KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 28 August 2026
Revised 14 November 2026
Accepted 23 November 2026
Initial Publish 29 November 2026
Published online 01 January 2027

Journal of Assessment and Research in Applied Counseling

Volume 9, Issue 1, pp 1-19

E-ISSN: 3041-8518

A Structural Model of Trust in Artificial Intelligence and Intention to Use Digital Psychotherapy with the Mediating Role of Perceived Usefulness

Yalda. Rezazadeh-Kermani[1], Anahita. Afkhami-Sarvestani[1], Farnoosh. Ghasemi[2*]

[1] Master of Clinical Psychology, Department of Psychology, SR.C., Islamic Azad University, Tehran, Iran
[2] M.A of Clinical Psychology, Department of Psychology, Isf.C., Islamic Azad University, Isfahan, Iran

*** Corresponding author email address**: farnoushghasemi357@gmail.com

Article Info

Article type:
Original Research

How to cite this article:
Rezazadeh-Kermani, Y., Afkhami-Sarvestani, A., & Ghasemi, F. (2026). A Structural Model of Trust in Artificial Intelligence and Intention to Use Digital Psychotherapy with the Mediating Role of Perceived Usefulness. *Journal of Assessment and Research in Applied Counseling*, *9*(1), 1-19.
http://dx.doi.org/10.61838/kman.jarac.6756

© 2026 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Objective: This study aimed to examine the structural relationships between trust in artificial intelligence and intention to use digital psychotherapy with the mediating role of perceived usefulness among adult residents of Tehran.

Methods and Materials: This quantitative study employed a descriptive-correlational, cross-sectional design based on structural equation modeling. The study sample comprised 400 adult residents of Tehran, Iran, selected through convenience sampling. Data were collected using adapted versions of the Trust in Automated Systems Scale, the Perceived Usefulness Scale, and the Behavioral Intention Scale. The psychometric properties of the measurement instruments were evaluated through confirmatory factor analysis, internal consistency reliability, convergent validity, and discriminant validity. Data were analyzed using Pearson's correlation analysis and structural equation modeling with maximum likelihood estimation in SPSS-29 and AMOS-29. The mediating effect was examined using bias-corrected bootstrapping with 5,000 resamples.

Findings: The structural model demonstrated satisfactory goodness-of-fit indices ($\chi^2/df = 1.875$, CFI = 0.963, TLI = 0.958, RMSEA = 0.047, SRMR = 0.043). Trust in artificial intelligence significantly predicted perceived usefulness ($\beta = 0.620$, $p < 0.001$) and intention to use digital psychotherapy ($\beta = 0.270$, $p < 0.001$). Perceived usefulness significantly predicted intention to use digital psychotherapy ($\beta = 0.511$, $p < 0.001$). The indirect effect of trust on behavioral intention through perceived usefulness was statistically significant ($\beta = 0.317$, $p < 0.001$), indicating complementary partial mediation. The structural model explained 38.4% and 50.4% of the variance in perceived usefulness and behavioral intention, respectively.

Conclusion: Trust in artificial intelligence and perceived usefulness constitute important psychological determinants of intention to use digital psychotherapy. Perceived usefulness partially accounts for the relationship between trust and behavioral intention.

Keywords: *Artificial intelligence, trust, perceived usefulness, digital psychotherapy, behavioral intention, technology acceptance, structural equation modeling.*

1. Introduction

The rapid advancement of artificial intelligence (AI) has fundamentally transformed the delivery, accessibility, and organization of psychological services, creating new opportunities for addressing mental health needs through digitally mediated interventions. The integration of intelligent conversational agents, machine learning algorithms, natural language processing, and generative AI into psychological services has expanded the conventional boundaries of psychotherapy by introducing alternative mechanisms for emotional support, psychological assessment, psychoeducation, and therapeutic engagement. Emerging technological environments combining artificial intelligence and extended reality have further diversified the possibilities for developing accessible and personalized mental health interventions (Tabassum et al., 2025). These developments are particularly important in the context of persistent barriers to conventional psychological services, including financial constraints, geographical limitations, social stigma, shortages of mental health professionals, and difficulties in maintaining treatment continuity. From a theoretical perspective, the convergence of psychotherapy, cognitive science, neuroscience, and systems engineering provides opportunities to reconsider the mechanisms through which therapeutic interactions and psychological change can occur within technologically mediated environments (Rad et al., 2025). Nevertheless, the expansion of AI-supported psychological services does not necessarily guarantee their acceptance or utilization by potential users. The successful implementation of digital psychotherapy depends not only on technological sophistication and clinical functionality but also on individuals' psychological readiness to interact with intelligent systems. Research synthesizing the literature on AI acceptance in psychotherapy has emphasized the multidimensional nature of this phenomenon, establishing the importance of investigating the psychological and technological conditions underlying behavioral acceptance (Fan, He, et al., 2026).

Digital psychotherapy encompasses psychological interventions delivered or facilitated through digital technologies, ranging from conventional internet-based therapeutic programs to sophisticated AI-supported conversational systems capable of generating individualized responses. Unlike static digital interventions, generative AI applications can adapt their communication to user inputs, simulate conversational exchanges, and provide context-sensitive psychological support. The psychotherapeutic potential of generative AI has consequently been examined in relation to mentalization, reflective functioning, and the possibility of facilitating psychologically meaningful interactions without attributing human consciousness or genuine intentionality to technological systems (Yirmiya & Fonagy, 2025). Similarly, the application of creative AI within art psychotherapy illustrates how intelligent technologies may contribute to therapeutic expression, symbolic exploration, and engagement in psychologically meaningful activities (Zubala et al., 2025). Research addressing adolescent engagement in generative AI-based art therapy further demonstrates the relevance of examining emotional and behavioral mechanisms underlying participation in technology-supported psychological interventions (Qian, 2025). However, the effectiveness and acceptability of these applications depend on the extent to which their technological characteristics correspond with users' psychological expectations, therapeutic needs, and preferences. Evidence concerning robot-assisted psychological interventions has highlighted therapeutic engagement as an important consideration in evaluating technology-mediated psychological support (Riches et al., 2021). Consequently, understanding digital psychotherapy adoption requires moving beyond technological availability and examining the cognitive and relational evaluations that shape individuals' willingness to engage with intelligent therapeutic systems.

Among the psychological determinants of technology acceptance, trust in artificial intelligence represents a particularly important construct because interaction with intelligent systems frequently involves uncertainty regarding their reliability, competence, predictability, and underlying decision-making processes. Trust in AI can be conceptualized as an individual's willingness to rely on an intelligent technological system under conditions in which its functioning cannot be completely monitored, understood, or controlled. Research on AI-supported decision-making has identified trust, transparency, and data quality as interconnected considerations in evaluating the appropriateness of reliance on intelligent systems (Bondac et al., 2026). In psychological contexts, trust acquires additional importance because users may disclose highly sensitive personal information, communicate emotionally distressing experiences, and seek guidance concerning intimate aspects of their lives. Explainability and safety-related cues may therefore contribute to the formation of trust by reducing uncertainty regarding the capabilities and limitations of generative AI advisors (Balaskas et al., 2025).

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

Furthermore, trust formation involves more than perceptions of technical accuracy; it incorporates evaluations of system integrity, consistency, responsiveness, and anticipated consequences. Research integrating trust theory with innovation diffusion perspectives has positioned trust as a relevant explanatory construct in understanding behavioral intentions toward generative artificial intelligence (Luo & Cao, 2026). Accordingly, individuals who regard AI-supported psychological systems as dependable and appropriately designed may be more willing to consider their potential contribution to psychological well-being, whereas distrust may prevent engagement even when relevant technological services are readily available.

The distinctive characteristics of psychological services make trust in AI qualitatively different from trust in ordinary commercial or informational applications. Psychotherapy traditionally involves a professional relationship characterized by confidentiality, emotional responsiveness, ethical responsibility, and sensitivity to individual circumstances. Introducing intelligent systems into this relationship raises questions concerning whether technological agents can adequately respond to psychological vulnerability while maintaining appropriate therapeutic boundaries. Research examining relationships among AI utilization, therapeutic alliance, and professional engagement in psychological service practitioners has situated technological adoption within the broader relational dynamics of psychological practice (Arnout & Alshehri, 2024). From the perspective of prospective users, willingness to engage with psychotherapy chatbots may also depend on attitudes toward artificial agents, anthropomorphic perceptions, and the individual's need for human interaction (Huțul et al., 2024). These considerations suggest that trust cannot be reduced to a generalized favorable attitude toward technology because individuals may confidently use AI for routine activities while remaining reluctant to disclose psychological difficulties to an artificial agent. Indeed, research examining attitudes toward large language models in psychotherapy has emphasized the importance of differences across user groups and therapeutic tasks (He et al., 2024). Investigations of AI-based mental health services have likewise incorporated trust alongside empathy and privacy concerns when explaining behavioral intention (Fan, Xie, et al., 2026). Thus, trust in artificial intelligence constitutes a context-sensitive psychological evaluation that may determine whether intelligent technologies are regarded as acceptable resources for addressing mental health needs.

