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Compilation of structural equations of love shock syndrome in female students based on psychological disturbance and dark personality traits: the mediating role of emotional schemas

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ABSTRACT

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Background and Aim: love shock in students is a common phenomenon that causes different psychological problems in them. Therefore, the aim of the present study was to investigate the mediating role of emotional schemas in the relationship between psychological disturbance and dark personality traits with love trauma syndrome in the female students of Mohaghegh Ardabili University. **Methods:** The research method was descriptive and structural equation type. The statistical population of the present study was all female students of Mohaghegh Ardabili University in the academic year 2018-2019. The statistical sample of this research consisted of 220 female students who participated in the research online and through virtual networks. The tools used in this research include the Love Shock Questionnaire (Ross, 1999), the Depression, Anxiety and Stress Scale (Lavibond, 1995), the Dark Traits Scale (Johnson and Webster, 2010) and the Emotional Schemas Questionnaire (Leahy, 2002). They were. Data analysis was done using structural equation modeling. **Results:** The obtained results showed that the causal model of the relationship between psychological disturbance, dark personality traits, emotional schemas and love shock syndrome of students was confirmed based on various fit indices. Psychological turmoil, dark personality traits, and emotional schemas have a direct effect on the degree of love trauma symptoms of students ($P < 0.001$); Also, psychological disturbance and dark personality traits have an indirect effect on students' love trauma symptoms through emotional schemas ($P < 0.001$). **Conclusion:** Therefore, psychological disturbance, dark personality traits, emotional schemas play an important role in the rate of love shock syndrome in students, and targeting these three components through various psychological treatments can be effective in reducing students' love shock syndrome.



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Introduction

Love shock in students is a common phenomenon that causes academic and psychological problems in them. Many people may experience it, people who have experienced a love blow, have lower self-awareness, impulse control, problem solving power, stress tolerance, happiness and flexibility than normal people. (Ahmoy Samreen, Ahmadi, 2020). Love shock syndrome includes four key features of arousal, avoidance, automatic recall and emotional numbness (Austin and Jackson, 2019). A love blow is so powerful that it causes depression and anger, feelings of deep insecurity, feelings of helplessness, guilt, fear, despair, pessimism, vulnerability, loss of focus, motivation and energy, physical symptoms such as headaches, etc. (Del Plasio, Clark and Slavin, 2017). The experience of romantic bereavement during the student period often leads to academic failure and depression. The results of research in American universities have shown that 65% of students who fail academically leave the university for non-academic reasons, including difficulty in creating a sense of belonging with friends and romantic partners. Many researchers believe that breaking up a romantic relationship is a stressful event and causes a person to experience major psychological distress (Del Plasio, Clark and Slavin, 2017).

The amount of psychological turmoil experienced in romantic relationships may be a predictor of love trauma symptoms. Psychological disturbance includes symptoms such as low mood, anxiety, depression and other psychiatric conditions (Dinley, Egan and Daly, 2016). In other words, psychological disturbance is related to the experience of disturbing emotional or cognitive states with a wide range of psychological injuries (Miho and Secherir, 2015). Today, depression is considered a serious threat to people's health, so that the high prevalence of this disorder and its destructive effects in various aspects of human life are not hidden from anyone. On the other hand, numerous studies show that psychological problems in a person lead to interpersonal problems; This means that in depressed people there is a tendency to create tensions in interpersonal relationships (Karbalai et al., 2020). In such a way that depression leads to the suppression of emotions and consequently avoiding the intellectual and emotional

experience of internal and external events (Kahtri, Heshmati, & Poursharifi, 2017). As it was shown in Lam et al.'s research (2003) on a sample of depressed patients, a positive relationship was reported between depression and interpersonal problems; In other words, severe confusion can overshadow interpersonal relationships. Also, mood and anxiety disorders have deep and heavy effects such as communication problems on people's quality of life (Barlow & Durand, 2011). In fact, people prone to anxiety become anxious when communicating with others, do not show a desire to rely on others, are afraid of expecting a lot of intimacy in their emotional relationships, acquaintances and friends, and are withdrawn and irresponsible, and are worried about the continuation of the relationship for no reason; They do not enjoy their relationships.

