

Structural Equation Model of Relationships between Personality Organization and Emotional Breakdown Based on the Mediating Role of Defense Mechanisms

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Abstract

Background: The breakdown of emotional relationships is one of the most tragic events in life. The loss of love at a young age is one of the biggest blows to one's ego, self-esteem, confidence, and self-worth.

Objectives: The present study aimed to determine the fitness of the structural equation model of relationships between personality organization and emotional breakdown based on the mediating role of defense mechanisms.

Methods: This applied research was conducted based on a descriptive-correlational design with a structural equation model. The statistical population of this study included all adolescent girls with an emotional breakdown in the academic year of 2019-20 in Nurabad. The sample consisted of 250 people who were selected via the purposive sampling method. Data were collected using the love trauma syndrome questionnaire (Ross, 1999), personality organization questionnaire (Kernberg, 2002), and defense mechanisms questionnaire (Andrews et al., 1993). Data were analyzed in SPSS.22 and AMOS.22 software using Pearson correlation coefficient and structural equation model. A p-value of 0.05 was considered statistically significant.

Results: Based on the results, personality organization had an indirect effect on the emotional breakdown. Therefore, the indirect relationship between the research variables with a 95% confidence was confirmed ($P < 0.05$).

Conclusion: It can be concluded that personality organization plays a mediating role in the relationship between defense mechanisms and emotional breakdown.

Keywords: Personality Disorders, Emotions, Defense mechanisms.

Introduction

Love is a feeling which has haunted the human mind throughout history. Psychologists have referred to love as a basic and positive emotion; nonetheless, they have not come to a consensus on love and its types (1). Although love is one of the most profound emotions a person can experience, an emotional breakdown can trigger the most insurmountable problems that can happen during a romantic relationship (2). The emotional breakdown is a state of frustration and inferiority experienced after being rejected by the beloved, bringing about a sense of attachment (3).

Based on multiple studies, failure is the main cause of mental disorders and suicide among young people. Romantic relationships are common among adolescents; however, some of them are short-lived and ended up in failure. Based on the studies, 23% of adolescents within the age range of 15-18 years experienced emotional failure in the past six months. Some failures are devastating and their negative consequences affect individual, social, and scientific

performance, as well as the skills and competencies needed in their intimate relationships. Nowadays, friendships and socialization outside the awareness circuit of families with the mentioned characteristics among adolescents have had a wide range of dimensions (4).

Some believe that personality organization and childhood experiences, such as attachment styles, early maladaptive schemas, and parenting styles, help us to understand romantic relationships, their quality, as well as their positive and negative correlation with health and emotional breakdown. Motivations, desires, beliefs, and thoughts seem to be important components of personality. Accordingly, many researchers believe that the existence of individual differences and various personality organizations determines people's reactions to situations and stressors (5).

Various approaches have tried to explain personality theory. Personality theory indicated that personality structure is a relatively stable structure of thematic relationships and he distinguishes among psychotic, borderline, and neurotic personality

structures. They are different in terms of identity integrity, defense mechanisms, and reality testing. (6). It seems that love and many aspects of emotional capitalization in romantic relationships are linked to fundamental characteristics of human personality (7).

Since personality traits and attachment styles are the foundations of numerous human behaviors, they also lay the foundation for healthy social-emotional development in adulthood. Attachment styles and personality traits play a crucial role in one's tendencies and the formation of the phenomenon of love (5). The results of a study performed by Yousefi et al. (7) pointed out that the primary schemas, personality traits, and attachment styles are associated with love trauma and can predict it.

Defensive mechanisms are one of the variables that seem to have a mediating role between personality organization and emotional breakdown. Defense mechanisms, based on what we know from psychodynamic theories, are unconscious intrapsychic processes that are activated in stressful and threatening situations. They minimize the unpleasant effects of heartache from consciousness and perception of threats from internal sources or the external world. Moreover, these mechanisms prompt the recent structure to the extent that they can be afraid of anxiety arising from this feeling of threat or at least not from its intensity (8). Neurotic defense mechanisms and unearthly growth are abnormal and inefficient exposure methods (9).