Privacy, ethical safeguards, and professional boundaries are particularly relevant to the development of appropriately calibrated trust in digital psychotherapy. Conversational psychological applications may collect information concerning users' emotions, interpersonal relationships, traumatic experiences, behavioral difficulties, and personal vulnerabilities. Uncertainty about how such information is processed, stored, or shared can undermine willingness to engage with AI-supported psychological services. Research reviewing privacy concerns in conversational chatbots has positioned these concerns within broader social and informational contexts, emphasizing that users' evaluations extend beyond the immediate functionality of technological systems (Gumusel, 2024). Importantly, promoting trust should not involve encouraging unquestioning reliance on AI-generated psychological recommendations. Research examining privacy assurances and professional-boundary warnings in generative AI mental health chatbots has explicitly addressed calibrated trust, overreliance risk, and intentions to seek professional help (Zhang et al., 2026). This distinction is essential because appropriate trust involves recognizing both technological capabilities and limitations. Ethical considerations surrounding AI-generated content have also become relevant to behavioral decision-making in other digital environments (Tam, 2026), illustrating the broader importance of integrating ethical evaluations into technology acceptance models. Within digital psychotherapy, appropriately calibrated trust may facilitate engagement by supporting confidence in legitimate technological functions without creating unrealistic expectations regarding clinical competence, crisis management, or the replacement of qualified mental health professionals.

Although trust provides a psychological foundation for technology acceptance, perceived usefulness represents a complementary cognitive mechanism through which favorable evaluations of intelligent systems may translate into behavioral intentions. Within technology acceptance theory, perceived usefulness refers to the extent to which individuals believe that using a technological system will improve relevant outcomes or facilitate the attainment of desired objectives. Investigations extending technology acceptance models across different AI applications have incorporated cognitive evaluations, user perceptions, trust, and system characteristics to explain adoption decisions (Suhluli, 2026). Similarly, the integration of technology acceptance and socio-technical perspectives in research concerning AI adoption demonstrates the importance of

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

considering perceived instrumental benefits alongside broader individual and organizational conditions (Aourarh & Elkharraz, 2026). In digital psychotherapy, perceived usefulness encompasses beliefs regarding whether AI-supported interventions can provide meaningful psychological assistance, improve access to emotional support, facilitate coping with distress, enhance convenience, and complement conventional mental health services. Research examining digital assistance systems among psychology students and psychotherapists has directly addressed predictors and barriers associated with perceived usefulness, including the potential relevance of exposure to demonstrations of technological capabilities (Oberthaler et al., 2026). Accordingly, perceived usefulness reflects an evaluative judgment concerning anticipated psychological and practical benefits rather than an objective measurement of therapeutic effectiveness. Individuals may therefore trust the general operation of AI systems while remaining unwilling to use digital psychotherapy if they perceive insufficient personal or therapeutic value in such services.

The relationship between trust and perceived usefulness can be explained through the reduction of uncertainty and the development of favorable outcome expectations. When individuals trust an intelligent system, they may be more inclined to regard its outputs as credible, consider its recommendations relevant, and anticipate beneficial consequences from interacting with it. Research investigating students' intentions to use ChatGPT has explicitly examined the relevance of trust to behavioral acceptance, illustrating the importance of extending conventional technology acceptance frameworks beyond purely functional considerations (Rahman et al., 2023). Related investigations have incorporated trust and perceived risk into extended technology acceptance models to provide more comprehensive explanations of generative AI adoption (Balaskas & Androulakis, 2025). The formation of trust may consequently influence the cognitive processes through which individuals evaluate the usefulness of technological applications. Research examining behavioral reasoning in interdisciplinary learning has further situated trust formation and behavioral intention within the broader processes underlying users' evaluations of generative AI (Zhu et al., 2026). In educational settings, personal psychological characteristics such as mindfulness have also been considered in extensions of technology acceptance models (Lan et al., 2025), demonstrating that evaluations of intelligent technologies arise from interactions between individual characteristics and perceived technological capabilities. Applied to digital psychotherapy, these perspectives suggest that individuals who trust AI may be more likely to interpret its accessibility, responsiveness, and personalization as meaningful benefits rather than as superficial technological features.

Behavioral intention constitutes the principal outcome of technology acceptance models and reflects an individual's conscious willingness, expectation, or plan to engage in a particular behavior in the foreseeable future. In digital psychotherapy, behavioral intention represents prospective willingness to use AI-supported psychological services rather than actual utilization or demonstrated therapeutic adherence. Structural investigations concerning acceptance of AI medical diagnosis systems illustrate the relevance of modeling behavioral intentions in health-related technological environments where perceived benefits coexist with uncertainty regarding professional reliability and system performance (Yao & Chiang, 2025). Nevertheless, psychological services involve distinctive considerations because their anticipated outcomes may include emotional relief, improved self-understanding, and the management of distress rather than exclusively objective diagnostic or functional benefits. Research concerning psychotherapists' attitudes toward avatar technologies has identified technology adoption as a relevant issue within professional mental health environments (Ciarmoli et al., 2025). The potential psychological value of intelligent systems has also been explored through constructs such as self-efficacy, autonomy support, and intrinsic motivation in educational contexts (Alqurni, 2026). At the same time, investigations of educational anxiety and mental health in AI-enriched environments highlight the need to recognize the complex psychological consequences accompanying technological transformation (Tian, 2026). Therefore, intentions to use digital psychotherapy should be understood as the outcome of evaluative processes in which anticipated psychological benefits are considered alongside technological uncertainty and personal vulnerability.

The association between trust and behavioral intention has also been investigated extensively across other technological domains, providing a broader conceptual foundation for examining its relevance to digital psychotherapy. Research on intelligent service robots has incorporated trust, perceived risk, and satisfaction into explanations of technology-related evaluations (Seo & Lee, 2021). Similarly, investigations of prospective users' intentions to engage with hotel robots illustrate the

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

importance of examining adoption decisions before actual interaction with intelligent services occurs (Ren et al., 2025). Studies concerning AI chatbots in electronic commerce have further emphasized users' attitudes toward conversational technologies as determinants of their prospective acceptance (Uddin et al., 2024). In more complex decision-making environments, behavioral drivers of AI adoption have been investigated through integrated technology acceptance frameworks in banking and financial services (Papathomas et al., 2025), while research involving financial industry professionals has examined factors underlying intentions to employ AI in business decision-making (Naji et al., 2026). Although findings from these domains cannot be directly generalized to psychotherapy, they provide theoretical justification for examining whether trust facilitates behavioral acceptance through both direct evaluations of technological reliability and indirect evaluations of anticipated usefulness.

The mediating role of perceived usefulness is particularly important because trust alone may not sufficiently explain how favorable perceptions of artificial intelligence become intentions to engage with digital psychotherapy. Research concerning smart home technology adoption demonstrates the broader relevance of behavioral intention in decisions involving intelligent technologies incorporated into personal environments (Daruwala, 2025). However, acceptance processes are also influenced by psychological and contextual characteristics, as illustrated by investigations examining psychological safety, technostress, and trust within moderated mediation frameworks of AI acceptance (Ţuclea & Holostencu, 2026). Moreover, research examining artificial intelligence, social media, personality characteristics, and decision-making has situated AI-related behavior within a broader network of individual and contextual influences (Mohsin et al., 2026). These perspectives support the development of a structural framework in which trust in artificial intelligence is associated with intention to use digital psychotherapy through complementary direct and indirect pathways. The direct pathway reflects the possibility that confidence in intelligent systems independently facilitates willingness to engage with them, whereas the indirect pathway reflects the possibility that trust contributes to favorable evaluations of therapeutic usefulness, which subsequently strengthen behavioral intention. Examining these pathways simultaneously provides a more comprehensive account of technology acceptance than investigating isolated bivariate associations.

Despite the growing literature on artificial intelligence adoption and technology-supported psychological interventions, several conceptual and empirical issues warrant further investigation. Existing research encompasses diverse technological applications, professional populations, educational environments, and mental health contexts, but these differences limit the extent to which general models of AI acceptance can explain intentions to engage with digital psychotherapy among community-dwelling adults. Moreover, favorable attitudes toward artificial intelligence do not necessarily indicate that individuals perceive AI-supported psychological services as personally useful, making it necessary to distinguish trust-related evaluations from anticipated therapeutic benefits. Investigating these relationships among adult residents of Tehran is particularly relevant because the acceptance of digitally mediated psychological services may be shaped by locally situated cultural expectations, technological experiences, attitudes toward mental health treatment, and preferences regarding therapeutic interaction. Structural equation modeling provides an appropriate methodological framework for examining these interrelationships while accounting for measurement error and estimating the direct and indirect associations among the latent constructs. Such an approach can contribute to clarifying whether perceived usefulness represents a meaningful explanatory mechanism linking trust in artificial intelligence with prospective acceptance of digital psychotherapy, while recognizing that cross-sectional associations cannot independently establish causal or temporal precedence. Therefore, the present study aimed to examine the structural relationships between trust in artificial intelligence and intention to use digital psychotherapy with the mediating role of perceived usefulness among adult residents of Tehran, Iran.

