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# Modeling the Causal Relationships of Client Engagement Based on Personality Traits with the Mediating Role of Therapeutic Alliance in Psychodynamic Interventions

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#### ABSTRACT

**Objective:** The aim of the present study was to determine the fit of a causal model of the relationships between personality traits and client engagement, with the mediating role of therapeutic alliance in analytic, or psychodynamic, psychotherapy interventions.

**Methods and Materials:** The research method was descriptive-correlational and based on structural equation modeling (SEM). The statistical population included all adult clients referring to psychotherapy clinics in Tehran in 2024 who had attended individual psychodynamic therapy continuously for at least one year. Sampling was conducted using the convenience method, and after incomplete questionnaires were excluded, data from 261 participants were entered into the analysis. The research instruments included Hazan and Shaver's Attachment Styles Questionnaire (1987), Lazarus and Folkman's Coping Strategies Questionnaire (1985), McCrae and Costa's NEO Personality Inventory, the Client Engagement Scale developed by Holdsworth et al. (2014) and Yuskowitz (2018), and Horvath's Working Alliance Inventory (1993). Data were analyzed using SPSS version 29 and AMOS version 26.

**Findings:** The results showed that personality traits ( $\beta = 0.106$ ,  $p < 0.05$ ) and therapeutic alliance ( $\beta = 0.496$ ,  $p < 0.01$ ) had direct and significant effects on client engagement, with therapeutic alliance being the strongest predictor of client engagement. The findings also indicate that in analytic psychotherapy, although relatively stable individual characteristics such as personality directly affect engagement, the quality of the therapeutic alliance, as the most proximal relational factor, plays a central role in strengthening client engagement.

**Conclusion:** These findings emphasize the importance of assessing clients' personality structures and coping capacities, as well as prioritizing the strengthening of the therapeutic alliance at different stages of treatment.

**Keywords:** Client Engagement, Therapeutic Alliance, Personality Traits, Analytic Psychotherapy, Psychodynamic Psychotherapy.

## Introduction

Analytic psychotherapy, or psychodynamic psychotherapy, is one of the most well-known therapeutic methods and is based on the foundations of Sigmund Freud's psychoanalytic theory (Wilson & Thomas, 2004). The focus of this approach is on unconscious content that can play an effective role in an individual's current behaviors, thoughts, and emotions, especially in the ongoing relationship between the client and the therapist. The assumptions of analytic psychotherapy are often rooted in early childhood experiences with primary caregivers, and this approach seeks to explore the relationships and events that have influenced the formation of personality, mental disorders, and individual maladjustment. Examining and resolving emotions that have developed over time requires a long-term, deep, authentic, and healing relationship, so that in this space the unconscious can present and repeat itself, and within the context of a safe and trustworthy relationship, previous unpleasant experiences can be experienced differently and in a non-harmful way. Ultimately, through resolving and freeing oneself from conflicts, the opportunity for renewed growth can emerge. Therefore, client engagement in this type of therapeutic relationship is considered one of the essential and important tasks; it is a process through which the patient and therapist create a unique relationship, and this process is influenced by the individual characteristics of both parties (Maroda, 2009). A review of the research literature shows that, in addition to individual characteristics, other variables can also be candidates for influencing client engagement.

Clients' personality traits and characteristics are among the strongest indicators of response to therapeutic interventions and change (Weiner & Bornstein, 2009). Therefore, it is assumed that these traits can still be influential in predicting client engagement. Personality is a set of internal structures and stable behaviors derived from them. In one of the latest achievements of personality psychologists, McCrae and Costa, using a factor-analytic approach, described personality along five major dimensions or factors: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. Neuroticism refers to the tendency to experience anxiety, tension, rumination, hostility, impulsivity, shyness, irrational

thinking, depression, and low self-esteem. Extraversion refers to the tendency to be positive, assertive, active, kind, and sociable. Openness to experience refers to the tendency toward curiosity, artistic expression, wisdom, flexibility, open-mindedness, and innovation. Agreeableness refers to the tendency toward forgiveness, kindness, generosity, trust, empathy, compliance, self-sacrifice, and loyalty. Conscientiousness refers to the tendency toward organization, efficiency, reliability, self-control, achievement orientation, logic, and reflection (McCrae & Costa, 2008).

Finally, therapeutic alliance is essentially a concept rooted in psychoanalysis (Friedman, 1969) and represents the collaborative relationship that is formed between therapist and client. It has so far been established that therapeutic alliance is a strong predictor of treatment outcomes (Baer, 2015) and also a predictor of client engagement (Krause et al., 2011). Therefore, therapeutic alliance can play a mediating role between therapeutic processes, such as empathy and therapist techniques, and treatment outcomes, and for this reason it can be considered a key mediating variable in causal models (Flückiger et al., 2018).