Several longitudinal and cross-sectional studies pointed out that people with borderline personality disorder (BPD) or BPD traits had more but less prolonged-romantic relationships, compare to people without BPD (10). Considering the aforementioned issues, it seems that personality organization and defense mechanisms can be associated with an emotional breakdown in some way. Although there are multiple studies on separate assessments of variables, no research has been conducted to explain emotional breakdown. Therefore, the present study assumes great importance since it can fill this research gap and provide the necessary knowledge in this field. In other words, the current study aimed to determine the fit of the structural equations model of relationships between personality organization and emotional breakdown based on the mediating role of defense mechanisms.

Objectives

The present study aimed to determine the fitness of the structural equation model of relationships between personality organization and emotional breakdown based on the mediating role of defense mechanisms.

Methods

This applied research was conducted based on a descriptive-correlational design with structural

equations. The statistical population of this study included all adolescent girls with an emotional breakdown in the academic year of 2019-20 in Nurabad, Iran. The sample consisted of 250 subjects who were selected via the purposeful sampling method. Firstly, students were asked to participate in the study if they were satisfied, and the emotional breakdown questionnaire was given to the students for screening. The participants were within the age range of 13-19 years, had experienced an emotional breakdown, and complained of physical, emotional, cognitive, and behavioral disturbances. They were selected based on the proposed method in Tabachnick and Fidel formula, which is used to determine the sample size in structural equations. According to this formula, the sample size is greater than or equal to 50 plus 8 times the number of predictor variables. The sample size increased to 250 cases to increase the generalizability of the results. The inclusion criteria were female students within the age range of 13-19 years, while the exclusion criterion was incomplete information. The ethical considerations of the present study were as follows: all subjects received written information about the research and participated in the research if they wished. Moreover, they were assured that their information would be confidential and used only for research purposes. To respect privacy, the participants' names and surnames were not registered.

Love Trauma Syndrome Questionnaire (LTS)

This questionnaire was developed by Ross (1999) to assess the severity of love trauma. The respondents select one of the four options based on their love trauma experiences (11). This questionnaire provides a general assessment of physical, emotional, cognitive, and behavioral problems. A score of 20 is considered the cut-off point of this questionnaire. The scores between 20 and 30 signify a serious experience of love trauma. A score between 10 and 19 indicates that love trauma is tolerable. A score between 0 and 10 suggests that love trauma is completely tolerable and does not seriously destroy life. In peasant research (12), the internal consistency and test-retest reliability were obtained at 0.81 and 0.83, respectively. The reliability of this questionnaire was reported as 0.79 by Cronbach's alpha method.

Personality Organization Questionnaire

The Kernberg personality organization questionnaire (2002) was used to measure the personality organization construct (13). This construct has three dimensions of reality, first psychological defenses, and identity confusion. In Kernberg's model of personality organization, the sum of three factors of psychological defenses, identity confusion, and reality test indicates the

overall vulnerability of personality (morbid personality). Moreover, the sum of scores of the first two dimensions of psychological defenses and identity confusion are the general criteria of borderline personality (14). The reliability of this questionnaire was calculated at 0.85 by Cronbach's alpha method.

Defense Mechanisms Questionnaire

Andrews and his colleagues developed a new 40-item version of the Defense Styles Questionnaire with 20 defense mechanisms. After factor analysis, they were able to differentiate 20 mechanisms from each other in three factors (15). Besharat et al. (16) reported Cronbach's alpha coefficients of 0.75, 0.73,

0.74 for grown, ungrown, and neurotic styles, respectively. Moreover, the validity coefficient of the test was obtained at 0.82 with a four-week interval. The reliability of this questionnaire was calculated at 0.87 by Cronbach's alpha method.

In the present study, data were analyzed in Amos software (version 22) and SPSS software (version 22) using descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation and structural equation modeling)

Results

The mean age of the responders was reported as 17.3±6.48 years. Descriptive findings of research variables are presented in Table 1.