The results of research studies confirm that personality factors are influential factors in the phenomenon of love and romantic relationships (Angel, 2020). In this regard, in the last decade, researchers who intended to evaluate the darker aspects of personality turned to dark personality traits (Cohen, Johnson, & Davis, 2019). These traits include the three dimensions of Machiavellianism, narcissism, and psychopathy, which are defined as a set of traits that reflect bad and dark personality traits (Womick, Feltz & King, 2019). Narcissistic people have the characteristics of a pervasive grand-secretary pattern in the world of imagination and behavior, a high need for excessive admiration and a lack of empathy; Psychopathic people have the characteristic of callousness, lack of empathy, arbitrary and impulsive behaviors; Machiavellian people have the characteristics of cheating and hypocrisy (Yu, Di, Jiang Ming, Yu Chen, 2020). People with the dark triad of personality have a life strategy of low self-control, high irritability, short-term mating orientation, and exploitation (Forham, Richard, & Chaulhus, 2013). On the other hand, dark personality traits can be overshadowed by childhood schemas. Stresses, adversities, violence or unstable parental relationships that lead to the formation of incompatible schemas activate an approach to life that contributes to the emergence of dark personality traits (Rasaei Kashuk & Mansouri, 2018).

Previous researches have determined the role of several psychological constructs, such as emotional schemas, in the continuity, intimacy

and satisfaction of romantic relationships (Chadoff & Wiseman, 2009). Most of the interpersonal problems that people experience are influenced by the way they perceive themselves and others. This way of thinking is called schema. Each new evolutionary stage requires roles, responsibilities, cognitive expectations and behavioral adaptations, so previous plans and coping strategies face challenges. People who grew up in dysfunctional families are more likely to use inflexible styles and fearful and fixed coping strategies. Therefore, such people face more problems in the transition of life stages (romantic relationships) (Zarb, 2017). Schemas used in coping with early life events are ineffective and sometimes maladaptive in dealing with later life events. Therefore, they may affect the subsequent relationships of life and prevent a person's ability to feel satisfaction in romantic relationships and suffer from love failure and trauma (Finney, 2016). Several studies have examined the relationship between primary schemas with intimacy, closeness, strength and compatibility in love relationships and have shown that incompatible primary schemas are related to intimacy and compatibility in romantic and marital relationships (Blach & Lawensen, 2018). Love experiences before marriage, provided that they are successful and combined with reflection, can probably help a person in choosing a suitable spouse. People's experiences at this stage can be considered as an opportunity to practice life skills together. When romantic relationships before marriage are not successful, a person must have enough ability to end the relationship or be able to decide to leave the relationship, which is usually a very exhausting challenge. Most people are forced to leave an intimate relationship at some point in their lives (Khodavardian et al., 2020). Therefore, the present study was conducted with the aim of explaining the love trauma syndromes of students based on psychological disturbance and dark personality traits with the mediation of emotional schemas in students.

Method

The method of this study was qualitative with an interpretative approach and thematic analysis method. The statistical population of this study included all married women who visited one of the midwifery centers in Tehran during the months of April to June 2020. Using the purposeful sampling method, the data of this study was saturated with the number of 11

people. The theoretical data saturation was when the repetition of similar data and answers was encountered and the continuation of the sampling process did not lead to the emergence of new data (Maxwell, 2013). In order to ensure as much as possible, interviews were also conducted with 2 other people, which did not lead to the formation of new codes and classes. A total of 13 interviews were reviewed and analyzed. The criteria for entering the research included being married and not suffering from addiction and psychotic disorders. The exit criterion was also unwillingness to cooperate in the interview process.

First, a number of effective variables in sexual performance were identified based on a cross-sectional study by studying the background and research records (such as sexual knowledge, sexual attitude, sexual self-expression). In the continuation of the research process, a case study was used to explore other effective variables. In the case study stage, the research is in the field of qualitative studies that was conducted with an interpretative approach and thematic analysis method. Since the psychological factors effective in women's sexual performance are different and are not well known among the women of Iranian society, we tried to use thematic analysis method to discover the effective factors (Spanagel et al., 2005). In terms of the characteristic and important advantage of this method, it can be mentioned to obtain information directly from the people themselves (Qurbani et al., 2015). In this way, classes were directly extracted using existing textual data to gain a deeper understanding of the phenomenon in question (Spanagel et al., 2005). Then, overt and hidden themes or patterns were identified using a regular classification process (Meyring, 2000).

