

Research Paper:

The Mediating Role of Psychological Wellbeing in the Relationship Between Defense Mechanisms and Therapeutic Alliance Among Therapists and Psychiatric Nurses



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ABSTRACT

Background: The effectiveness of psychotherapy relies on the therapeutic alliance, so it is essential to identify the variables related to this concept. The present study investigated the relationship between defense mechanisms and therapeutic alliance with the mediating role of psychological wellbeing in therapists and psychiatric nurses.

Methods: This research was a descriptive-correlational study that adopted Structural Equation Modeling (SEM). The statistical population comprised all therapists, psychiatric nurses, and counselors licensed by the Psychology and Counseling Organization of Iran in 2019. A sample of 255 was selected via the convenience sampling method. The research instruments included the defense style questionnaire, Ryff's psychological wellbeing scale (short form), and the working alliance inventory (short form). The obtained data were analyzed by the Pearson correlation coefficient and path analysis in AMOS software v. 24.

Results: Immature ($\beta=-0.35$, $P<0.001$) and neurotic defense mechanisms ($\beta=-0.22$, $P<0.001$) demonstrated significant negative correlations with the therapeutic alliance, while mature defense mechanisms ($\beta=0.38$, $P<0.001$) and psychological wellbeing ($\beta=0.24$, $P<0.001$) showed significant positive correlations with therapeutic alliance. The path analysis revealed the mediating role of psychological wellbeing in the relationships between immature ($\beta=-0.11$, $P<0.01$), mature ($\beta=0.14$, $P<0.01$), and neurotic ($\beta=-0.09$, $P<0.01$) defense mechanisms with therapeutic alliance.

Conclusion: The present study results confirmed the model's goodness of fit. Therapists' defense mechanisms and psychological wellbeing should be taken into account when designing measures to improve the psychotherapy and counseling outcome.

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Highlights

- There was a negative relationship between immature defense mechanisms and the therapeutic alliance in therapists.
- There was a positive relationship between mature defense mechanisms and the therapeutic alliance in therapists.
- There was a direct relationship between therapeutic alliance and psychological wellbeing in therapists.
- Psychological wellbeing had a mediating role in the relationship between defense mechanisms and therapeutic alliance.

Plain Language Summary

Therapeutic alliance refers to the mutual understanding and agreement between the therapist and client to reach the therapy's goals, ensure commitment to task fulfillment, and guarantee adherence to ongoing collaboration in order to resolve tensions that inevitably emerge during this process. Without a judgmental view, the therapist must help clients deal with painful topics they avoid. Therapists' psychological wellbeing seems to predict the therapeutic alliance. Also, therapists' defense mechanisms may predict therapeutic alliance by affecting their psychological wellbeing. This study suggests that immature and neurotic defense mechanisms have a negative effect on the therapeutic alliance, but mature defense mechanisms and psychological wellbeing have a positive impact on the therapeutic alliance.

1. Introduction

For the therapeutic relationship to move beyond the patient's dysfunctional relations, therapy should be stimulating so that the clients feel a sense of alliance with the therapist in a joint effort to overcome problems (Portacolone et al., 2020). Therapeutic alliance can begin before the first contact through clients' or therapists' feelings and imagination. Therapeutic alliance constitutes the core of psychotherapy. Thus, its role in psychotherapy outcomes is strongly emphasized in the experimental literature. Regardless of their different approaches, various psychotherapies employ therapeutic alliance during the therapy (DePue et al., 2016). Alliance is characterized by three elements of goals, tasks, and personal bonds. As a joint construction, this concept comprises shared goals, the undertaking of certain tasks, and an attachment between the therapist and client (Allen et al., 2017). In other words, alliance refers to the mutual understanding and agreement between the therapist and client to reach therapy goals, ensure commitment to task fulfillment, and guarantee adherence to ongoing collaboration in order to resolve tensions that inevitably emerge during this process (Stubbe, 2018). Several psychological and behavioral concepts can influence therapeutic alliance. It is, for instance, reported that some defense mechanisms can prevent or facilitate the process of change in therapy (de Roten et al., 2021; Laconi et al., 2014).

