finally, future studies should test theoretically constrained SEM models with latent variables, compare alternative mediation models, and examine whether professional help-seeking attitudes operate alongside other mediators such as trust in AI, AI anxiety, perceived stigma, and perceived interpersonal safety.

The findings have practical implications for clinicians, developers, universities, and organizations implementing AI-supported mental health services. AI-based psychological interventions should not be introduced as universally acceptable tools because individuals differ substantially in their psychological readiness to engage with them. Screening or onboarding procedures could assess users' concerns about AI, willingness to seek professional help, expectations regarding therapeutic relationships, and preferences for human versus technology-mediated support. Individuals characterized by high negative affectivity may benefit from clear explanations concerning safety, confidentiality, limitations, and human oversight, whereas individuals with avoidant or detached interpersonal tendencies may require low-pressure and autonomy-supportive engagement options. AI platforms should preserve access to human professionals and clearly communicate that automated systems complement rather than indiscriminately replace clinical care. Universities and mental health services could also improve acceptance by simultaneously promoting psychological help-seeking literacy and AI literacy, because favorable orientations toward professional support appear closely connected with openness to AI-assisted treatment. Designers should prioritize transparency, user control, privacy protections, escalation pathways to human clinicians, and relationally sensitive communication. In practice, matching the mode and intensity of AI-supported care to users' personality, attachment tendencies, and help-seeking preferences may improve engagement, reduce resistance, and support safer and more person-centered integration of artificial intelligence into psychological services.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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All authors equally contributed in this article.

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In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

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