Therapeutic alliance is regarded as a necessary element for the growth and effectiveness of psychotherapy. This concept has been explained in a three-component model: agreement on goals, agreement on tasks, and bond (Notsu et al., 2025). In general, therapeutic alliance is the collaborative relationship between client and therapist, which plays an important role in promoting interaction and improving symptoms in psychotherapy. Therapeutic alliance is the result of complex interactions between patient and therapist, and distinguishing between the therapist's and patient's roles is highly important in understanding the relationship between alliance and treatment outcome. Of course, therapeutic alliance has also been a controversial factor, and in some cases there has been bias in the extent of its effect across different studies. Nevertheless, it has been examined and accepted as one of the strongest predictors of treatment outcomes across all forms of psychotherapy (Flückiger et al., 2018). Since the relationship between therapeutic alliance and personality traits has also been confirmed (Diener & Monroe, 2011), Elliott et al., (2011), based on what has been stated, the proposed model in the present study includes the most important variables from the

perspective of the research background, and it is expected to lead to the depiction of a system of meaningful relationships among the variables. Ultimately, the aim of this study was to determine the direct and relative effects of personality traits on client engagement through therapeutic alliance.

## Methods and Materials

### Study Design

The research method was descriptive-correlational and based on structural equation modeling (SEM). The statistical population included all adult clients referring to psychotherapy clinics in Tehran in 2024 who had attended individual psychodynamic therapy continuously for at least one year. Sampling was conducted using the convenience method, and after incomplete questionnaires were excluded, data from 261 participants were entered into the analysis. Considering the convenience sampling method, criteria were determined for entry into the study, some of which were related to the clients and some to the type of therapy. For this purpose, it was ensured that the therapists had graduated from psychiatry, psychology, or other fields related to psychotherapy; had been trained or were undergoing training in one of the reputable psychoanalytic training centers; acknowledged that their current approach was psychoanalytic; and had at least three years of psychotherapy experience. Regarding the clients, it was ensured that they were adults who had not been diagnosed with psychotic disorders and had attended individual psychoanalytic therapy continuously for at least one year. It should be noted that clients could have received psychoanalytic therapy either online or in person; however, participation in psychoanalytic group sessions was not accepted.

*Attachment Style Questionnaire:* This scale, developed by Shaver & Hazan (1993), is a 15-item self-report questionnaire designed to assess attachment styles in close relationships. The items of this questionnaire are answered on a five-point Likert scale ranging from 0, never, to 4, almost always. Respondents are asked to choose the items that best describe their characteristic style in close relationships. This questionnaire includes three main subscales, each consisting of 5 items: secure attachment style, avoidant attachment style, and ambivalent attachment style. The score of each subscale

is calculated by averaging the scores of the 5 related items. In other words, the scores of the relevant items are first summed and then divided by 5 to obtain the mean score for each style. Factor analysis of this questionnaire by Collins & Read (1990) extracted three major factors: secure, avoidant, and ambivalent attachment styles, which researchers interpret as the capacity to engage in intimate and close relationships. Regarding reliability, Shaver & Hazan (1993) reported an overall test-retest reliability coefficient of 0.81 and a Cronbach's alpha coefficient of 0.78 for the questionnaire. Collins & Read (1990) also obtained a Cronbach's alpha coefficient of 0.78 for this instrument. In Iranian studies, Ebrahimi Moaghar et al., (2025) reported Cronbach's alpha reliability coefficients of 0.75 for the ambivalent style, 0.83 for the avoidant style, 0.81 for the secure style, and 0.77 for the total scale, indicating desirable reliability quality. Regarding validity, Shaver & Hazan (1993) evaluated and reported the face and content validity as good and the construct validity as highly desirable. In Iran, the content and face validity of the questionnaire were also confirmed by a group of psychology experts, professors at the University of Isfahan. The Shaver & Hazan (1993) Attachment Styles Questionnaire is widely used especially in studies related to close relationships, adult attachment, and the analysis of relational styles, and its Persian version is used in Iranian society with acceptable validity and reliability. Cronbach's alpha reliability coefficients of this questionnaire were reported as 0.79 for the ambivalent style, 0.77 for the avoidant style, 0.78 for the secure style, and 0.77 for the total test.