The psychoanalytic approach states that, in response to tension, people adopt specific defense mechanisms that are divided into mature, immature, and neurotic depending on their level of maturity (Waqas et al., 2018). Each category consists of certain mechanisms that, as mental functions, serve to protect people against the anxiety of external and internal stressors (Bazarnik et al., 2018). Regarding automatic and unconscious regulatory processes, these mechanisms displace unpleasant emotions from the conscious to the unconscious realm and help people achieve psychological stability and cognitive harmony (Babl et al., 2019). Defense mechanisms distort or deny reality by affecting the perception of threatening events and have adaptive value by protecting the individual against psychological anxiety and distress. However, excessive recourse to immature and neurotic defense mechanisms can be pathological and is central to the conceptualization of psychological disorders and their treatment (Lenzo et al., 2020; Babl et al., 2019; Bazarnik et al., 2018). Immature and maladaptive defense mechanisms are more prevalent among people with psychological disorders, whereas mature ones are more common among non-clinical populations (Mielimaka et al., 2018). A direct relationship exists between immature and neurotic defense mechanisms and troublesome interpersonal relationships. While immature and neurotic defense mechanisms can prevent change during therapy, mature defense mechanisms can facilitate this process (Laconi et al., 2014).

The therapeutic alliance requires the therapist to build rapport with the client. Without a judgmental view, the therapist must help clients deal with painful topics they avoid. Therapists' psychological wellbeing, therefore, seems to be a predictor of a therapeutic alliance. Positive psychology theoreticians regard mental health as a positive psychological function and conceptualize it as psychological wellbeing (Twenge, Martin, & Campbell, 2018). They hold that the absence of illness does not guarantee a sense of health; instead, health is characterized by life satisfaction, adequate and positive progress, and efficient and effective balance with the world (Weiss, Westerhof, & Bohlmeijer, 2016). Ryff (1995) defined psychological wellbeing as efforts to actualize one's potential, which is a significant indicator of health and wellbeing and ensures awareness of the integrity of all the aspects of one's existence. Psychological wellbeing is conceptualized as possessing six dimensions: self-acceptance (the ability to acknowledge one's strengths and weaknesses), goal-orientation (having goals that direct one's life and give meaning to it), personal growth (the sense that one's potential talents and abilities will be actualized), positive interpersonal relationships (close and valuable relationships with significant others), environmental mastery (the ability to regulate and manage one's life, especially daily activities), and autonomy (the ability to pursue demands and act based on personal principles, even if they run counter to social demands and customs) (Pourpashang & Mousavi, 2021). Some studies speculate that psychological wellbeing can predict improved performance and successful interpersonal relationships. The literature also highlights the significant role of defense mechanisms in predicting psychological wellbeing (Mousavi, Vaez Mousavi, & Yaghubi, 2017; Lyke, 2016). Therapists' defense mechanisms may, therefore, predict therapeutic alliance by affecting their psychological wellbeing.

Because of the significance of therapeutic alliance, it is necessary to identify the variables associated with it. Psychological wellbeing and defense mechanisms seem to be the main predictors of the therapeutic alliance. It is hypothesized that different defense mechanisms increase or decrease therapists' psychological wellbeing, thereby improving or impairing therapeutic alliance. Accordingly, the present study aimed to investigate the relationship between defense mechanisms and therapeutic alliance with the mediating role of psychological wellbeing in therapists and psychiatric nurses.

2. Materials and Methods

The present study had a descriptive-correlational design and adopted Structural Equation Modeling (SEM). The statistical population comprised all therapists, psychiatric nurses, and counselors licensed by the Psychology and Counseling Organization of Iran in 2019. In the present study, according to the allocation of 10 for each observed variable (25 observed variables), to reduce sampling error, a total of 255 subjects were selected as the sample. They were selected via a convenience sampling method. Then, the link of the questionnaires was provided to the participants online via email or messengers. The participants were ensured of the confidentiality of their data. Therapists licensed by the Psychology and Counseling Organization of Iran with a minimum of three years of professional experience and 27-65 years old were included. The exclusion criteria were unwillingness to continue the study and failure to complete the questionnaires.

Study instruments

The Defense Style Questionnaire (DSQ)

The defense style questionnaire was developed by Andrews, Singh, and Bond (1993) and consists of 40 statements scored on a 9-point Likert scale from strongly disagree = 1 to strongly agree = 9. The questionnaire evaluates 20 defense mechanisms and three defense styles at three levels of immature (acting out, denial, devaluation, displacement, dissociation, autistic fantasy, isolation, passive aggression, projection, rationalization, somatization, splitting), neurotic (pseudo-altruism, idealization, reaction formation, undoing), and mature (sublimation, humor, anticipation, suppression) (Andrews, Singh, & Bond, 1993). The minimum and maximum scores for immature defense mechanisms are 48 and 216, respectively. The minimum and maximum scores for neurotic defense mechanisms are 16 and 72, respectively. Also, the minimum and maximum scores for mature defense mechanisms are 16 and 72, respectively. The participant gets a score between 2 and 18 in each of the defense mechanisms. In each defense mechanism, if the respondent receives a score higher than 10, s/he is supposed to use that mechanism. Heidarinasab and Shaeiri (2011) reported a Cronbach α of 0.71 for the Persian version of the questionnaire. In the present study, the Cronbach α coefficient was 0.79.