2. Methods and Materials

2.1. Study Design and Participants

The present study was designed as an applied, quantitative investigation employing a descriptive-correlational research design based on structural equation modeling (SEM). A cross-sectional approach was adopted to examine the structural relationships between trust in artificial intelligence, perceived usefulness, and intention to use digital psychotherapy, with particular emphasis on the mediating role of perceived usefulness in the relationship between trust in artificial intelligence and behavioral intention. The target statistical population comprised adult

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

residents of Tehran, Iran, who had access to digital technologies and possessed basic familiarity with artificial intelligence applications and digitally delivered mental health services. Considering the requirements of structural equation modeling, the number of latent constructs and observed indicators, the necessity of achieving adequate statistical power for estimating direct and indirect relationships, and the possibility of incomplete questionnaire responses, a sample size of 400 participants was specified. Participants were to be recruited through convenience sampling from different geographical districts of Tehran using online recruitment announcements, social networking platforms, psychological counseling centers, and online mental health communities. To enhance the heterogeneity of the sample, recruitment was designed to include individuals from different age groups, educational backgrounds, occupational categories, and levels of experience with digital technologies. Eligibility criteria included being at least 18 years of age, residing in Tehran, having access to a smartphone or computer connected to the internet, possessing sufficient Persian-language literacy to understand and complete the questionnaires, having basic familiarity with artificial intelligence applications, and providing voluntary informed consent. Previous experience with digital psychotherapy was not considered a mandatory inclusion criterion because behavioral intention encompasses both prospective and existing users of technology-based psychological services. Questionnaires with substantial missing data, duplicate submissions, inconsistent responses, or evidence of careless responding were to be excluded from the final analysis. Before completing the questionnaires, participants were provided with a standardized description of digital psychotherapy, defined in the present study as digitally delivered psychological interventions incorporating artificial intelligence capabilities, including conversational agents, intelligent psychological support systems, and AI-assisted therapeutic platforms. This standardized description was intended to establish a common conceptual understanding among respondents and distinguish AI-supported digital psychotherapy from conventional face-to-face psychotherapy and ordinary videoconferencing-based counseling. Participation was voluntary, and respondents were informed about the objectives of the investigation, the confidentiality of their responses, their right to withdraw without penalty, and the exclusive use of the collected information for scientific research. No personally identifiable information was required, and questionnaire responses were to be stored securely and analyzed in aggregate form.

2.2. Instruments

Trust in Artificial Intelligence Scale. Trust in artificial intelligence was operationalized using an adapted version of the Trust in Automated Systems Scale developed by Jian et al. (2000). This instrument comprises 12 items designed to assess individuals' subjective trust in automated and intelligent technological systems. The scale includes seven positively oriented items reflecting trust and five negatively oriented items reflecting distrust. The instrument assesses perceptions of reliability, dependability, integrity, confidence, predictability, security, and potential risks associated with interacting with automated systems. Each item is rated on a seven-point Likert scale ranging from 1 (not at all) to 7 (extremely). Negatively worded items are reverse-scored before calculating the overall score. Total scores range from 12 to 84, with higher scores indicating greater trust in artificial intelligence. For the purposes of the present investigation, the wording of the items was contextualized to refer specifically to artificial intelligence systems incorporated into digital psychotherapy services. The original instrument was developed through empirical investigations of interpersonal and human–automation trust and has subsequently been employed in research examining trust in intelligent technological systems. Given the contextual adaptation of the instrument, its construct validity and internal consistency were specified to be evaluated through confirmatory factor analysis, Cronbach's alpha, McDonald's omega, and composite reliability.

Perceived Usefulness Scale. Perceived usefulness was assessed using an adapted version of the Perceived Usefulness Scale developed by Davis (1989) within the framework of the Technology Acceptance Model (TAM). The original instrument comprises six items measuring the extent to which individuals believe that using a particular technological system improves their performance and facilitates the achievement of desired outcomes. In the present study, the items were contextualized to assess participants' perceptions of the usefulness of AI-supported digital psychotherapy in addressing psychological concerns, improving access to psychological support, facilitating the management of emotional difficulties, enhancing the efficiency of receiving mental health services, and contributing to psychological well-being. Responses are recorded on a seven-point Likert scale ranging from 1

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

(strongly disagree) to 7 (strongly agree). The total score ranges from 6 to 42, with higher scores representing more favorable perceptions of the usefulness of digital psychotherapy. Davis (1989) reported a Cronbach's alpha coefficient of 0.98 for the original perceived usefulness scale, indicating excellent internal consistency. The instrument has subsequently become one of the most extensively utilized measures in technology acceptance research. Nevertheless, because perceived usefulness in the context of digital psychotherapy differs substantively from its original application in occupational information systems, the psychometric characteristics of the adapted instrument were specified to be independently examined within the target population through confirmatory factor analysis, internal consistency estimates, composite reliability, and average variance extracted.

Behavioral Intention to Use Digital Psychotherapy Scale. Intention to use digital psychotherapy was measured using an adapted version of the Behavioral Intention Scale introduced by Venkatesh et al. (2003) within the Unified Theory of Acceptance and Use of Technology (UTAUT). The instrument consists of three items assessing individuals' intentions, expectations, and plans to use a particular technological system in the foreseeable future. In the present investigation, the items were adapted to measure respondents' willingness and intention to use AI-supported digital psychotherapy services during the subsequent six months. The instrument assesses prospective technology acceptance rather than actual utilization behavior, thereby enabling the participation of individuals who have not previously received digital psychological interventions. Each item is scored on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Total scores range from 3 to 21, with higher scores indicating a stronger behavioral intention to use digital psychotherapy services. The original instrument was developed and validated within a comprehensive theoretical framework integrating major models of individual technology acceptance and has been widely employed in investigations of behavioral intentions toward emerging technologies. The contextualized version was specified to undergo psychometric evaluation using standardized factor loadings, Cronbach's alpha, McDonald's omega, composite reliability, and average variance extracted.

To ensure the linguistic equivalence and contextual appropriateness of the measurement instruments, a forward–backward translation procedure was specified for developing the Persian-language questionnaires. The original English-language items were to be translated independently into Persian by two bilingual translators familiar with psychological terminology and information technology concepts. Following reconciliation of the translated versions, the resulting Persian questionnaires were to be independently back-translated into English by translators unfamiliar with the original instruments. Semantic discrepancies were to be resolved through consultation with specialists in clinical psychology, psychometrics, and artificial intelligence. The adapted questionnaires were also to undergo expert assessment of item clarity, conceptual relevance, linguistic appropriateness, and correspondence with the theoretical definitions of the respective constructs. A preliminary pilot assessment involving 30 individuals with demographic characteristics comparable to those of the target population was specified to examine item comprehensibility, response patterns, questionnaire administration procedures, and preliminary internal consistency. Participants involved in the pilot assessment were not to be included in the main analytical sample of 400 individuals.

2.3. Data analysis

Data analysis was specified to be performed using IBM SPSS Statistics version 29 and AMOS version 29. Initially, the collected data were to be screened for missing values, duplicate observations, inconsistent responses, univariate and multivariate outliers, and potential data entry errors. Descriptive statistics, including frequencies, percentages, means, standard deviations, skewness, and kurtosis coefficients, were to be calculated to summarize participants' demographic characteristics and the distributions of the research variables. Univariate normality was to be evaluated using skewness and kurtosis coefficients, whereas multivariate normality was to be examined using Mardia's multivariate kurtosis coefficient. Multivariate outliers were to be identified using Mahalanobis distance, and potential multicollinearity among the predictor variables was to be assessed using tolerance values and variance inflation factors. Pearson's product–moment correlation coefficients were to be calculated to examine the direction and magnitude of the bivariate associations among trust in artificial intelligence, perceived usefulness, and intention to use digital psychotherapy. Internal consistency reliability was to be evaluated using Cronbach's alpha, McDonald's omega, and composite

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

reliability, with coefficients of 0.70 or higher considered indicative of acceptable reliability.

Structural equation modeling was to be conducted using a two-stage analytical procedure comprising evaluation of the measurement model followed by assessment of the structural model. In the first stage, confirmatory factor analysis was specified to examine the factorial structure of the measurement instruments and establish the adequacy of the relationships between the observed indicators and their corresponding latent constructs. Standardized factor loadings of at least 0.50 were considered acceptable, although coefficients exceeding 0.70 were regarded as preferable. Convergent validity was to be assessed using average variance extracted and composite reliability, with threshold values of 0.50 and 0.70, respectively. Discriminant validity was to be evaluated using the Fornell–Larcker criterion and the heterotrait–monotrait ratio of correlations, with HTMT values below 0.85 considered indicative of satisfactory construct differentiation. The possibility of common method variance associated with the simultaneous administration of self-report instruments was to be examined through comparison of the hypothesized three-factor measurement model with a competing single-factor model and, where statistically identifiable, a common latent method factor model.