*Client Engagement Scale (CES):* This scale was developed by Holdsworth (2014), and client engagement is defined in it as a multidimensional variable consisting of three factors: 1) attendance, 2) expected engagement, and 3) homework completion. These factors are consistent with the expected dimensions of engagement that have repeatedly been evaluated in different therapeutic settings (Tetley et al., 2011). The expected engagement factor has the strongest effect on the overall engagement score. In total, 15 items were used to measure client engagement, including 5 items related to the attendance dimension, 7 items related to expected engagement, and 3 items related to homework completion. The scale is scored using a 7-point Likert scale ranging from completely disagree (1) to completely

agree (7). The minimum score of this scale is 12 and its maximum score is 84, with higher scores indicating better client engagement with the therapist and the treatment process. In Iran, the three-factor structure of the engagement variable was confirmed through factor analysis by *Imanzadeh et al.*, in a doctoral dissertation (2021) in an Iranian population. In the present study, with the deletion of one item from the attendance dimension and two items from the expected engagement dimension whose factor loadings were less than 0.40, the fit indices of this instrument were considered appropriate (RMSEA = 0.061, AGFI = 0.914, CFI = 0.976, GFI = 0.994, NFI = 0.957, TLI = 0.969), and the 12-item Client Engagement Scale was confirmed. In this study, the reliability of this instrument was calculated using Cronbach's alpha, composite reliability, and average variance extracted, which were 0.93, 0.95, and 0.63, respectively, indicating confirmation of the reliability of the instrument.

*Working Alliance Inventory*: This scale was developed by *Horvath (2014)* and, at the same time as the dissertation was being written, was standardized for Iranian clients and therapists by the researcher, advisor, and consultant professors. This questionnaire consists of 36 items and measures three subscales, each including 12 items. The subscales are bond, tasks, and goals. Each item is answered using 7 response options, scored on a Likert scale from never (score 1) to always (score 7). The content validity of this questionnaire has been confirmed in various studies. In the present study, both the client and therapist forms of the questionnaire were independently translated into Persian by two individuals. After a coordination meeting, a unified

version was prepared and was then independently back-translated into English by a third person. The English text was compared with the original text in a three-person panel consisting of the main researcher, advisor, and consultant professor, and appropriate changes were applied to the translated text. The final text was to be given to five psychotherapists and five clients so that, if its face validity was confirmed, based on a seven-point Likert scale for assessing clarity and comprehensibility of the statements, it would be used in this study. At the same time, the Cronbach's alpha coefficient of the questionnaire was reported as 0.79.

In the present study, several statistical methods were used to analyze the collected data and answer the research hypotheses. First, at the descriptive statistics stage, mean and standard deviation were used to describe the scores obtained from the questionnaires, the examined indices, and the individual characteristics of the respondents. Then, at the inferential statistics stage, structural equation modeling and analysis of structural relationships were used to evaluate the fit of the model. In addition, Cronbach's alpha coefficient was used to determine the reliability of the research questionnaires.

## Findings and Results

Before testing the research hypotheses, the frequency distribution of the demographic variables was first examined. The frequency distribution of these variables, including gender, education, and age, is presented in Table 1.

**Table 1**

*Frequency and Percentage of Demographic Characteristics of Research Participants*

Variable	Level	Frequency	Percentage
Gender	Female	165	77.5
	Male	48	22.5
Education	Associate degree and lower	29	13.6
	Bachelor's degree	67	31.5
	Master's degree	81	38.0
	Doctoral degree	36	16.9
Age	20 to 24 years	16	7.5
	25 to 29 years	41	19.2
	30 to 34 years	54	25.4
	35 to 39 years	53	25.0
	40 to 45 years	30	14.0
	45 years and older	19	8.9

The participants in this study, consisting of 213 individuals, were all clients who had participated continuously in psychoanalytic therapy for more than one year. These individuals were between 20 and 53 years old, and a large proportion of them were women (77.5%). In terms of educational level, almost all participants had university education, with the largest

proportion holding a master's degree (38%). The largest age group among the participants (50.4%) was 30 to 39 years. Descriptive statistics of the research variables, including number, mean, standard deviation, minimum, maximum, and the results of the Kolmogorov-Smirnov test, are presented in Table 2.

**Table 2**

*Descriptive Statistics and Shapiro-Wilk Test Results for the Research Variables*

Variable	N	Mean	Standard deviation	Minimum	Maximum	Shapiro-Wilk	p
Client engagement	213	55.88	25.55	17	103	0.876	<0.01
Therapeutic alliance	213	163.65	36.26	90	229	0.964	<0.01
Openness	213	40.79	5.25	25	57	0.992	0.270
Extraversion	213	38.43	6.27	19	56	0.991	0.185
Agreeableness	213	41.24	4.85	28	58	0.985	0.026
Neuroticism	213	38.14	7.07	14	55	0.988	0.083
Conscientiousness	213	42.71	6.50	26	59	0.991	0.243

Based on the table above, the Shapiro-Wilk test results were examined to assess the normality of these variables. According to the results of this test, the p-value for the variables of client engagement, therapeutic alliance, and agreeableness was less than 0.05, while it was greater than 0.05 for the other variables. Therefore, except for the three variables mentioned above, the normality of the other variables was confirmed.

Since not all research variables were normally distributed, the partial least squares (PLS) structural equation modeling method was used to test the causal relationships among these variables. Structural equation modeling tests the model in two stages: the measurement model and the structural model. In PLS modeling, the measurement model is called the outer model, and the structural model is called the inner model. The measurement model examines the reliability and validity of the measurement instruments and research constructs, while the structural model tests the hypotheses and relationships among latent variables. To examine construct validity, Fornell & Larcker (1981) proposed three criteria: 1) the validity of each item, 2)

composite reliability of each construct, and 3) average variance extracted (AVE).