Materials

1. Depression, Anxiety and Stress Scale (DASS-21): This scale was prepared in 1995 by Lavibond and Lavibond. This scale is a self-report scale that assesses each symptom of depression, anxiety, and stress. This short form scale has 21 statements that measure each of the three psychological constructs by 7 statements. Subjects had to respond to statements on a four-point scale (from not at all to very much) scoring 0 for not at all and 3 for very much. In addition, in this questionnaire, all questions are scored directly. A higher score in this scale indicates higher anxiety, depression and stress in a person. Lavibond (1995) using a sample of 1794 people in England, the total reliability of this scale according to Cronbach's alpha method was 0.93. 0.88, 0.82 and 0.90 were reported for the three scales of depression, anxiety and stress, respectively. Samani and Jokar (2015) investigated the psychometric properties of this questionnaire in Iran. Retest reliability for depression, anxiety and stress scales were reported as 0.80, 0.76 and 0.77, respectively, and Cronbach's alpha for these three

scales was 0.81, 0.74 and 0.78, respectively. In addition, in the present study, the reliability of this questionnaire was estimated to be 0.91 using Cronbach's alpha method.

2. Leahy Emotional Schema Scale (LESS): This scale was introduced by Leahy (2015) in order to clarify people's beliefs and strategies in relation to their emotions and emotional schemas. In this scale, people express their views on 28 statements and on a 6-option scale between 1 (completely false) and 6 (completely true). Emotional validity, emotional understanding, guilt, emotional simplicity, pursuit of higher values, control of emotional numbness, need for rationality, emotional continuity, universality of emotions, acceptance of emotions, mental rumination, emotional expression and blaming others, emotional schemas evaluated in this scale. Each of these dimensions includes 2 terms. Since it measures some dimensions of incompatible schemas and some compatible schemas, therefore, there is no overall score and the scores of each dimension are calculated separately. In a study conducted on 1286 participants on the original form of this scale, a high internal consistency of 0.80 was reported. Khanzadeh et al. (2014) have obtained the correlation of each item with the total score of the corresponding subscale between 0.52 and 0.92 and the correlation of each item with the total score of the Robin scale from 0.12 to 0.52. The reliability of this scale is 0.78 for the whole scale and for the sub-scales in the range between 0.56 and 0.71 through the retest method in two weeks. Also, the internal consistency coefficient of the scale was obtained using Cronbach's alpha method for the whole scale of 0.82 and for the subscales in the range of 0.59 to 0.73. In this research, the reliability of this questionnaire was estimated to be 0.95 using Cronbach's alpha method.

3. 12-item scale of three dark personality traits. this scale was created by Johnson and Webster (2010) and includes 12 items that measure the three dark traits of Machiavellianism, psychopathy, and narcissism. Subjects respond to the items of this test on a 9-point Likert scale from 1 (completely disagree) to 9 (completely agree), and a high score indicates more of that trait in the individual. Each of the subtests of this tool has a good correlation with the questionnaires of narcissism, Machiavellianism and psychopathy scale. Its test-retest reliability coefficient is 0.89 for the whole scale, 0.86 for Machiavellianism, 0.76 for psychopathy and 0.87 for narcissism (Johnson & Webster, 2010). Questions 1 to 4 of this scale measure Machiavellian traits, questions 5 to 8 measure narcissistic traits, and questions 9 to 12 measure psychopathy traits. The present tool was used on students for the first time in Iran, and Cronbach's alpha coefficients of Machiavellianism, psychopathy, and narcissism subscales were obtained as 0.75, 0.68, and 0.69, respectively (Basharpoor & Shafei, 2015). Also, the face validity and construct validity of the

tool were confirmed as 0.88 and 0.85 respectively (Badbareh & Zinali, 2016). In the present study, the reliability of the scale was obtained using Cronbach's alpha method for the three traits of Machiavellianism, psychopathy and narcissism, respectively, 0.75, 0.72 and 0.79.