In the second stage, the hypothesized structural model was to be estimated using the maximum likelihood estimation method, subject to the adequacy of distributional assumptions. The structural model incorporated trust in artificial intelligence as the exogenous latent variable, perceived usefulness as the mediating latent variable, and intention to use digital psychotherapy as the endogenous latent variable. Three direct structural paths were specified, including the relationship between trust in artificial intelligence and perceived usefulness, the relationship between perceived usefulness and intention to use digital psychotherapy, and the relationship between trust in artificial intelligence and intention to use digital psychotherapy. Model fit was to be evaluated using the chi-square statistic, the ratio of chi-square to degrees of freedom (χ^2/df), the comparative fit index (CFI), the Tucker–Lewis index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). A χ^2/df ratio below 3.00, CFI and TLI values of at least 0.90, RMSEA values below 0.08, and SRMR values below 0.08 were considered indicative of acceptable model fit. CFI and TLI values of 0.95 or higher and RMSEA values of 0.06 or lower were interpreted as evidence of comparatively strong model fit.

The mediating role of perceived usefulness was to be examined using a bias-corrected bootstrapping procedure with 5,000 resamples and 95% confidence intervals. The indirect effect of trust in artificial intelligence on intention to use digital psychotherapy through perceived usefulness was considered statistically significant when the corresponding bootstrap confidence interval did not include zero. Standardized and unstandardized regression coefficients, standard errors, critical ratios, probability values, and confidence intervals were to be reported for the hypothesized structural relationships. Furthermore, the coefficients of determination (R^2) were to be calculated for perceived usefulness and intention to use digital psychotherapy to establish the proportion of variance explained by their respective predictors. Direct, indirect, and total effects were to be examined to provide a comprehensive assessment of the relationships among the latent constructs. All statistical tests were to be conducted at a significance level of 0.05. Given the cross-sectional and nonexperimental nature of the research design, statistically significant structural and indirect effects were to be interpreted as predictive associations consistent with the hypothesized theoretical model rather than definitive evidence of causal relationships.

3. Findings and Results

In the analytical sample, 400 adult residents of Tehran were included, of whom 228 (57.0%) were women and 172 (43.0%) were men. Regarding age distribution, 96 participants (24.0%) were between 18 and 25 years of age, 138 participants (34.5%) were between 26 and 35 years, 102 participants (25.5%) were between 36 and 45 years, 46 participants (11.5%) were between 46 and 55 years, and 18 participants (4.5%) were aged 56 years or older. The mean age of the participants was 33.84 years (SD = 10.26). Regarding educational attainment, 68 participants (17.0%) held a high school diploma or lower educational qualification, 42 participants (10.5%) held an associate degree, 164 participants (41.0%) held a bachelor's degree, 104 participants (26.0%) held a master's degree, and 22 participants (5.5%) held a doctoral degree. In terms of marital status, 182 participants (45.5%) were single, 194 participants (48.5%) were married, and 24 participants (6.0%) reported other marital statuses. Regarding occupational status, 208 participants (52.0%) were employed, 84 participants (21.0%) were university students,

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

46 participants (11.5%) were self-employed, 48 participants (12.0%) were unemployed or homemakers, and 14 participants (3.5%) were retired. Concerning previous experience with artificial intelligence applications, 74 participants (18.5%) reported limited experience, 174 participants (43.5%) reported moderate experience, and 152 participants (38.0%) reported extensive experience. Furthermore, 126 participants (31.5%) reported previous experience with digitally delivered psychological services, whereas 274 participants (68.5%) had not previously used such services. Regarding prior experience with AI-supported psychological applications specifically, 92 participants (23.0%) reported previous use, while 308 participants (77.0%) reported no previous experience. The demographic distribution illustrated variability in age, educational attainment, occupational status, technological experience, and previous exposure to digital mental health services.

Table 1

Descriptive Statistics and Pearson Correlation Matrix of the Research Variables

Variable	Possible range	Mean	SD	Skewness	Kurtosis	1	2	3
Trust in artificial intelligence	12–84	55.68	12.47	−0.38	−0.46	1.000		
Perceived usefulness	6–42	28.94	6.83	−0.42	−0.31	0.574**	1.000	
Intention to use digital psychotherapy	3–21	13.87	3.92	−0.21	−0.58	0.526**	0.637**	1.000

As presented in Table 1, the mean and standard deviation of trust in artificial intelligence were 55.68 and 12.47, respectively, while perceived usefulness had a mean score of 28.94 and a standard deviation of 6.83. The mean score for intention to use digital psychotherapy was 13.87, with a standard deviation of 3.92. Considering the theoretical midpoint of each measurement instrument, the mean scores for trust in artificial intelligence, perceived usefulness, and intention to use digital psychotherapy were above their respective scale midpoints of 48, 24, and 12, indicating relatively favorable attitudes toward artificial intelligence and the potential adoption of AI-supported digital psychological services within the sample. The skewness coefficients ranged from −0.42 to −0.21, while kurtosis coefficients ranged from −0.58 to −0.31. These coefficients remained within conventional acceptable limits, suggesting no substantial departure from univariate normality. Preliminary assessment of multivariate normality yielded a Mardia normalized multivariate kurtosis coefficient of 3.84, indicating no pronounced violation of the distributional assumptions required for maximum likelihood estimation under the adopted heuristic. Examination of multivariate outliers using Mahalanobis distance was conducted with reference to the chi-square distribution and the number of observed indicators. Furthermore, tolerance values for the structural predictors were above 0.70, and variance inflation factors remained below 1.40, indicating no substantial multicollinearity. Pearson correlation analysis demonstrated a positive and statistically significant association between trust in artificial intelligence and perceived usefulness ($r = 0.574$, $p < 0.001$), indicating that individuals reporting greater trust in intelligent technological systems also tended to perceive AI-supported digital psychotherapy as more beneficial. Trust in artificial intelligence was also positively and significantly associated with intention to use digital psychotherapy ($r = 0.526$, $p < 0.001$). Moreover, perceived usefulness demonstrated a positive and statistically significant correlation with intention to use digital psychotherapy ($r = 0.637$, $p < 0.001$). Among the observed bivariate relationships, the association between perceived usefulness and intention to use digital psychotherapy was the strongest, followed by the relationship between trust in artificial intelligence and perceived usefulness. The direction and magnitude of these associations were consistent with the hypothesized structural relationships and provided preliminary support for examining perceived usefulness as a potential mediator. Nevertheless, the bivariate correlations alone were insufficient to establish mediation, necessitating the subsequent evaluation of the measurement and structural models.

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

Table 2

Confirmatory Factor Analysis, Internal Consistency Reliability, and Construct Validity of the Measurement Model

Construct	Indicator	Standardized factor loading	Cronbach's α	McDonald's ω	CR	AVE
Trust in artificial intelligence	TAI1	0.741	0.941	0.942	0.941	0.570
	TAI2	0.768				
	TAI3	0.719				
	TAI4	0.782				
	TAI5	0.735				
	TAI6	0.806				
	TAI7	0.774				
	TAI8	0.693				
	TAI9	0.752				
	TAI10	0.786				
	TAI11	0.724				
	TAI12	0.773				
Perceived usefulness	PU1	0.812	0.917	0.919	0.919	0.654
	PU2	0.786				
	PU3	0.834				
	PU4	0.768				
	PU5	0.851				
	PU6	0.798				
Intention to use digital psychotherapy	IUDP1	0.861	0.882	0.885	0.885	0.720
	IUDP2	0.827				
	IUDP3	0.856				

As shown in Table 2, the confirmatory factor analysis of the three-factor measurement model demonstrated satisfactory standardized factor loadings for all 21 observed indicators. The standardized factor loadings of the indicators measuring trust in artificial intelligence ranged from 0.693 to 0.806, with TAI6 demonstrating the highest loading and TAI8 demonstrating the lowest loading. The standardized factor loadings for perceived usefulness ranged from 0.768 to 0.851, whereas the corresponding coefficients for intention to use digital psychotherapy ranged from 0.827 to 0.861. All indicators exceeded the minimum acceptable standardized factor loading of 0.50, and 20 of the 21 indicators exceeded the more stringent recommended threshold of 0.70. Although the standardized factor loading of TAI8 was slightly below 0.70, its magnitude remained acceptable, and retaining the indicator was justified on the basis of its contribution to the conceptual coverage of trust in artificial intelligence. Consequently, no observed indicators were eliminated from the measurement model. Regarding internal consistency reliability, Cronbach's alpha coefficients were 0.941, 0.917, and 0.882 for trust in artificial intelligence, perceived usefulness, and intention to use digital psychotherapy, respectively. Similarly, McDonald's omega coefficients were 0.942, 0.919, and 0.885, respectively, exceeding the recommended threshold of 0.70 for all constructs. Composite reliability coefficients were 0.941 for trust in artificial intelligence, 0.919 for perceived usefulness, and 0.885 for intention to use digital psychotherapy, providing further evidence of satisfactory construct-level reliability. The average variance extracted values were 0.570, 0.654, and 0.720, respectively, exceeding the minimum recommended criterion of 0.50. These results indicated that each latent construct accounted for more than half of the variance in its corresponding observed indicators, supporting the convergent validity of the measurement instruments. Discriminant validity was subsequently examined using the Fornell–Larcker criterion and the heterotrait–monotrait ratio of correlations. The square roots of the average variance extracted values for trust in artificial intelligence, perceived usefulness, and intention to use digital psychotherapy were 0.755, 0.809, and 0.849, respectively. These values exceeded the corresponding interconstruct correlations of 0.620 between trust in artificial intelligence and perceived usefulness, 0.587 between trust in artificial intelligence and intention to use digital psychotherapy, and 0.678 between perceived usefulness and intention to use digital psychotherapy. Furthermore, the HTMT coefficients were 0.638 for trust in artificial intelligence and perceived usefulness, 0.601 for trust in artificial intelligence and intention to use digital psychotherapy, and 0.695 for perceived usefulness and intention to use digital psychotherapy. All HTMT

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

coefficients remained below the recommended threshold of 0.85, providing additional support for discriminant validity. Collectively, the measurement model results indicated that the three latent constructs possessed satisfactory internal consistency, convergent validity, and discriminant validity and were empirically distinguishable despite their theoretical interconnectedness.