Regarding the validity of each item, a factor loading of 0.50 or higher for each item in confirmatory factor analysis indicates a well-defined construct. In addition, the factor loadings of the items must be significant at least at the 0.05 level (Gefen et al., 2011). Composite reliability is the ratio of the sum of the factor loadings of the latent variables to the sum of the factor loadings plus error variance. Its values range from 0 to 1, and it is considered an alternative to Cronbach's alpha. The value of this index should not be less than 0.70. This index is also called the Dillon-Goldstein ratio. The third criterion is the examination of average variance extracted. Fornell & Larcker (1981) recommend values of 0.50 or higher for AVE, meaning that the construct explains about 50% or more of the variance of its indicators (Chen et al., 2001).

According to the statistical analysis results, the standardized factor loadings of all research items were greater than 0.50 and were significant at least at the 0.05 level. Therefore, all questionnaire items had sufficient validity. Table 3 shows composite reliability, Cronbach's alpha, and the AVE index for the research variables.

**Table 3**

*Results of Reliability Assessment of the Research Variables*

Variables	Composite reliability	Cronbach's alpha	AVE
Client engagement	0.965	0.959	0.757
Therapeutic alliance	0.962	0.951	0.602
Openness	0.753	0.773	0.529
Extraversion	0.725	0.718	0.541
Agreeableness	0.767	0.756	0.654
Neuroticism	0.758	0.748	0.510
Conscientiousness	0.753	0.758	0.538

According to the table above, the composite reliability and Cronbach's alpha values for the research variables were greater than 0.70, and the AVE values for these variables were greater than 0.50. Therefore, the obtained results indicate convergent validity and construct consistency. As a result, the validity of the measurement instruments and research constructs was confirmed.

Table 4 shows Pearson correlation coefficients and the convergent validity index. The values on the main diagonal of this matrix represent the square root of the average variance extracted (AVE). The requirement for confirming discriminant validity is that the square root of the AVE should be greater than the absolute value of all correlation coefficients between the relevant variable and the other variables (Chen et al., 2001).

**Table 4***Pearson Correlation Coefficients and Convergent Validity Index*

Variable	1	2	3	4	5	6	7
1. Therapeutic alliance	0.776						
2. Openness	0.671	0.727					
3. Extraversion	0.622	0.540	0.736				
4. Agreeableness	0.700	0.597	0.620	0.809			
5. Neuroticism	-0.560	-0.468	-0.549	-0.508	0.714		
6. Client engagement	0.623	0.643	0.607	0.651	-0.502	0.870	
7. Conscientiousness	0.682	0.584	0.631	0.653	-0.516	0.664	0.733

Note. All correlation coefficients are significant at an error level of less than 1%. The main diagonal shows the square root of the average variance extracted (AVE).

According to the values in the table above, the values on the main diagonal have the highest value in their corresponding columns. Therefore, the construct validity was also confirmed. After examining the reliability and validity of the measurement instruments

and research constructs, or the outer model, it was necessary to test the relationships among the latent variables, or the inner model. For this purpose, the tested research model based on path coefficients is presented in Figure 1.

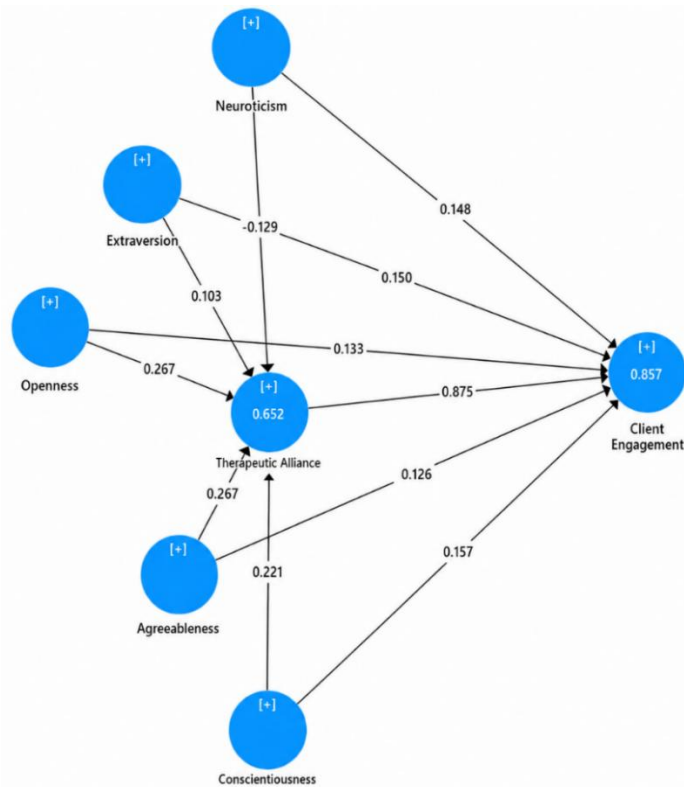


Figure 1

Tested Research Model Based on Path Coefficients

The results of testing the direct causal relationships of the study based on structural equation modeling using the partial least squares method are shown in Table 5. The results of this table show that all direct relationships, except relationship 2, were confirmed at the 0.05