Table 1. The Pearson correlation coefficients among the research variables

Variables	1	2	3	4	5
1- Immature defense mechanisms	1				
2- Mature defense mechanisms	-0.25**	1			
3- Neurotic defense mechanisms	0.46**	-0.38**	1		
4- Psychological wellbeing	-0.41**	0.35**	-0.33**	1	
5- Therapeutic alliance	-0.39**	0.42**	-0.34**	0.29**	1

** P<0.01

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Ryff's Psychological Wellbeing Scale (short form)

The original version of the psychological wellbeing scale was developed by Ryff (1995) and comprised 120 questions. Later editions, however, included 84, 54, and 18 questions. We administered the 18-item short form to assess the dimensions of psychological wellbeing (autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance). The items are scored on a 6-point Likert scale from "totally disagree" to "totally agree". Items 1, 3, 4, 5, 9, 10, 13, and 17 are scored in reverse. The minimum score for this scale is 18, while the maximum score is 108. In this study, the total score of the scale was used. Higher scores indicate high psychological wellbeing. Hassani, Tizdast, & Zarbakhsh (2021) reported a Cronbach α of 0.79 for the Persian version of the questionnaire. In the present study, the Cronbach α coefficient was 0.76 for the questionnaire.

The Working Alliance Inventory (short form)

This working alliance inventory was developed by Horvath and Greenberg (1989) based on Bordin's (1979) tripartite theory of alliance (goals, tasks, and bonds). The short form comprises 12 questions scored on a 5-point Likert scale from never =1 to always =5, and the total score ranges from 12 to 60. In the present study, the total score of the questionnaire was used. Higher scores indicate a high therapeutic alliance. Rahimian Boogar, Safarzade, and Talepasand(2020) reported a Cronbach α of 0.92 for the Persian version of the questionnaire. In the present study, the Cronbach α coefficient was calculated as 0.85.

Statistical analysis

The data were analyzed by the Pearson correlation coefficient and path analysis in AMOS software version 24.0.

3. Results

The sample included 255 therapists, psychiatric nurses, and counselors (177 [69.41%] women and 78 [30.59%] men) with a Mean \pm SD age of 34.59 \pm 8.68 years. Table 1 presents the correlation matrix of defense mechanisms, psychological wellbeing, and therapeutic alliance.

Immature (-0.39) and neurotic defense mechanisms (-0.34) demonstrated a significant negative correlation with the therapeutic alliance, whereas mature defense mechanisms (0.42) had a significantly positive correlation with this variable. Psychological wellbeing also significantly and positively correlated with the therapeutic alliance (0.29). SEM was applied to test the proposed model of the mediating role of psychological wellbeing in the relationship between therapists' defense mechanisms and therapeutic alliance. Table 2 presents the hypothesized model's proper fit to the data based on the goodness-of-fit indices, including the value of $\chi^2/df=2.79$, which is <3. Values of ≥ 0.90 are also deemed acceptable for other important indices (GFI, AGFI, IFI, TLI, CFI, and NFI). Furthermore, values of <0.08 are acceptable, and values of ≤ 0.05 are very good for the Root Mean Square Error of Approximation (RMSEA). The indices in Table 2, therefore, depict the proper fit of the proposed model.