Table 1. Descriptive Statistics of Research Variables

Variable		M	SD	Min.	Max.
Personality Organization	Reality	11.21	1.25	9	14
	Psychological Defenses	8.76	1.38	1	15
	Identity confusion	12.55	1.81	1	12
	Borderline personality	22.16	7.19	13	28
Defense Mechanisms	Developed	12.41	1.16	7	14
	Undeveloped	8.98	1.10	5	11
	Neurotic	12.47	1.99	8	20
Love Trauma Syndrome		19.29	6.31	5	29

Table 2. Correlation matrix between research variables

Variable	1	2	3	4	5	6	7	8
Reality	1							
Psychological Defenses	0.40**	1						
Identity confusion	0.17**	0.36**	1					
Borderline personality	0.26**	0.32**	0.36**	1				
Developed	-0.29**	-0.33**	-0.35**	-0.44**	1			
Undeveloped	0.22**	0.17**	0.29**	0.10**	-0.27**	1		
Neurotic	0.42**	0.29**	0.13**	0.28**	-0.25**	0.36**	1	
Love Trauma Syndrom	0.28**	0.18**	0.41**	0.14*	-0.41**	0.46**	0.29**	1

**P<0/01

As illustrated in Table 2, correlation coefficients among personality organization subscales, defense mechanisms, and love trauma were statistically significant (P<0.01). Crooked and elongation coefficients related to the distribution of scores of research variables demonstrated that due to normality, the research variables all had an absolute value of coefficient smaller than 3, and the absolute value of elongation coefficient was less than 1; therefore, violation of data normality is not

visible. Consequently, it can be stated that the distribution of research variables is normal. Furthermore, the amount of inflation factor of the obtained variance for variables is smaller than 10, indicating that there are no multiple linearities among the variables. The results of implementing the initial model in standard mode, along with some of the most important good indicators of model fitting, are displayed in Table 3.

Table 3. The goodness of fit indicators of model

Index	Goodness of fit	
	Value	Limit
χ^2	0.11	Lower than 3
RMSEA	0.032	Lower than 0.1
CFI	0.97	Higher than 0.9
NFI	0.95	Higher than 0.9
GFI	0.96	Higher than 0.9
AGFI	0.93	Higher than 0.9
AIC	187.16	Smaller values compared to other models
BIC	204.44	Smaller values compared to other models

The goodness of fit indicators, including Xi square index on the degree of freedom, comparative fitness index (CFI), the goodness of fit index (GFI), adaptive fit goodness index (AFGI), and root mean square error approximation (RMSEA), were obtained at

0.11, 0.97, 0.96, 0.93, and 0.032, respectively. The numerical values of good indicators of the model fit showed that it is acceptable to fit the proposed model with the data (Table 3).

Table 4. Coefficients and meaning of direct effect of personality organization, emotional breakdown, and defense mechanisms

Dependent variable	Independent variable	Effect	Unstandardized beta	β Standardized	T	P
Personality organization	Psychological Defenses	Direct	0.46	0.58	10.60	0.001
Psychological Defenses	Emotional breakdown	Direct	0.10	0.18	3.75	0.001
Personality organization	Emotional breakdown	Direct	0.29	0.35	7.60	0.001

As presented in Table 4, personality organization and defense mechanisms had a direct effect on the emotional breakdown. Therefore, the relationship of

emotional breakdown with personality organization and defense mechanisms is confirmed with a 95% confidence ($P < 0.001$).

Table 5. Coefficients and significance of the indirect effect of personality organization, emotional breakdown, and defense mechanisms

Dependent variable	Independent variable	Effect	Unstandardized beta	β Standardized	Sobel	P
Personality organization	Emotional breakdown	Indirect	0.53	0.46	8.31	0.001

The Sobel test was used to investigate the effect of mediating variables of defense mechanisms. Based on Table 5, the personality organization had an indirect effect on emotional breakdown; therefore, the indirect relationship between the research variables was confirmed with a 95% confidence ($P < 0.001$).