significance level, because their t statistics were greater than 1.96. It should be noted that direct causal relationships 1, 3, 5, and 11 were also confirmed at the 0.01 significance level ( $t > 2.58$ ).

Table 5

Path Coefficients, t Statistics, and Results of Causal Relationships

Relationship no.	Direct relationships	Effect coefficient (β)	Standard deviation	t statistic	Coefficient determination	of Result
1	Openness → Therapeutic alliance	0.267	0.106	2.522**	0.652	Confirmed
2	Extraversion → Therapeutic alliance	0.103	0.094	1.101		Rejected
3	Agreeableness → Therapeutic alliance	0.267	0.063	4.262**		Confirmed
4	Neuroticism → Therapeutic alliance	-0.129	0.062	2.092*		Confirmed
5	Conscientiousness → Therapeutic alliance	0.221	0.062	3.569**		Confirmed
6	Openness → Client engagement	0.133	0.058	1.975*	0.857	Confirmed
7	Extraversion → Client engagement	0.150	0.061	1.982*		Confirmed
8	Agreeableness → Client engagement	0.126	0.045	2.570*		Confirmed
9	Neuroticism → Client engagement	-0.148	0.044	1.988*		Confirmed
10	Conscientiousness → Client engagement	0.157	0.054	2.055*		Confirmed
11	Therapeutic alliance → Client engagement	0.875	0.066	13.348**		Confirmed

Note. \* $|t| > 1.96$  indicates significance at the 0.05 level. \*\* $|t| > 2.58$  indicates significance at the 0.01 level.

Model validity was determined using the coefficient of determination ( $R^2$ ). This coefficient measures the variance of an endogenous variable explained by exogenous variables. The coefficient of determination for the dependent variable, client engagement, was 0.857. This means that 85.7% of the changes in client engagement were explained by changes in openness, extraversion, agreeableness, neuroticism, conscientiousness, and therapeutic alliance. The coefficient of determination for the mediating variable, therapeutic alliance, was 0.652. This means that 65.2% of the changes in therapeutic alliance were explained by

changes in openness, extraversion, agreeableness, neuroticism, and conscientiousness.

To test the significance of the indirect causal relationships of the variables openness, extraversion, agreeableness, neuroticism, and conscientiousness with client engagement through the mediating variable therapeutic alliance, the Sobel test was used. The results of this test are presented in Table 6. In this table, a Z statistic greater than 2.58 indicates a significant effect at the 0.01 significance level, and a Z statistic greater than 1.96 indicates a significant effect at the 0.05 significance level. The VAF index also shows what proportion of the total effect is related to indirect effects.

**Table 6**

*Results of Indirect Effects of Personality Components on Client Engagement Through Therapeutic Alliance*

Relationship no.	Indirect relationships	Z statistic	VAF	Result
1	Neuroticism → Therapeutic alliance → Client engagement	2.050*	0.436	Confirmed
2	Extraversion → Therapeutic alliance → Client engagement	1.089	0.375	Rejected
3	Openness → Therapeutic alliance → Client engagement	2.468*	0.637	Confirmed
4	Agreeableness → Therapeutic alliance → Client engagement	4.027**	0.650	Confirmed
5	Conscientiousness → Therapeutic alliance → Client engagement	3.433**	0.552	Confirmed

According to the results in Table 6, the indirect causal relationship of agreeableness and conscientiousness with client engagement through the mediating variable therapeutic alliance was significant at the 0.01 level ( $Z > 2.58$ ). In addition, the indirect causal relationship of neuroticism and openness with client engagement through the mediating variable therapeutic alliance was significant at the 0.05 level ( $Z > 1.96$ ). However, the indirect causal relationship of extraversion with client engagement through the mediating variable therapeutic alliance was not statistically significant ( $Z < 1.96$ ).

According to the VAF index in Table 6, 43.6% of the total effect of neuroticism on client engagement was explained through the mediating variable therapeutic alliance. Also, 63.7% of the total effect of openness on client engagement was explained through therapeutic alliance. In addition, 65% of the total effect of agreeableness on client engagement was explained through therapeutic alliance. Finally, 55.2% of the total effect of conscientiousness on client engagement was explained through therapeutic alliance. Therefore, among personality traits, agreeableness had the greatest effect on client engagement through therapeutic alliance.