Table 3

Goodness-of-Fit Indices for the Measurement Model, Structural Model, and Competing Single-Factor Model

Fit index	Recommended criterion	Measurement model	Structural model	Single-factor model
Chi-square (χ^2)	Lower values preferable	348.76	348.76	1,184.62
Degrees of freedom (df)	—	186	186	189
Chi-square significance	$p > 0.05$ desirable	< 0.001	< 0.001	< 0.001
χ^2/df	< 3.00	1.875	1.875	6.268
Comparative fit index (CFI)	≥ 0.90	0.963	0.963	0.775
Tucker–Lewis index (TLI)	≥ 0.90	0.958	0.958	0.750
Root mean square error of approximation (RMSEA)	< 0.08	0.047	0.047	0.115
RMSEA 90% confidence interval	Upper limit < 0.08	[0.039, 0.055]	[0.039, 0.055]	[0.109, 0.121]
Standardized root mean square residual (SRMR)	< 0.08	0.043	0.043	0.104
Overall fit assessment	—	Good	Good	Poor

The results presented in Table 3 demonstrated that the hypothesized three-factor measurement model achieved satisfactory overall fit with the covariance structure. Although the chi-square statistic was statistically significant ($\chi^2 = 348.76$, df = 186, $p < 0.001$), this finding was interpreted in conjunction with the remaining fit indices because the chi-square statistic is sensitive to sample size and relatively minor discrepancies between observed and model-implied covariance matrices. The ratio of chi-square to degrees of freedom was 1.875, remaining below the recommended threshold of 3.00 and indicating satisfactory relative model fit. Furthermore, the comparative fit index was 0.963 and the Tucker–Lewis index was 0.958, both exceeding the more stringent recommended criterion of 0.95. The root mean square error of approximation was 0.047, with a 90% confidence interval ranging from 0.039 to 0.055, indicating a comparatively small degree of approximation error. The standardized root mean square residual was 0.043, which was substantially below the maximum acceptable threshold of 0.08. Collectively, these fit indices supported the adequacy of the hypothesized three-factor measurement structure. The structural model demonstrated identical global fit indices because all three possible directional relationships among the latent constructs were specified in accordance with the hypothesized recursive mediation framework. Therefore, the structural component did not impose additional covariance restrictions beyond those established by the three-factor measurement model. To examine whether the observed indicators could be adequately represented by a single general factor, the hypothesized measurement model was compared with a competing single-factor model in which all 21 observed indicators loaded onto one latent construct. The competing model demonstrated substantially poorer fit, with a chi-square value of 1,184.62, a chi-square-to-degrees-of-freedom ratio of 6.268, a comparative fit index of 0.775, a Tucker–Lewis index of 0.750, an RMSEA of 0.115, and an SRMR of 0.104. The difference in chi-square statistics between the competing models was 835.86, accompanied by a substantial deterioration in incremental and absolute fit indices in the single-factor model. These results supported the multidimensional representation of the research constructs and demonstrated that the covariance among the observed indicators could not be satisfactorily explained by a single general factor. Nevertheless, the inferior fit of the single-factor model did not independently establish the absence of common method variance, and the possibility of shared measurement effects remained a methodological consideration. Overall, the fit indices supported proceeding with the interpretation of the hypothesized structural path coefficients and the examination of the mediating role of perceived usefulness.

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

Table 4

Direct, Indirect, and Total Effects in the Structural Model of Intention to Use Digital Psychotherapy

Structural relationship	B	SE	β	CR	p	Bootstrap 95% CI for B
Direct effects						
Trust in AI → Perceived usefulness	0.568	0.049	0.620	11.592	< 0.001	[0.472, 0.665]
Perceived usefulness → Intention to use digital psychotherapy	0.581	0.065	0.511	8.938	< 0.001	[0.454, 0.711]
Trust in AI → Intention to use digital psychotherapy	0.282	0.058	0.270	4.862	< 0.001	[0.169, 0.397]
Indirect effect						
Trust in AI → Perceived usefulness → Intention to use digital psychotherapy	0.330	0.047	0.317	—	< 0.001	[0.243, 0.428]
Total effect						
Trust in AI → Intention to use digital psychotherapy	0.612	0.055	0.587	—	< 0.001	[0.505, 0.720]
Explained variance						
Perceived usefulness (R^2)			0.384			
Intention to use digital psychotherapy (R^2)			0.504			

As presented in Table 4, the structural equation modeling results demonstrated that all three hypothesized direct relationships were positive and statistically significant. Specifically, trust in artificial intelligence positively predicted perceived usefulness (B = 0.568, SE = 0.049, β = 0.620, CR = 11.592, p < 0.001), indicating that a one-standard-deviation increase in trust in artificial intelligence was associated with a 0.620-standard-deviation increase in perceived usefulness. The corresponding 95% confidence interval for the unstandardized coefficient ranged from 0.472 to 0.665 and did not include zero, supporting the statistical significance of the relationship. Perceived usefulness also demonstrated a positive and statistically significant direct relationship with intention to use digital psychotherapy (B = 0.581, SE = 0.065, β = 0.511, CR = 8.938, p < 0.001). This finding indicated that individuals who perceived AI-supported digital psychotherapy as more useful reported stronger intentions to use such services, even after accounting for trust in artificial intelligence. Furthermore, the direct relationship between trust in artificial intelligence and intention to use digital psychotherapy remained positive and statistically significant after the inclusion of perceived usefulness in the structural model (B = 0.282, SE = 0.058, β = 0.270, CR = 4.862, p < 0.001). Comparison of the standardized coefficients of the two predictors of intention to use digital psychotherapy indicated that perceived usefulness demonstrated a stronger direct association with behavioral intention than trust in artificial intelligence. To investigate the mediating role of perceived usefulness, the indirect relationship between trust in artificial intelligence and intention to use digital psychotherapy was evaluated using bias-corrected bootstrapping with 5,000 resamples. The results demonstrated a positive and statistically significant indirect effect (B = 0.330, SE = 0.047, β = 0.317, p < 0.001), with a 95% bootstrap confidence interval ranging from 0.243 to 0.428. Because the confidence interval did not include zero, the hypothesized indirect relationship was supported. The simultaneous statistical significance and identical positive direction of the direct and indirect effects indicated complementary partial mediation. Accordingly, trust in artificial intelligence was associated with intention to use digital psychotherapy both directly and indirectly through perceived usefulness. The total standardized effect of trust in artificial intelligence on intention to use digital psychotherapy was 0.587 (B = 0.612, p < 0.001), demonstrating the combined magnitude of the direct and mediated relationships. The standardized indirect effect accounted for approximately 54.0% of the total standardized effect, whereas the remaining 46.0% corresponded to the direct effect. Examination of the coefficients of determination further demonstrated that trust in artificial intelligence accounted for 38.4% of the variance in perceived usefulness (R^2 = 0.384). Furthermore, trust in artificial intelligence and perceived usefulness jointly accounted for approximately 50.4% of the variance in intention to use digital psychotherapy (R^2 = 0.504). These findings illustrated the explanatory contribution of the hypothesized model and highlighted the importance of perceived usefulness in statistically accounting for the relationship between trust in artificial intelligence and behavioral intention. Nevertheless, given the cross-sectional nature of the research design, the estimated indirect effect represented statistical mediation consistent with the hypothesized theoretical ordering rather than definitive evidence of a temporally established causal mechanism.