Discussion

The present study aimed to determine the fit of the structural equations model of relationships between personality organization and emotional breakdown based on the mediating role of defense mechanisms. As evidenced by the obtained results, personality organization and defense mechanisms

had a direct effect on emotional breakdown. The results were in line with those reported by Gini Ovie, John Michael, Lukasovalask (17), Lazarus (18), and Lazarus et al. (19).

This finding can be justified on the ground that loss of love and emotional relationship in adolescence is one of the biggest traumas that can happen to individuals. An emotional breakdown is accompanied by different responses and is influenced by multiple factors. Therefore, the relationship of emotional breakdown with personality traits and defense mechanisms was

investigated considering the effect of different factors on emotional breakdown and its tolerance. People who experience a breakdown in romantic and emotional relationships feel severe discomfort, depression, and loss of self-esteem. In keeping with the negative emotions of the subjects, several participants experienced higher levels of psychological distress after the breakdown of their relationship. Emotional breakdowns refer to cases where the emotional relationship between one person is broken and ends in separation. Previously conducted studies have highlighted the role of several psychological constructs in continuity, intimacy, and satisfaction of relationships. Therefore, people who do not have developed personalities are presented with numerous problems in interpersonal relationships, intimacy, and a high likelihood of an emotional breakdown (20). Furthermore, in our country, the emotional breakdown experience is not accepted by families and relatives as an unpleasant event. Consequently, in the collapse of romantic relationships, the people involved do not receive the needed support from friends and family since the bereavement process is not considered serious from their viewpoint. Sometimes even the person him/herself distorts the real and painful experience of bereavement by emotional avoidance or severe conflict with loss. Failure to properly develop the necessary skills to cope with life challenges (such as failure to find a partner and failure to obtain desirable marriage situations and limited options ahead) causes adolescent girls to experience anxiety and feelings of incompetence and adequacy.

In such circumstances, the social system seems unfair to the young person, and he/she develops anger and resentment toward others. If people can improve their behavioral skills, they can benefit from developed mechanisms in life. Defense mechanisms distort reality, and the degree of reality distortion in ungrown and neurotic defenses is more than developed defenses (21). The higher amounts of cognitive distortions of defense result in more reduction in conscious awareness; consequently, less effort is made to deal with cognitive distortions. An increase in emotional ability and behavioral skills will promote the use of humor defense mechanisms

and possibly other developed defense mechanisms. On the contrary, a reduction in this capability will increase the use of aggressive defense mechanisms and possibly other ungrown mechanisms in people's lives. Behavioral skills of individuals and positive problem-solving methods directly predict relationship satisfaction, inappropriate conflict resolution methods, withdrawal, submission, and conflict inversely predict relationship satisfaction (22). According to the personality organization model, Ego power levels are one of the key predictors of how people work in the face of environmental stressors. The presence of a powerful ego causes fewer psychological damage symptoms; therefore, people have sufficient tolerance and capacity against stress caused by stressful living conditions (23).

In this regard, the findings of a study conducted by Baban Firouz et al. demonstrated that people who are affected by some kind of emotional disorders are different from the perspective of personality organization (i.e., ego strength levels, level of psychological damage, and type of defense mechanisms used by normal people). In other words, personality organization has a significant and direct relationship with ego strength and identity confusion. In line with the results of the present study, the findings of the studies performed by Farjad, Mohammadi, Rahimi, and Hadianfar indicated that among the dimensions of personality organization (first psychological defenses, identity confusion, and reality testing), the first psychological defenses predict the defense style.