In structural equation modeling using the partial least squares approach, an index called goodness of fit (GOF)

was proposed by [Tenenhaus et al. \(2026\)](#). This index considers both the measurement model and the structural model and is used as a criterion for assessing the overall performance of the model. [Tzels et al. \(2009\)](#) introduced three values of 0.10, 0.25, and 0.36 as weak, moderate, and strong values for GOF, respectively [Mohsenin & Esfidani \(2014\)](#). The GOF value for the model in this study was 0.467. Therefore, the model had strong desirability.

## Discussion and Conclusion

The research hypothesis stated that “personality traits have an indirect effect on client engagement through therapeutic alliance.” The Sobel test was used to examine this hypothesis. The results of this test showed that the Z statistic was 5.989, which is greater than the critical value of 2.58 at the 0.01 significance level. Accordingly, with 99% confidence, it can be concluded that personality traits have a significant indirect effect on client engagement through therapeutic alliance. In addition, the VAF index of 0.675 indicates that approximately 67.5% of the total effect of personality traits on client engagement is mediated through

therapeutic alliance. Therefore, the research hypothesis was confirmed.

This finding indicates that stable behavioral, emotional, and relational patterns, generally defined as personality traits, not only directly affect client engagement but can also have significant effects on the client's bond with the therapist and active participation in the treatment process through therapeutic alliance. In other words, therapeutic alliance, as an important interpersonal process, is a mediating pathway that explains a considerable part of the relationship between clients' personality traits and their engagement in the treatment process. The present finding is consistent with the results of many recent and valid studies in the field of psychotherapy and therapeutic relationship. In recent studies, therapeutic alliance has been identified as one of the most important mediating factors in the relationship between clients' individual characteristics and therapeutic outcomes (Aldao et al., 2015). These studies have shown that the quality of the therapeutic relationship can transmit a major part of the effect of individual background variables on treatment outcomes such as participation, treatment continuation, and client engagement.

Other studies have also found that different personality traits, particularly the dimensions of the five-factor model of personality, can have complex effects on the formation of therapeutic alliance and, consequently, on therapeutic interaction and the outcomes of clients' therapeutic experience. For example, some personality dimensions such as extraversion and agreeableness have been associated with a more positive perception of the therapeutic relationship and a stronger alliance, which helps increase client participation and engagement. These results have been replicated in various studies, showing that personality traits, through their influence on the relational framework between client and therapist, can produce important changes in the treatment process (Morgan et al., 2020).

It should be noted that previous studies have also shown that therapeutic alliance plays a significant role as a mediating variable in the relationship between personality and treatment outcomes. As some studies have indicated, clients who are better able to establish a relationship based on trust and agreement with the therapist in the early stages of treatment achieve better therapeutic outcomes and more active participation.

This clearly demonstrates the mediating role of therapeutic alliance in psychotherapy processes (Flückiger et al., 2018). To theoretically explain this finding, it is necessary first to consider the role of personality in the therapeutic relationship process and then the role of therapeutic alliance as a mediating mechanism. Personality traits, particularly within the five-factor model, represent stable patterns of behavior, emotion, and thought that shape how individuals interact with situations and others. These traits include dimensions such as extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience, each of which can directly create different pathways in relational and therapeutic processes.

From the perspective of therapeutic interaction theory, therapeutic alliance is one of the most important interpersonal processes that determines the quality of the therapist-client relationship. Therapeutic alliance is a multidimensional mechanism that includes trust, agreement on goals, and agreement on common tasks for advancing therapy (Soldz, 1990). Research findings have shown that therapeutic alliance is not only associated with better treatment outcomes but can also function as a strong mediator in the causal pathway between personality traits and therapeutic outcomes. This means that the way the client and therapist experience and perceive the therapeutic relationship can transmit a major part of the effects of internal individual characteristics, such as personality traits, on active participation, continued attendance, and client engagement. In this regard, traits such as agreeableness and emotional stability are usually associated with a more positive perception of the therapeutic relationship, because these individuals have a greater ability to create and maintain positive interpersonal relationships (Johansen et al., 2013). These patterns help clients establish a more constructive interaction with the therapist, place greater trust in the treatment plan, and consequently form a stronger therapeutic alliance. When therapeutic alliance is strengthened, it can reinforce or facilitate the direct effects of personality on client engagement; in other words, a considerable portion of the effect of personality on engagement is transmitted through therapeutic alliance (Kushner et al., 2016).