4. Love Trauma Inventory (LTI): It is a scale prepared by Ross in 1999 to measure the intensity of love trauma and consists of ten 4-choice items. This questionnaire provides a general assessment of physical, emotional, cognitive and behavioral disturbances. The cut point of this questionnaire is considered to be 20. In scoring the options of each question, a score of 3 to 0 is considered, only questions one and two are scored in reverse. After scoring, the sum of the scores is considered as a condition of love shock syndrome. If the subject's score is between 20 and 30, this condition means a serious experience of love shock syndrome and it is recommended to ask for help from professionals and experts (counselor and psychologist). Akbari et al. (2012) reported its reliability using Cronbach's alpha method of 0.83 during their research in Iran on Tabriz University students. Also, the validity of this questionnaire in the research of Yousefi, Amani, Asgari and Soleimani was found to be 0.69. The reliability of this questionnaire in the present study was found to be 0.82 using Cronbach's alpha method.

Implementation

The method of data collection was that the entire questionnaire and the purpose of the study was designed on a web page and its link was sent through WhatsApp, Telegram and Instagram for girls who were in university groups and who had a history of emotional failure. be, and then it was sent to them, and through that link, the girls could enter the questionnaire page and complete it. Between April 1st and May 30th, 220 people had completed all the questionnaires. To analyze the data in the descriptive part, the mean and standard deviation of the sample was done using SPSS-25 software. Then, in the inferential statistics section, the data were analyzed by structural equation method and using LISREL-23 software to check research hypotheses. In this research, the accepted significance level was $P < 0.05$.

Results

A number of 220 female students participated in this research, and their average and standard deviation of age was 23.63 ± 5.27 . Since all subjects in the study were girls, this demographic characteristic was controlled, but regarding the educational status of the subjects, 53.21% had a bachelor's degree, 44.52% had a master's degree, and only 2.27% had a doctorate degree. Also, regarding the marital status of the subjects, 17 people (7.7%) were divorced and 203 people

(92.28%) were single. The results of the descriptive findings of the research variables are presented in Table 1.

Table 1. Description of research variables

Variables	Mean	SD	Variance	Skewness	Kurtosis
1- Love shock	25/52	4/01	16/03	-0/83	-0/16
2- Psychopathy	12/13	3/68	13/56	0/97	0/42
3- Narcissism	21/50	2/39	5/69	-0/22	0/69
4- Machiavellian	23/57	3/86	14/90	-0/40	-0/86
5- Depression	19/01	1/81	3/28	-0/58	-0/18
6- Anxiety	18/12	1/28	1/65	-0/23	0/10
7- Stress	19/27	1/13	1/27	-0/70	0/63
8- Adaptive emotional schemas	103/10	24/03	577/52	-0/78	-0/38
9- Non-adaptive emotional schemas	121/53	30/74	945/22	-0/88	-0/07

According to Table 1, the skewness value observed for the research variables is in the range (2, -2); That is, in terms of skewness, the research variables are normal and their distribution is symmetrical. Also, their elongation value is in

the range (2, -2); This shows that the distribution of the studied variables has a normal curve. The correlation matrix of research variables is presented in Table 2.

Table 2. Correlation matrix of research variables

Variables	1	2	3	4	5	6	7	8	9
1- Love shock	1								
2- Psychopathy	0/63**	1							
3- Narcissism	0/82**	0/66**	1						
4- Machiavellian	0/87**	0/82**	0/83**	1					
5- Depression	0/88**	0/64**	0/91**	0/89**	1				
6- Anxiety	0/73**	0/54**	0/78**	0/72**	0/81**	1			
7- Stress	0/82**	0/68**	0/85**	0/81**	0/87**	0/75**	1		
8- Adaptive emotional schemas	0/93**	0/56**	0/77**	0/82**	0/82**	0/71**	0/78**	1	
9- Non-adaptive emotional schemas	-0/48**	-0/46**	-0/68**	-0/52**	-0/67**	-0/72**	-0/65**	-0/40**	1

**p<0.05

According to the results of the correlation matrix in Table 2, there is a positive and significant relationship between the love trauma symptoms of psychopathy, narcissism, Machiavellianism, depression, anxiety, stress and adaptive emotional schemas, and there is an inverse and significant relationship with non-adaptive emotional schemas. ($p>0.01$). Also, there is a positive and significant relationship between dark personality traits (psychopathy, narcissism, Machiavellianism) with depression, stress and adaptive emotional schemas, and a negative and significant relationship with non-adaptive emotional schemas. There is a positive and

significant relationship between psychological disturbance and adaptive emotional schemas and a negative and significant relationship between psychological disturbance and non-adaptive emotional schemas ($p<0.01$).