One of the most common psychological defenses in this group of adolescents is economy, which is characteristic of having a polarized view of the world and others. This "all good" or all "bad" view based on moment-to-moment perception causes instability, incompatibility, and impulsivity. In other words, the more organized power of personality levels will result in fewer emotional problems (24). The findings of a study by Barreto also pointed to the direct and indirect effects of personality organization on psychological turmoil. The result is that adolescents at the border personality organization have first-time psychological defenses and cannot protect themselves against extreme anxiety. Therefore, they experience more emotional problems, do not have enough tolerance and capacity against stress conditions of life, and use self-harm behaviors to deal with anger and frustration. Impulsivity as a diagnostic criterion factor plays a major role in the behavior of this group of adolescents (25).

A normal personality organization can experience a range of complex and regulated emotions without losing impulse control of this capacity, both with identity and the level of defense mechanisms. The third feature of normal personality organization is

the existence of an integrated system of internal values. The mature system of internal values with its developmental roots in the values and prohibitions of parents is not uncompromisingly attached to parental prohibitions (26).

The cause of disturbing behaviors during adolescence, including an emotional breakdown in people with borderline personality disorder, is an increase in the penetration of severe immature emotions that are lacking cohesion and often appear concerning emotional disorganizations and related behaviors at the borderline personality organization level. The border personality organization is located on the boundary between neurotic and psychotic and is characterized by extraordinary instability of affection, mood, and behavior. These people have good reality testing; nonetheless, they are vulnerable, suffer from identity confusion, and have defenses at the level of early psychological defenses. These people, whose ego strength is associated with weakness have difficulty in coherence identification and emotion regulation, resulting in emotional breakdown among adolescents.

Among the notable limitations of the present study, we can refer to the use of the correlation method which limits causal inference about the resulting relationships. Moreover, the restriction of the research community to female students with an emotional breakdown in Nurabad limits the generalization of the results to other cities. It is recommended to improve the personality organization and defense mechanisms in students through integration in textbook activities, formation of workshops, and training teachers. It can be concluded that personality organization performs a mediating role in the relationship between defense mechanisms and emotional breakdown.

Conclusion

As evidenced by the obtained results, it can be concluded that personality organization has a mediating role in the relationship between defense mechanisms and emotional breakdown.

Conflicts of Interest

The authors declare that they have no conflict of interest.

References

1. Amiri Pichaklaei A, Khanjani Z, Poursharifi H, Azimi Z, Fahimi E, Akbari E, Mahmoud Alilu M, Ghasempour A. Preliminary study of the persistence of clinical symptoms emotional failure with emphasis on attachment styles and early maladaptive schemas. *Thought & Behavior in clinical*. 2012;6(23),21-30
2. Aminalsadat R, Dortaj F, Delavar A, Hajjalizadeh K. The Effectiveness of Reality Therapy Training on Marital Burnout in Couple with Marital Conflicts. *Journal of Research in Behavioural Sciences*. 2020;18(3):300-9.
3. Karaminejad Z, Sudani M, Mehrabizadeh H M. The effectiveness of the emotion-oriented approach on cognitive emotion regulation of female students with emotional failure. 2016;4(70):79-86.
4. Schaffner L. *Teenage runaways: broken hearts and "bad attitudes"*. Routledge; 2014.
5. Lotfi N, Saadati Shamir A. Investigating the relationship between personality traits and attachment style with emotional breakdown students. *Clinical Psychology Research and Counseling*. 2016;6(1):98-112.
6. Farjad M, Mohamadi N, Rahimi C, Hadianfard H. Personality organization in people with obsessive-compulsive, depressive symptoms, obsessive-compulsive and depressive symptoms, and normal group. *Research in clinical psychology and Counseling*. 2014; 3(2):37-50.
7. Yousefi R, Adhamhian A, Abdolmohamadee K. Experience of love and romantic grief is prevalent in university students. *Social studies in Women's Psychology*. 2016;14(3):171-90
8. Salari S, Roshan R, Moghadasin M. Five major personality factors and defense mechanisms in predicting the quality of women with sexual dysfunction. *Cognitive and Behavioral Sciences Research*. 2015;5(8): 37-50
9. Álvarez-Segura M, Echavarría MF, Lafuente M, Zeiders C, Antonín P, Vitz PC. Defense mechanisms: Determined or ethical choices or both. *European Journal of Science and Theology*. 2017;13(3):5-14.
10. Navarro-Gómez S, Frías Á, Palma C. Romantic relationships of people with borderline personality: A narrative review. *Psychopathology*. 2017;50(3):175-87.
11. Rosse RB. *The love trauma syndrome: free yourself from the pain of a broken heart*. Da Capo Lifelong Books; 2007.
12. Dehghani M, Atef-Vahid MK, Gharaee B. Efficacy of short-term anxiety-regulating psychotherapy on love trauma syndrome. *Iranian journal of psychiatry and behavioral sciences*. 2011;5(2):18.
13. Lind M, Vanwoerden S, Penner F, Sharp C. Inpatient adolescents with borderline personality disorder features: Identity diffusion and narrative incoherence. *Personality Disorders: Theory, Research, and Treatment*. 2019;10(4):389.
14. Monajem A, Monirpour N, Mirza Hosseini H. Pathological eating patterns prediction based on the primary object-relations and personality organization. *Journal of Fundamentals of Mental Health*. 2019;21(2):91-101.