Furthermore, from a psychoanalytic-insight-oriented perspective, therapeutic alliance allows clients to express difficult emotional and interpersonal

experiences within a safe and predictable framework. Clients who have more facilitative personality traits, such as emotional stability, emotional flexibility, and high agreeableness, are more likely to experience the therapeutic relationship as supportive and collaborative. This positive relational experience can strengthen the mediating interaction between personality and engagement (Hanney et al., 2023). Confirming the mediating role of therapeutic alliance in the relationship between personality traits and client engagement has important clinical and theoretical implications. From a clinical perspective, therapists should pay greater attention to how the therapeutic relationship is formed, because therapeutic alliance is not only a desirable outcome of the treatment process but can also serve as the main pathway through which clients' stable personality traits influence engagement and active participation. In other words, clients who have personality traits more favorable to interpersonal relationships are more likely to engage and participate in the treatment process when these traits are placed within a strong, agreement-based, and collaborative therapeutic relationship. From a theoretical perspective, this finding also indicates that simple linear analyses between personality and treatment outcomes cannot explain all the complexities of psychotherapy processes. Rather, interpersonal relational factors such as therapeutic alliance should be considered as mediating mechanisms. Such a perspective contributes to the development of dynamic and multilevel models in which individual and relational variables simultaneously explain therapeutic outcomes.

The statistical population of this study consisted of clients of psychotherapy clinics in Tehran. The geographical limitation, namely the focus only on Tehran, may require caution in generalizing the results to other cities, cultures, or clients who refer to other private or public centers. In addition, the lack of random selection of clients may have caused selection bias. It is recommended that future studies be conducted in other cities and in public and private treatment centers to increase the generalizability of the findings and compare clients with different clinical diagnoses.

The findings showed that personality traits affect client engagement both directly and through the mediating role of therapeutic alliance. Therefore, it is recommended that therapists consider clients'

personality profiles in initial assessment and treatment planning. For clients with high neuroticism, focusing on creating stability, predictability, and reducing anxiety should be prioritized, and early challenging interventions should be avoided. Clients with low extraversion need respect for their personal space and should not be pressured into rapid self-disclosure. In addition, for clients with low conscientiousness, providing more structure and regular follow-up can help increase engagement. Adjusting interventions according to personality traits increases the likelihood of forming a strong therapeutic alliance and, consequently, stable client engagement.

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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. Ethical considerations in this study were that participation was entirely optional.

### 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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### Authors' Contributions

All authors equally contribute to this study.