In the following, using structural equations and path analysis method, the direct and indirect effect of dark personality traits (psychopathy, narcissism, Machiavellianism) and psychological disturbance (depression, anxiety and stress) with the mediation of emotional schemas on students' love impact were investigated.

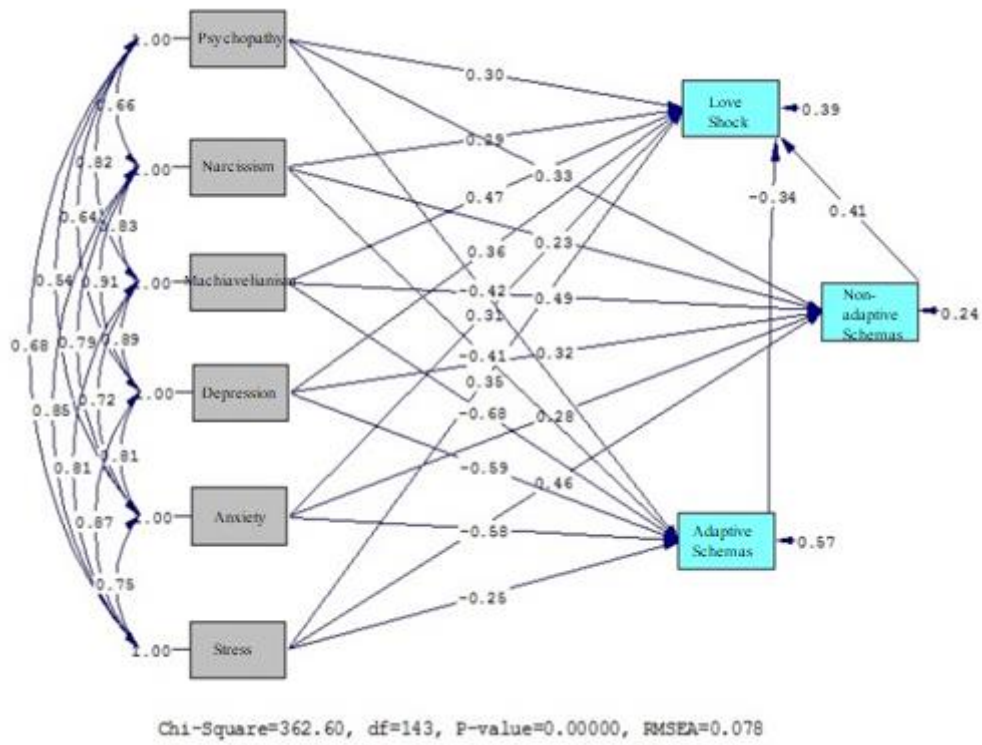


Figure 1. Research model test (Beta coefficient)