Table 2. Proposed model fit indicators

Fit Indicators	χ^2	df	(χ^2/df)	GFI	AGFI	CFI	TLI	IFI	NFI	RMSEA
Proposed and final model	52.92	19	2.79	0.90	0.89	0.94	0.93	0.96	0.91	0.03

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χ^2 : Chi-square; df: degrees of freedom; GFI: Goodness of Fit Index; AGFI: Adjusted Goodness of Fit Index; CFI: Comparative Fit Index; TLI: the Tucker-Lewis Index; IFI: Incremental Fit Index; NFI: Normed Fit Index; RMSEA: the Root Mean Square Error of Approximation

Table 3. Path coefficients of direct and indirect effects between the variables

Paths	Path Type	B	SE	β	P	R ²
Immature defense mechanisms to therapeutic alliance	Direct	-0.57	0.04	-0.35	0.001	-
Psychological wellbeing to therapeutic alliance	Direct	0.30	0.03	0.24	0.001	-
Immature defense mechanisms to therapeutic alliance	Indirect	-0.28	0.07	-0.11	0.01	-
Immature defense mechanisms to therapeutic alliance	Total	-0.85	0.30	-0.46	0.01	0.28
Mature defense mechanisms to therapeutic alliance	Direct	0.60	0.41	0.38	0.001	-
Mature defense mechanisms to therapeutic alliance	Indirect	0.33	0.02	0.14	0.01	-
Mature defense mechanisms to therapeutic alliance	Total	0.93	0.42	0.52	0.01	0.34
Neurotic defense mechanisms to therapeutic alliance	Direct	-0.46	0.37	-0.22	0.001	-
Neurotic defense mechanisms to therapeutic alliance	Indirect	-0.23	0.14	-0.09	0.01	-
Neurotic defense mechanisms to therapeutic alliance	Total	-0.69	0.07	-0.31	0.01	0.23

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Table 3 presents the main parameters of the structural model of psychological wellbeing's mediating role in the relationship between defense mechanisms and therapeutic alliance. The direct path from immature defense mechanisms to the therapeutic alliance ($\beta = -0.35$, $P < 0.001$) and then from psychological wellbeing to the therapeutic alliance were significant ($\beta = 0.24$, $P < 0.001$) (Table 3). The indirect path from immature defense mechanisms to the therapeutic alliance ($\beta = -0.11$, $P < 0.001$) and the total path coefficient for immature defense mechanisms and therapeutic alliance were also significant ($\beta = -0.46$, $P < 0.01$). This path had a coefficient of determination of 0.28, suggesting that, together, immature defense mechanisms and psychological wellbeing explained 28% of the variance in the therapeutic alliance.

The direct path coefficient from mature defense mechanisms to the therapeutic alliance ($\beta = 0.38$, $P < 0.001$) was also significant. Furthermore, the indirect path coefficient from mature defense mechanisms to the therapeutic alliance ($\beta = 0.14$, $P < 0.001$) and the total path coefficient for mature defense mechanisms and therapeutic alliance were significant ($\beta = 0.52$, $P < 0.01$). This path had a coefficient of determination of 0.34, revealing that mature defense mechanisms and psychological wellbeing together explained 34% of the variance in the therapeutic alliance. The direct path coefficient from neurotic defense mechanisms to the therapeutic alliance ($\beta = -0.22$, $P < 0.001$) was significant. The indirect path coefficient from neurotic defense mechanisms to the therapeutic alliance ($\beta = -0.09$, $P < 0.01$) and the total path coefficient for neurotic defense mechanisms and therapeutic alliance

were significant as well ($\beta = -0.31$, $P < 0.01$). This path had a coefficient of determination of 0.23, indicating that, together, neurotic defense mechanisms and psychological wellbeing explained 23% of the variance in the therapeutic alliance.

4. Discussion

The present study investigated the relationship between defense mechanisms and therapeutic alliance with the mediating role of psychological wellbeing in therapists and psychiatric nurses. The findings of our study revealed a positive relationship between psychological wellbeing and therapeutic alliance. This finding is in line with the reported association between psychological wellbeing and successful interpersonal relationships (Kelloway et al., 2012; Wai & Yip, 2009).

Considering the capacity to discover all one's aptitudes, psychological wellbeing greatly contributes to various dimensions of life, including social acceptance, interpersonal relationships, intimacy, efficacy, social status, and, therefore, mental health (Twenge, Martin, & Campbell, 2018; Hashemi & Abbasi, 2017). This concept is defined as individuals' positive appraisal of the quality of their experiences, awareness, relationships, and other issues pertinent to their value in life. Thus, it is a determinant of interpersonal relationships, their nature, and quality (Weiss, Westerhof, & Bohlmeijer, 2016). The perception of existential challenges is a prerequisite for psychological wellbeing that comprises emotional and cognitive components. Those with a higher level of wellbeing