## References

- Aldao, A., Sheppes, G., & Gross, J. J. (2015). Emotion regulation flexibility. *Cognitive therapy and research*, 39(3), 263-278. <https://doi.org/10.1007/s10608-014-9662-4>
- Baer, R. A. (2015). *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications*. Elsevier. <https://shop.elsevier.com/books/mindfulness-based-treatment-approaches/baer/978-0-12-416031-6>
- Chen, F., Bollen, K. A., Paxton, P., Curran, P. J., & Kirby, J. B. (2001). Improper solutions in structural equation models: Causes, consequences, and strategies. *Sociological methods & research*, 29(4), 468-508. <https://doi.org/10.1177/0049124101029004003>
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of personality and social psychology*, 58(4), 644. <https://doi.org/10.1037/0022-3514.58.4.644>
- Diener, M. J., & Monroe, J. M. (2011). The relationship between adult attachment style and therapeutic alliance in individual psychotherapy: a meta-analytic review. *Psychotherapy*, 48(3), 237. <https://doi.org/10.1037/a0022425>
- Ebrahimi Moaghar, F., Rahimian Boogar, I., & Talepasand, S. (2025). The Mediating Role of Academic Self-Efficacy in the Relationship between Diffusion Academic Identity, Ambivalent Attachment Style and Adaptive Cognitive Emotion Regulation Strategies with Addiction to Social Networks among Students. *Journal of Cognitive Strategies in Learning*, 12(23), 207-228. [10.22084/j.psychogy.2025.29563.2706](https://doi.org/10.22084/j.psychogy.2025.29563.2706)
- Elliott, R., Bohart, A. C., Watson, J. C., & Greenberg, L. S. (2011). Empathy. *Psychotherapy*, 48(1), 43. <https://doi.org/10.1037/a0022187>
- Flückiger, C., Del Re, A. C., Wampold, B. E., & Horvath, A. O. (2018). The alliance in adult psychotherapy: A meta-analytic synthesis. *Psychotherapy*, 55(4), 316. <https://doi.org/10.1037/pst0000172>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
- Friedman, L. (1969). The therapeutic alliance. *The International Journal of Psychoanalysis*, 50, 139. <https://pep-web.org/search/document/IJP.050.0139A>
- Gefen, D., Rigdon, E. E., & Straub, D. (2011). Editor's Comments: An Update and Extension to SEM Guidelines for Administrative and Social Science Research. In (Vol. 35, pp. iii-A7): Management Information Systems Research Center, University of Minnesota. <https://doi.org/10.2307/23044042>
- Hanney, W. J., Dhalla, F., Kelly, C., Tomberlin, A., Kolber, M. J., Wilson, A. T., & Salamh, P. A. (2023). The influence of personality type on patient outcome measures and therapeutic alliance in patients with low back pain. *NeuroSci*, 4(3), 186-194. <https://doi.org/10.3390/neurosci4030017>
- Holdsworth, E. (2014). *A Theory of Engagement in Group Offending Behaviour Programmes* Coventry University]. <https://pureportal.coventry.ac.uk/en/studentTheses/a-theory-of-engagement-in-group-offending-behaviour-programmes/>
- Horvath, A. O. (2014). Therapeutic/working alliance. *The encyclopedia of clinical psychology*, 1-5. <https://doi.org/10.1002/9781118625392.wbecp262>
- Imanzadeh, S., Alivandi Vafa, M., Hashemi, T., & Azemoudeh, M. (2021). Examining the role of the therapeutic alliance in treatment efficacy by mediating client engagement. *Journal of Applied Psychological Research*, 12(3), 171-190.
- Johansen, R., Melle, I., Iversen, V. C., & Hestad, K. (2013). Personality traits, interpersonal problems and therapeutic alliance in early schizophrenia spectrum disorders. *Comprehensive psychiatry*, 54(8), 1169-1176. <https://doi.org/10.1016/j.comppsy.2013.05.016>
- Krause, M., Altimir, C., & Horvath, A. (2011). Deconstructing the therapeutic alliance: Reflections on the underlying dimensions of the concept. *Clinical and Health*, 22(3), 267-283. <https://doi.org/10.5093/cl2011v22n3a7>
- Kushner, S. C., Quilty, L. C., Uliaszek, A. A., McBride, C., & Bagby, R. M. (2016). Therapeutic alliance mediates the association between personality and treatment outcome in patients with major depressive disorder. *Journal of Affective Disorders*, 201, 137-144. <https://doi.org/10.1016/j.jad.2016.05.016>
- Maroda, K. J. (2009). *Psychodynamic techniques: Working with emotion in the therapeutic relationship*. Guilford Press. [https://www.guilford.com/books/Psychodynamic-Techniques/Karen-Maroda/9781462563098?srsltid=AfmBOorA9Vsy\\_DKklr3E8Baelf5-IDH1CmoazcuQCNpvgRKICV74z-I](https://www.guilford.com/books/Psychodynamic-Techniques/Karen-Maroda/9781462563098?srsltid=AfmBOorA9Vsy_DKklr3E8Baelf5-IDH1CmoazcuQCNpvgRKICV74z-I)
- McCrae, R. R., & Costa, P. T. (2008). Empirical and theoretical status of the five-factor model of personality traits. *The SAGE handbook of personality theory and assessment*, 1, 273-294. <https://doi.org/10.4135/9781849200462.n13>
- Mohsenin, S., & Esfidani, M. (2014). *Structural Equation Based on Partial Least Square Approach*. Tehran, Mehraban Nashr Book Intistitute Press. Persian.
- Morgan, M. C., Cardaciotto, L., Moon, S., & Marks, D. (2020). Validation of the Philadelphia Mindfulness Scale on experienced meditators and nonmeditators. *Journal of Clinical Psychology*, 76(4), 725-748. <https://doi.org/10.1002/jclp.22907>
- Notsu, H., Blansfield, R. E., Spina, D. S., & Levy, K. N. (2025). An updated meta-analysis of the relation between adult attachment style and working alliance. *Psychotherapy Research*, 35(5), 721-734. <https://doi.org/10.1080/10503307.2024.2370344>
- Shaver, P. R., & Hazan, C. (1993). Adult romantic attachment: Theory and evidence. *Advances in personal relationships*, 4, 29-70. <https://www.scirp.org/reference/referencespapers?referenceid=2132348>
- Soldz, S. (1990). The Therapeutic Interaction Research Perspectives. In *Handbook of the brief psychotherapies* (pp. 27-53). Springer. [https://doi.org/10.1007/978-1-4899-2127-7\\_2](https://doi.org/10.1007/978-1-4899-2127-7_2)
- Tenenhaus, A., Tenenhaus, M., & Dijkstra, T. K. (2026). Structural equation modeling with factors and composites within the framework of the basic design. *Advances in Data Analysis and Classification*, 20(1), 227-254. <https://doi.org/10.1007/s11634-025-00647-4>
- Tetley, A., Jinks, M., Huband, N., & Howells, K. (2011). A systematic review of measures of therapeutic engagement in psychosocial and psychological treatment. *Journal of Clinical Psychology*, 67(9), 927-941. <https://doi.org/10.1002/jclp.20811>
- Weiner, I. B., & Bornstein, R. F. (2009). *Principles of psychotherapy: Promoting evidence-based psychodynamic practice*. John Wiley & Sons. <https://books.google.me/books?id=nzzpukiMTLkC&printsec=frontcover#v=onepage&q&f=false>
- Wilson, J. P., & Thomas, R. B. (2004). *Empathy in the treatment of trauma and PTSD*. Routledge. <https://doi.org/10.4324/9780203020999>