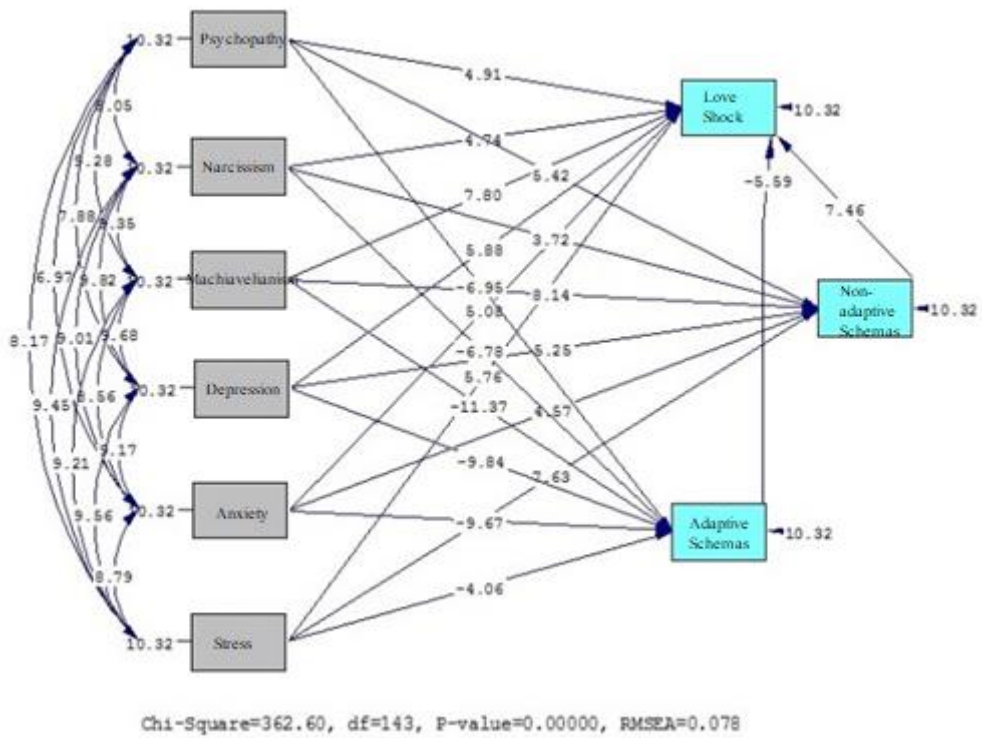


Figure 2. Research model test (T-Value)

Index	Value	Acceptable fit	Result
X ² /df	2/53	< 3	Approved
RMSEA	0/078	< 0.08	Approved
CFI	0/91	> 0.9	Approved
GFI	0/92	> 0.9	Approved
AGFI	0/84	> 0.8	Approved

According to the results obtained in Table 3, it can be said that the research model is approved in terms of significant indicators and model fit.

From ... to ...		Beta	T	SE	P
Psychopathy	Non-adaptive emotional schemas	0/33	5/42	0/112	<0.01
Psychopathy	Adaptive emotional schemas	-0/42	-6/95	0/102	<0.01
Psychopathy	Love shock	0/30	4/91	0/115	<0.01
Narcissism	Non-adaptive emotional schemas	0/23	3/72	0/123	<0.01
Narcissism	Adaptive emotional schemas	-0/41	-6/78	0/103	<0.01
Narcissism	Love shock	0/29	4/74	0/117	<0.01
Machiavellian	Non-adaptive emotional schemas	0/49	8/14	0/094	<0.01
Machiavellian	Adaptive emotional schemas	-0/68	-11/37	0/072	<0.01
Machiavellian	Love shock	0/47	7/80	0/096	<0.01
Depression	Non-adaptive emotional schemas	0/32	5/25	0/113	<0.01
Depression	Adaptive emotional schemas	-0/59	-9/84	0/082	<0.01
Depression	Love shock	0/36	5/88	0/109	<0.01
Anxiety	Non-adaptive emotional schemas	0/28	4/57	0/118	<0.01
Anxiety	Adaptive emotional schemas	-0/58	-9/67	0/083	<0.01
Anxiety	Love shock	0/31	5/08	0/114	<0.01
Stress	Non-adaptive emotional schemas	0/46	7/63	0/097	<0.01
Stress	Adaptive emotional schemas	-0/25	-4/06	0/121	<0.01
Stress	Love shock	0/35	5/76	0/110	<0.01
Non-adaptive emotional schemas	Love shock	0/41	7/46	0/103	<0.01
Adaptive emotional schemas	Love shock	-0/34	-5/59	0/111	<0.01

According to Table 4; The value of the T statistic between the variables of dark personality traits and psychological disturbance with non-adaptive emotional schemas and love shock is outside the range (1.96 to -1.96). Direct path coefficient of psychopathic traits and non-adaptive emotional schema ($\beta=0.33$); trait of psychopathy and love shock ($\beta=0.30$); trait of narcissism and maladaptive emotional schema ($\beta=0.23$); trait of self-infatuation and love shock ($\beta=0.29$);

Machiavellian trait and non-adaptive emotional schema ($\beta=0.49$); Machiavellian trait and love blow ($\beta=0.47$); variable of depression and maladaptive emotional schema ($\beta=0.32$); variable of depression and love shock ($\beta=0.31$); anxiety variable and non-adaptive emotional schema ($\beta=0.28$); anxiety variable and love trauma ($\beta=0.36$) and stress variable and non-adaptive emotional schema ($\beta=0.46$); The variable of stress and love shock ($\beta = 0.35$, $P <$

0.01) is significant at a significant level of 99%, taking into account the path coefficients for this positive effect. Also, the coefficient of the direct path of psychopathic trait and adaptive emotional schema ($\beta=0.42$); trait of narcissism and adaptive emotional schema ($\beta=0.41$); Machiavellian trait and adaptive emotional schema ($\beta=0.68$); depression variable and adaptive emotional schema ($\beta=0.59$); The variable of anxiety and adaptive emotional schema ($\beta=-0.58$) and the variable of stress and adaptive emotional schema ($\beta=-0.25$) are significant at a significant level of 99%, taking into account the path coefficients, the direction of this effect is opposite. . Finally, the coefficient of the direct path of the non-

adaptive emotional schema variable and love shock ($\beta=0.41$) and the adaptive emotional schema variable and love shock ($\beta=-0.34$) is significant and positive ($p < 0.01$).