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

Figure 1

Final Structural Model of Trust in Artificial Intelligence and Intention to Use Digital Psychotherapy with the Mediating Role of Perceived Usefulness

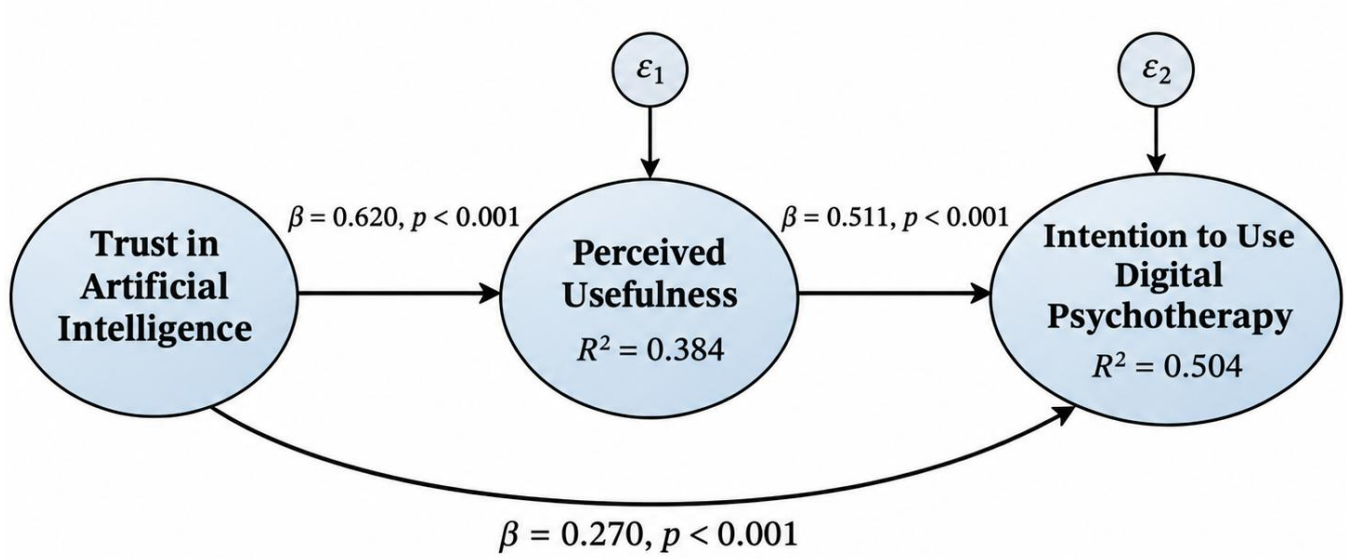


Figure 1 presents the final structural representation of the hypothesized relationships among trust in artificial intelligence, perceived usefulness, and intention to use digital psychotherapy, accompanied by the standardized structural path coefficients and coefficients of determination for the endogenous constructs. In the structural model, trust in artificial intelligence was specified as the exogenous latent construct, perceived usefulness was incorporated as the mediating endogenous latent construct, and intention to use digital psychotherapy was specified as the ultimate endogenous latent construct. The standardized path coefficient from trust in artificial intelligence to perceived usefulness was 0.620, demonstrating the substantial positive association between confidence in intelligent technological systems and perceptions of the potential benefits of digital psychological services. The standardized path coefficient from perceived usefulness to intention to use digital psychotherapy was 0.511, representing the strongest direct predictive relationship with behavioral intention within the final structural model. The standardized direct path coefficient from trust in artificial intelligence to intention to use digital psychotherapy was 0.270, indicating that trust retained an independent positive association with behavioral intention after perceived usefulness was incorporated into the model. All three structural paths were statistically significant at $p < 0.001$. The coefficient of determination associated with perceived usefulness was 0.384, indicating that 38.4% of its variance was statistically explained by trust in artificial intelligence, while 61.6% remained attributable to unexplained variance and factors not incorporated into the model. Similarly, the coefficient of determination associated with intention to use digital psychotherapy was 0.504, demonstrating that trust in artificial intelligence and perceived usefulness jointly explained approximately half of the variance in behavioral intention. The remaining 49.6% represented variance not explained by the hypothesized predictors. The simultaneous presence of statistically significant direct and mediated relationships demonstrated that perceived usefulness partially accounted for the association between trust in artificial intelligence and intention to use digital psychotherapy without completely eliminating the direct contribution of trust. The final structural configuration was therefore consistent with the theoretical proposition that individuals' intentions to adopt AI-supported psychological services are associated with both their confidence in artificial intelligence and their evaluations of the instrumental benefits of such services. Overall, the findings supported all hypothesized direct relationships and the proposed complementary partial mediating role of perceived usefulness within the structural model.

4. Discussion

The present study aimed to examine the structural relationships between trust in artificial intelligence and

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

intention to use digital psychotherapy with the mediating role of perceived usefulness among adult residents of Tehran. The structural equation modeling results indicated that trust in artificial intelligence positively and significantly predicted perceived usefulness and intention to use digital psychotherapy. Furthermore, perceived usefulness demonstrated a positive and statistically significant relationship with intention to use digital psychotherapy and partially mediated the relationship between trust in artificial intelligence and behavioral intention. The proposed structural model accounted for 38.4% of the variance in perceived usefulness and 50.4% of the variance in intention to use digital psychotherapy. These findings are consistent with contemporary theoretical perspectives that conceptualize artificial intelligence acceptance as a multidimensional phenomenon involving trust-related evaluations, anticipated instrumental benefits, and behavioral readiness (Fan, He, et al., 2026; Suhluli, 2026). Moreover, the satisfactory explanatory contribution of the structural model reinforces the relevance of integrating trust into conventional technology acceptance frameworks, particularly when investigating technologies associated with sensitive psychological needs. Previous research incorporating trust and perceived risk into extended technology acceptance models has similarly emphasized the importance of considering psychological evaluations alongside perceptions of technological functionality (Balaskas & Androulakis, 2025). Collectively, the findings suggest that willingness to engage with AI-supported digital psychotherapy reflects both confidence in intelligent technological systems and expectations regarding their potential contribution to psychological well-being.

The first finding demonstrated that trust in artificial intelligence had a positive and statistically significant relationship with perceived usefulness ($\beta = 0.620$, $p < 0.001$). This relationship was the strongest standardized structural association in the proposed model, indicating that individuals reporting greater confidence in artificial intelligence were more likely to perceive digital psychotherapy as useful. This finding aligns with research examining trust formation and behavioral reasoning in generative AI environments, which has emphasized the importance of trust-related evaluations in shaping individuals' interpretations of technological capabilities (Zhu et al., 2026). Similarly, research integrating innovation diffusion theory and trust theory has positioned trust as a central construct in explaining individuals' evaluations and acceptance of intelligent technologies (Luo & Cao, 2026). From a theoretical perspective, trust reduces uncertainty concerning system reliability, output quality, and the anticipated consequences of technological interaction. When users believe that AI systems operate consistently and generate credible responses, they may be more inclined to recognize their potential instrumental benefits. The interrelationships among trust, transparency, and data quality identified in AI-supported decision-making research provide further conceptual support for this explanation (Bondac et al., 2026). Within digital psychotherapy, uncertainty regarding the accuracy and appropriateness of AI-generated responses may otherwise prevent users from appreciating technological advantages such as accessibility, responsiveness, and personalized psychological assistance. Research examining perceived usefulness among psychology students and psychotherapists also underscores the relevance of understanding technological capabilities and overcoming barriers to favorable usefulness evaluations (Oberthaler et al., 2026). Accordingly, trust appears to provide a cognitive foundation through which the functional characteristics of AI-supported psychological services acquire perceived personal relevance.

The positive association between trust and perceived usefulness can also be explained by the distinctive psychological characteristics of therapeutic interaction. Unlike ordinary technological applications, digital psychotherapy may involve the disclosure of emotionally sensitive experiences, interpersonal difficulties, and psychological vulnerabilities. Consequently, individuals' evaluations of therapeutic usefulness may depend substantially on whether they perceive the technological environment as sufficiently dependable and secure. Research concerning explainability and safety cues in generative AI advisors has highlighted their relevance to trust formation and users' evaluations of intelligent systems (Balaskas et al., 2025). In psychological applications, such characteristics may facilitate favorable expectations concerning the appropriateness, consistency, and relevance of AI-generated responses. The psychotherapeutic potential of generative artificial intelligence has also been discussed in relation to reflective functioning and mentalization, despite the absence of genuine human consciousness within these systems (Yirmiya & Fonagy, 2025). Users who recognize both the capabilities and limitations of intelligent conversational agents may therefore be better positioned to appreciate their supportive functions. Nevertheless, privacy concerns remain particularly important because uncertainty surrounding the management of sensitive information may

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

undermine confidence in otherwise functional applications (Gumusel, 2024). Thus, the observed association should not be interpreted as justification for maximizing trust indiscriminately. Rather, it emphasizes the importance of developing appropriately calibrated trust that enables users to recognize legitimate technological benefits without overestimating clinical capabilities.

The second finding revealed that trust in artificial intelligence positively and significantly predicted intention to use digital psychotherapy ($\beta = 0.270$, $p < 0.001$), even after accounting for perceived usefulness. This finding indicates that trust retains an independent association with prospective acceptance of AI-supported psychological services. Consistent with this result, research examining college students' intentions to use AI-based mental health services has incorporated trust alongside empathy and privacy concerns as important explanatory variables (Fan, Xie, et al., 2026). Investigations addressing behavioral intentions toward psychotherapy chatbots have similarly emphasized the relevance of psychological attitudes, anthropomorphic evaluations, and preferences for human interaction (Huțul et al., 2024). These considerations suggest that individuals may evaluate intelligent therapeutic systems not merely as functional technologies but also as potential interaction partners within psychologically sensitive circumstances. Trust may reduce anticipatory apprehension concerning technological unpredictability, inappropriate responses, and the consequences of disclosing personal information. The importance of trust in behavioral intention is also consistent with research investigating ChatGPT adoption in educational environments (Rahman et al., 2023). Although educational and therapeutic applications differ substantially, both require users to evaluate whether intelligent systems can be relied upon to support personally meaningful objectives. Research concerning acceptance of AI medical diagnosis systems provides additional support for considering behavioral intentions within health-related environments characterized by uncertainty and perceived vulnerability (Yao & Chiang, 2025). Consequently, individuals who regard artificial intelligence as dependable may demonstrate greater willingness to initiate digital therapeutic interactions, independently of their explicit evaluations of anticipated usefulness.