15. Andrews G, Singh M, Bond M. The defense style questionnaire. *Journal of Nervous and mental Disease*. 1993.
16. Besharat MA, Irawani M, Sharifi M. An investigation of the relationship between attachment styles and defense mechanisms. 2001;2(1):277-289.
17. Ooi J, Michael J, Lemola S, Butterfill S, Siew CS, Walasek L. Interpersonal functioning in borderline personality disorder traits: a social media perspective. *Scientific reports*. 2020;10(1):1-8.
18. Lazarus SA, Beeney JE, Howard KP, Strunk DR, Pilkonis P, Cheavens JS. Characterization of relationship instability in women with borderline personality disorder: A social network analysis. *Personality Disorders: Theory, Research, and Treatment*. 2020;11(5):312.
19. Lazarus SA, Choukas-Bradley S, Beeney JE, Byrd AL, Vine V, Stepp SD. Too much too soon?: Borderline personality disorder symptoms and romantic relationships in adolescent girls. *Journal of abnormal child psychology*. 2019;47(12):1995-2005.
20. Behdost P, Kargar K, Ziaaddini Z, Salimi H. The effectiveness of spiritual-religious psychotherapy on love trauma syndrome and acceptance in female students with love failure. *Health, Spirituality and Medical Ethics*. 2019;6(2):45-51.
21. Tavasoli Z, Aghamohammadin Sherbaf HR, Sepehri Shamloo Z, Shahsavari M. Effectiveness of group Reality Therapy on love trauma syndrome and overall function of people who failed emotionally. *Journal of Applied Psychology*. 2018;12(1):83-102.
22. Rajabi S, Nikpoor N. Comparison of the effectiveness of the transactional analysis training and emotion regulation on the improvement of love trauma syndrome: Dealing with the problems caused by the separation and love break up. *Archives of Psychiatry and Psychotherapy*. 2018;20(4):17-28.
23. Di Pierro R, Gargiulo I, Poggi A, Madeddu F, Preti E. The Level of Personality Functioning Scale applied to clinical material from the Structured Interview of Personality Organization (STIPO): Utility in detecting personality pathology. *Journal of personality disorders*. 2020;34(Supplement C):62-76.
24. Ensink K, Rousseau ME, Biberdzic M, Bégin M, Normandin L. Reflective functioning and personality organization: Associations with negative maternal behaviors. *Infant Mental Health Journal*. 2017;38(3):351-62.
25. Genova F, Gazzillo F. Personality organization, personality styles, and the emotional reactions of treating clinicians. *Psychodynamic psychiatry*. 2018;46(3):357-92.
26. Fontana A, De Panfilis C, Casini E, Preti E, Richetin J, Ammaniti M. Rejection sensitivity and psychopathology symptoms in early adolescence: The moderating role of personality organization. *Journal of adolescence*. 2018;67:45-54.