mainly experience positive emotions and optimistically appraise events. On the contrary, those with poor wellbeing appraise incidents as negative and mostly experience negative emotions (e.g. anxiety, depression, and anger) that can impair interpersonal relationships. To improve clients' positive attention and self-respect, therapists' empathy, sincerity, and positive unconditional attention are necessary conditions for therapy and the formation of a therapeutic alliance. Therapists' mental health and wellbeing, therefore, shape their skills and ability to establish a therapeutic alliance. In fact, by attaining psychological wellbeing, people can actualize their potential, and thanks to a rich inner life and meaning, can express the same qualities in their interpersonal relationships (Pourpashang & Mousavi, 2021). In this way, they establish healthy, positive, and full human relationships. Therapists who enjoy psychological wellbeing understand the clients' need for empathy and respect and meet these needs in a therapeutic relationship filled with acceptance, understanding, empathy, and positive attention, thereby shaping therapeutic alliance.

The findings also revealed a positive relationship between the therapists' mature defense mechanisms and their therapeutic alliance but a negative relationship between their immature and neurotic defense mechanisms and therapeutic alliance. In line with prior research, it is concluded that immature and neurotic defense mechanisms can prevent the process of change during therapy, whereas mature defense mechanisms can facilitate this process. Psychological wellbeing has been found to mediate this relationship (Laconi et al., 2014; Kramer et al., 2009).

It is known that immature defense mechanisms distort reality more severely than mature ones. People with severe cognitive distortions in their defense mechanism have more impaired conscious awareness and make little effort to deal with these cognitive distortions. Therapists can thus disrupt the process and progress of therapy by resorting to immature defense mechanisms, e.g. projecting their painful emotions on the client or helping them deny, inhibit, or further repress their own emotions and feelings (Kramer et al., 2009). Defense mechanisms can also alter therapists' conscious awareness of themselves, disrupt their awareness of their internal conflicts, stimulate and activate conflicting emotions during therapy, and impair the therapeutic alliance (Laconi et al., 2014). Therapists further deny and distort reality with immature defense mechanisms, and the lack of a transparent and therapeutic relationship impairs therapeutic alliance.

The higher the level of neuroticism and mental disorders, the more likely people will use abnormal, dysfunc-

tional, and immature defense mechanisms (Mielimaka et al., 2018). People with severe neuroticism lack sufficient understanding and awareness to adopt more mature defense mechanisms, such as altruism, sublimation, and humor; on the contrary, they turn to immature and neurotic defense mechanisms, such as displacement, denial, repression, and inhibition to alleviate their anxiety and tolerate problems. Instead of helping clients face and experience their painful emotions and enhance their mental capacity for tolerating anxiety, immature defense mechanisms further suppress their emotions, deny reality, exacerbate anxiety, and eventually reduce their satisfaction with the therapy and therapeutic alliance (Babl et al., 2019). On the other hand, mature defense mechanisms can promote one's adaptation to the external world, regulate emotions, improve interpersonal relationships, help maintain intrapsychic balance, and eventually guarantee successful interpersonal relationships. Mature defense mechanisms can help people deal with the stress of the outside world and resolve it by proper cognitive and emotional management. This skill is essential for establishing successful therapeutic relationships in therapy as a potentially stressful process.

The study, with its correlational design, cannot assume cause and effect, and a strong correlation between variables may be misleading. Because of the involvement of various variables in psychological wellbeing, qualitative studies in this field are recommended.

5. Conclusion

The findings revealed a positive relationship between psychological wellbeing and therapeutic alliance. There was also a positive relationship between the therapists' mature defense mechanisms and therapeutic alliance and a negative relationship between their immature and neurotic defense mechanisms and therapeutic alliance. Therapeutic relationships and alliance are essential for a successful response to psychotherapy. Overall, the present study results confirmed the model's goodness of fit. Therefore, therapists' defense mechanisms and psychological wellbeing should be taken into account when designing measures to improve the psychotherapy and counseling outcome.

Ethical Considerations

Compliance with ethical guidelines

The study was approved by the Ethics Committee of Islamic Azad University, Tehran Medical Branch (Code: IR.IAU.TMU.REC.1398.102). The questionnaires were

completed with the subjects' satisfaction, and informed consent was sought from the participants.

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Authors' contributions

Conceptualization, supervision, investigation, writing - review, and editing: Amin Rafiepoor and Saba Jafari; Methodology: Saba Jafari and Afsaneh Taheri; Writing - original draft: Amin Rafiepoor and Mehrdad Sabet; Funding acquisition and resources: Saba Jafari.

Conflict of interest

The authors declared no conflict of interests.

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