The third finding indicated that perceived usefulness positively and significantly predicted intention to use digital psychotherapy ($\beta = 0.511$, $p < 0.001$). Perceived usefulness demonstrated a stronger direct association with behavioral intention than trust in artificial intelligence, suggesting that anticipated practical and psychological benefits represent a particularly relevant consideration in prospective therapeutic adoption. This finding is consistent with technology acceptance perspectives emphasizing instrumental evaluations as central components of behavioral decision-making. Research integrating technology acceptance frameworks across different AI-supported environments has similarly emphasized the relevance of perceived benefits in explaining adoption intentions (Aourarh & Elkharraz, 2026; Papathomas et al., 2025). Within digital psychotherapy, individuals may evaluate usefulness according to anticipated improvements in access to psychological assistance, convenience, emotional support, and opportunities for managing psychological difficulties. The expansion of mental health technologies integrating artificial intelligence and extended reality illustrates the increasingly diverse range of benefits that users may associate with digitally mediated interventions (Tabassum et al., 2025). Furthermore, research concerning therapeutic engagement in robot-assisted psychological interventions highlights the importance of understanding whether technologically mediated activities are meaningful and engaging for recipients (Riches et al., 2021). From this perspective, individuals are more likely to consider digital psychotherapy when they anticipate that interacting with intelligent systems will address relevant psychological needs rather than merely provide access to innovative technologies. Nevertheless, perceived usefulness remains a subjective evaluation and should not be equated with objectively demonstrated clinical effectiveness.

The importance of perceived usefulness may also reflect individuals' evaluations of barriers associated with conventional psychological services. Potential users who experience scheduling difficulties, geographical limitations, concerns regarding social stigma, or discomfort with initial face-to-face disclosure may regard digital psychotherapy as a comparatively accessible form of psychological assistance. Research addressing differences across therapeutic tasks and user groups in attitudes toward large language models indicates that acceptance may vary according to the specific functions individuals expect intelligent systems to perform (He et al., 2024). Similarly, investigations of psychotherapists' attitudes toward avatar technologies highlight the contextual relevance of perceived technological applications within mental health practice (Ciarmoli et al., 2025). The potential usefulness of AI-supported interventions extends beyond conversational assistance to creative expression and psychologically

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

meaningful engagement, as illustrated by research concerning artificial intelligence in art psychotherapy (Qian, 2025; Zubala et al., 2025). These perspectives suggest that behavioral intention may increase when technological functions correspond with users' particular psychological objectives. Nevertheless, individuals who prioritize interpersonal connection, professional accountability, or complex therapeutic interaction may evaluate the usefulness of automated psychological systems differently. Therefore, perceived usefulness should be understood as a context-dependent evaluation reflecting the correspondence between anticipated technological capabilities and individual psychological needs.

5. Conclusion

The principal finding of the study demonstrated that perceived usefulness significantly mediated the relationship between trust in artificial intelligence and intention to use digital psychotherapy ($\beta = 0.317$, $p < 0.001$). The continued significance of the direct relationship between trust and behavioral intention indicated complementary partial mediation, with the indirect pathway accounting for approximately 54.0% of the total standardized association. This finding provides an integrative explanation of how trust-related evaluations may translate into behavioral readiness. Research extending technology acceptance models through trust and risk-related constructs supports the importance of investigating interconnected psychological pathways rather than treating adoption determinants as independent influences (Balaskas & Androulakis, 2025). Similarly, investigations employing moderated mediation frameworks have situated trust within broader psychological processes involving safety perceptions and technostress (Ţuclea & Holostencu, 2026). The present finding suggests that trusting artificial intelligence may be associated with greater recognition of its anticipated therapeutic benefits, which subsequently relates to stronger willingness to use digital psychotherapy. Trust may thus function as an antecedent of favorable instrumental evaluations, whereas perceived usefulness represents a more proximal correlate of behavioral intention. Research concerning the relationships among AI utilization, therapeutic alliance, and professional engagement provides additional conceptual justification for considering interconnected psychological mechanisms within technology-supported mental health practice (Arnout & Alshehri, 2024). Importantly, the practical implications of this mediation pattern should remain consistent with professional boundaries and appropriately calibrated reliance, particularly given concerns regarding overreliance on generative AI mental health chatbots (Zhang et al., 2026). Overall, the findings support a structural explanation in which both confidence in artificial intelligence and perceptions of its anticipated psychological benefits contribute to prospective acceptance, without establishing that these relationships represent temporally ordered causal mechanisms.

6. Limitations & Suggestions

The present study has several limitations that should be considered when interpreting its findings. First, the cross-sectional research design precludes definitive conclusions regarding causal direction, temporal precedence, and the underlying mechanisms of the observed indirect relationships. Second, convenience sampling among adult residents of Tehran limits the generalizability of the findings to other geographical regions, cultural environments, and populations with different levels of technological accessibility. Third, the exclusive reliance on self-report questionnaires may have introduced social desirability bias, response tendencies, and common method variance. Fourth, behavioral intention was assessed rather than actual utilization, treatment adherence, or clinically demonstrated therapeutic outcomes. Fifth, the contextual adaptation of measurement instruments originally developed for broader technological environments may not have fully captured the distinctive ethical, relational, and clinical dimensions of AI-supported psychotherapy. Finally, potentially relevant variables, including privacy concerns, perceived empathy, digital health literacy, psychological symptom severity, perceived risk, and preferences for human interaction, were not explicitly incorporated into the structural model.

Future research is recommended to employ longitudinal and experimental designs to investigate the temporal ordering of trust, perceived usefulness, and behavioral intention and determine whether changes in these constructs correspond with subsequent utilization of digital psychotherapy. Researchers should recruit more diverse samples through probability-based sampling procedures and conduct comparative investigations across geographical, socioeconomic, and cultural contexts. Future investigations could extend the proposed structural model by incorporating perceived empathy, privacy concerns, digital literacy, psychological safety, perceived risk, and previous therapeutic experiences as additional predictors, mediators,

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

or moderators. Examining measurement invariance across demographic groups and individuals with different levels of technological experience would further clarify the stability of the proposed relationships. Researchers should also distinguish between fully automated psychological support systems, clinician-supervised AI applications, and hybrid therapeutic interventions. Incorporating objective behavioral indicators, actual engagement patterns, treatment adherence, and validated clinical outcome measures would enable a more comprehensive evaluation of the relationship between technology acceptance and therapeutic effectiveness.

From a practical perspective, developers of AI-supported digital psychotherapy platforms should prioritize system reliability, transparent communication, information security, and clearly defined professional boundaries to facilitate appropriately calibrated user trust. Mental health organizations should provide accessible explanations and demonstrations of the specific functions, potential benefits, and limitations of intelligent psychological applications, enabling prospective users to make informed decisions regarding their utilization. Psychologists and psychotherapists may incorporate appropriately validated AI-supported tools as complementary resources within professionally supervised treatment frameworks, particularly for psychoeducation, between-session support, and structured psychological exercises. Developers should also emphasize user-centered design, linguistic accessibility, culturally responsive communication, and the relevance of technological functions to users' psychological needs. Clear referral mechanisms, crisis escalation procedures, informed consent processes, and safeguards against excessive reliance should be incorporated into digital psychotherapy platforms. Rather than promoting artificial intelligence as an unrestricted substitute for professional psychological care, implementation strategies should emphasize its responsible integration into accessible, evidence-informed, and ethically accountable mental health service delivery.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

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.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Authors' Contributions

All authors equally contributed in this article.

Declaration

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

References

Alqurni, J. S. (2026). Exploring the Role of Agentic AI in Fostering Self-Efficacy, Autonomy Support, and Self-Learning Motivation in Higher Education. *Frontiers in Artificial Intelligence*, *9*. https://doi.org/10.3389/frai.2026.1738774

Aourarh, Y., & Elkharraz, A. (2026). Artificial Intelligence Adoption in Recruitment and Selection: A Socio-Technical TAM–TOE Framework Explaining HR Professionals' Behavioral Intention. *Systems*, *14*(9), 1173. https://doi.org/10.3390/systems14091173

Arnout, B. A., & Alshehri, S. M. (2024). Causal Relationships Between the Use of AI, Therapeutic Alliance, and Job Engagement Among Psychological Service Practitioners. *Behavioral Sciences*, *15*(1), 21. https://doi.org/10.3390/bs15010021

Balaskas, S., & Androulakis, G. (2025). Explainability, Safety Cues, and Trust in GenAI Advisors: A SEM–ANN Hybrid Study. *Future Internet*, *17*(12), 566. https://doi.org/10.3390/fi17120566

Balaskas, S., Tsiantos, V. D., Chatzifotiou, S., & Rigou, M. (2025). Determinants of ChatGPT Adoption Intention in Higher Education: Expanding on TAM With the Mediating Roles of Trust and Risk. *Information*, *16*(2), 82. https://doi.org/10.3390/info16020082

Bondac, G. T., Stănescu, S.-G., Ionescu, C. A., Duică, A., & Uzlău, M. C. (2026). Decision-Making in Complex Systems Using AI-Based Decision Support: The Role of Trust, Transparency, and Data Quality. *Electronics*, *15*(2), 372. https://doi.org/10.3390/electronics15020372

Ciarmoli, D., Gennaro, A., Lecce, F., Reho, M., & Triberti, S. (2025). Avatars in Mental Health: Psychotherapists' Attitudes

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

Towards Avatar Technology and Factors Influencing Adoption. *European Journal of Investigation in Health Psychology and Education*, *15*(12), 256. https://doi.org/10.3390/ejihpe15120256

Daruwala, N. A. (2025). Behavioural Intention and Smart Home Technology Adoption. *International Journal of Technology and Human Interaction*, *21*(1), 1-24. https://doi.org/10.4018/ijthi.372059

Fan, M., He, X., Zhou, M., & Xia, T. (2026). A Study on the Factors Associated With College Students' Intention to Use AI-Based Mental Health Services: The Roles of Trust, Empathy, and Privacy Concern. *Behavioral Sciences*, *16*(10), 1874. https://doi.org/10.3390/bs16101874

Fan, M., Xie, X., & Xia, T. (2026). A Meta-Analysis of the Acceptance of Artificial Intelligence in Psychotherapy. *Behavioral Sciences*, *16*(9), 1552. https://doi.org/10.3390/bs16091552

Gumusel, E. (2024). A Literature Review of User Privacy Concerns in Conversational Chatbots: A Social Informatics Approach: An Annual Review of Information Science and Technology (ARIST) Paper. *Journal of the Association for Information Science and Technology*, *76*(1), 121-154. https://doi.org/10.1002/asi.24898

He, Q., Wang, J., & He, D. (2024). The Influence of Task and Group Disparities Over Users' Attitudes Toward Using Large Language Models for Psychotherapy. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *68*(1), 1147-1152. https://doi.org/10.1177/10711813241268507

Huțul, T. D., Popescu, A., Karner-Huțuleac, A., Holman, A. C., & Huțul, A. (2024). Who's Willing to Lay on the Virtual Couch? Attitudes, Anthropomorphism and Need for Human Interaction as Factors of Intentions to Use Chatbots for Psychotherapy. *Counselling and Psychotherapy Research*, *24*(4), 1479-1488. https://doi.org/10.1002/capr.12794

Lan, Y., Chen, H., & Xia, L. (2025). Mindfulness and AI Adoption: Extending the Technology Acceptance Model for Chinese Media Students. *Frontiers in psychology*, *16*. https://doi.org/10.3389/fpsyg.2025.1637502

Luo, T., & Cao, S. (2026). An Empirical Study on College Students' Behavioral Intention to Use Generative Artificial Intelligence: An Integrated Model Based on the Innovation Diffusion Theory and Trust Theory. *Sage Open*, *16*(1). https://doi.org/10.1177/21582440251409860

Mohsin, A. M. A., Li, S., & Quah, K. W. J. (2026). The Influence of Artificial Intelligence, Social Media, and Personality Traits on Purchase Decision-Making Among Generation Z University Students. *Administrative Sciences*, *16*(10), 461. https://doi.org/10.3390/admsci16100461

Naji, G. M. A., Alzoraiki, M., Rao, N. S., & Iskandar, Y. H. P. (2026). Factors Influencing Intention to Use AI in Business Decision Making Among Professional Employees in Malaysia's Financial Industry. *Frontiers in Artificial Intelligence*, *9*. https://doi.org/10.3389/frai.2026.1779573

Oberthaler, M., Röhrig, B., Petrak, F., & Goerigk, S. A. (2026). Perceived Usefulness of Digital Assistance Systems Among Psychology Students and Psychotherapists: Predictors, Barriers and the Impact of a Brief Video Demonstration. *International journal of psychology*, *61*(6). https://doi.org/10.1002/ijop.70268

Papathomas, A., Konteos, G., & Avlogiaris, G. (2025). Behavioral Drivers of AI Adoption in Banking in a Semi-Mature Digital Economy: A TAM and UTAUT-2 Analysis of Stakeholder Perspectives. *Information*, *16*(2), 137. https://doi.org/10.3390/info16020137

Qian, Y. H. (2025). Fostering Adolescent Engagement in Generative AI Art Therapy: A Dual SEM-ANN Analysis of Emotional. *Frontiers in psychology*, *16*. https://doi.org/10.3389/fpsyg.2025.1628471

Rad, D., Maier, M. L., Triff, Z., & Marcu, R. (2025). Entangled Autopoiesis: Reframing Psychotherapy and Neuroscience Through Cognitive Science and Systems Engineering. *Brain Sciences*, *15*(10), 1032. https://doi.org/10.3390/brainsci15101032

Rahman, M. S., Sabbir, M. M., Zhang, J., Moral, I. H., & Hossain, G. M. S. (2023). Examining Students' Intention to Use ChatGPT: Does Trust Matter? *Australasian Journal of Educational Technology*, 51-71. https://doi.org/10.14742/ajet.8956

Ren, G., Wang, G., & Huang, T. (2025). What Influences Potential Users' Intentions to Use Hotel Robots? *Sustainability*, *17*(12), 5271. https://doi.org/10.3390/su17125271

Riches, S., Azevedo, L., Vora, A., Kaleva, I., Taylor, L., Guan, P., Jeyarajaguru, P., McIntosh, H., Petrou, C., Pisani, S., & Hammond, N. (2021). Therapeutic Engagement in Robot-assisted Psychological Interventions: A Systematic Review. *Clinical Psychology & Psychotherapy*, *29*(3), 857-873. https://doi.org/10.1002/cpp.2696

Seo, K. H., & Lee, J. H. (2021). The Emergence of Service Robots at Restaurants: Integrating Trust, Perceived Risk, and Satisfaction. *Sustainability*, *13*(8), 4431. https://doi.org/10.3390/su13084431

Suhluli, S. A. (2026). Digital Adoption of Generative AI Tools: A Multi-Theory Model Linking Cognitive Load, User Perceptions, and System Attributes. *Sustainability*, *18*(4), 2076. https://doi.org/10.3390/su18042076

Tabassum, A., Ghaznavi, I., Abd-Alrazaq, A. A., & Qadir, J. (2025). Exploring the Application of AI and Extended Reality Technologies in Metaverse-Driven Mental Health Solutions: Scoping Review. *Journal of medical Internet research*, *27*, e72400. https://doi.org/10.2196/72400

Tam, D. H. (2026). The Ethical Dilemma of AI-Generated Videos: A Hybrid PLS-SEM, ANN, and fsQCA Study of Purchase Intention in E-Commerce. https://doi.org/10.21203/rs.3.rs-11651204/v1

Tian, Q. (2026). Educational Anxiety and Student Mental Health in the Era of Artificial Intelligence: A Multi-Source Data Fusion Analysis in Smart Education. *Frontiers in Public Health*, *14*. https://doi.org/10.3389/fpubh.2026.1804527

Țuclea, C.-E., & Holostencu, L.-F. (2026). Generation Z Employees' Acceptance and AI Use Intensity: A Moderated Mediation Model of Psychological Safety, Technostress, and Trust. *Merits*, *6*(1), 7. https://doi.org/10.3390/merits6010007

Uddin, M. N., Low, W. T., Rahman, M. A., & Mokhtar, S. (2024). An Exploration of Millennials' Attitudes Towards the Use of Artificial Intelligence Chatbots for Customer Service Within E-Commerce Platforms. *Proceedings of the International Conference on Business Management and Leadership*, *1*(1), 1-19. https://doi.org/10.33422/icbml.v1i1.374

Yao, K. C., & Chiang, S. (2025). Mathematical Modeling and Structural Equation Analysis of Acceptance Behavior Intention to AI Medical Diagnosis Systems. *Mathematics*, *13*(15), 2390. https://doi.org/10.3390/math13152390

Yirmiya, K., & Fonagy, P. (2025). Mentalizing Without a Mind: Psychotherapeutic Potential of Generative AI. *Journal of medical Internet research*, *27*, e79156. https://doi.org/10.2196/79156

Zhang, Z., Lu, X., Zhang, Y., Zhang, H., & Zhang, M. (2026). Privacy Assurances and Professional-Boundary Warnings in Generative AI Mental Health Chatbots: A Randomized Vignette Experiment on Calibrated Trust, Overreliance Risk,

and Professional Help-Seeking Intentions. *Frontiers in psychology*, *17*. https://doi.org/10.3389/fpsyg.2026.1934264

Zhu, J., Chen, J., Covarrubias, M., Li, D., & Wei, W. (2026). Higher Education Students' Trust Formation and Behavioral Intention Toward GenAI in Interdisciplinary Learning: A Behavioral Reasoning Theory Perspective. *Sustainability*, *18*(15), 7986. https://doi.org/10.3390/su18157986

Zubala, A., Pease, A., Lyszkiewicz, K., & Hackett, S. (2025). Art Psychotherapy Meets Creative AI: An Integrative Review Positioning the Role of Creative AI in Art Therapy Process. *Frontiers in psychology*, *16*. https://doi.org/10.3389/fpsyg.2025.1548396

JARAC
Assessment and Research in Applied Counseling
E-ISSN: 3041-8518