In order to investigate the indirect effect of dark personality traits and psychological disturbance on students' love trauma through the mediation of emotional schemas, the Sobel test was used, the results of which are presented in Table 5. Also, to determine the intensity of the indirect effect through a mediator, a statistic called VAF is used, which has a value between 0 and 1; And the closer this value is to 1, the stronger the mediating effect. In fact, this value measures the indirect effect to the total effect.

Table 5. The results of the analysis of the indirect effects of dark personality traits and psychological disturbance on students' love trauma with the mediation of emotional schemas

From ... to ... to ...			T-sobel	Beta	VAT	Results
Psychopathy	Non-adaptive emotional schemas	Love shock	2/36	0/13	0/31	Approved
Psychopathy	Adaptive emotional schemas	Love shock	2/45	0/14	0/32	Approved
Narcissism	Non-adaptive emotional schemas	Love shock	1/80	-	-	Rejected
Narcissism	Adaptive emotional schemas	Love shock	2/41	0/14	0/33	Approved
Machiavellian	Non-adaptive emotional schemas	Love shock	3/18	0/20	0/30	Approved
Machiavellian	Adaptive emotional schemas	Love shock	3/71	0/23	0/33	Approved
Depression	Non-adaptive emotional schemas	Love shock	2/31	0/13	0/27	Approved
Depression	Adaptive emotional schemas	Love shock	3/23	0/20	0/36	Approved
Anxiety	Non-adaptive emotional schemas	Love shock	2/09	0/12	0/27	Approved
Anxiety	Adaptive emotional schemas	Love shock	3/19	0/20	0/39	Approved

Stress	Non-adaptive emotional schemas	Love shock	3/03	0/19	0/35	Approved
Stress	Adaptive emotional schemas	Love shock	1/69	-	-	Rejected

According to Table 5, the indirect T-statistic (T-Sobel) between the variables of psychopathy, Machiavellianism, depression, anxiety and stress with love trauma in the mediation of non-adaptive emotional schemas is outside the range (1.96 and -1.96); Therefore, the hypothesis of the indirect effect of psychopathy, Machiavellianism, depression, anxiety and stress variables on love trauma is accepted. Therefore, the variables of psychopathy, Machiavellianism, depression, anxiety and stress, in addition to their direct effect, indirectly and through non-adaptive emotional schemas also affect the love impact of students. Also, the indirect T-statistic (T-Sobel) between the variables of psychopathy, narcissism, Machiavellianism, depression and anxiety with love trauma in the mediation of adaptive emotional schemas is also outside the range (1.96 and -1.96); Therefore, the hypothesis of the indirect effect of psychopathy, narcissism, Machiavellianism, depression and anxiety variables on love trauma is accepted. Therefore, the variables of psychopathy, narcissism, Machiavellianism, depression and anxiety, in addition to their direct effect, indirectly and through adaptive emotional schemas also affect the love impact of students.

According to the VAF, 31% of the effect of psychopathy on love trauma, 32% of the effect of Machiavellianism on love trauma, 27% of the effect of depression and anxiety on love trauma, and 35% of the impact of stress on love trauma can be explained through non-adaptive emotional schemas. Also, 32% of the effect of psychopathy on love trauma, 33% of the effect of narcissism and Machiavellianism on love trauma, 36% of the effect of depression on love trauma, and 39% of the effect of anxiety on love trauma can be explained through adaptive emotional schemas.

Conclusion

The aim of the current research was to explain the symptoms of love trauma in female students based on psychological disturbance and dark personality traits with the mediation of emotional schemas. The results showed that the presented

model has a good fit for explaining the relationship.

The findings showed that psychological disturbance and its components (anxiety, depression and stress) have a positive and significant relationship with the symptoms of love trauma; This result was in line with the findings of Del Palcio et al. (2017), Sharabi et al. (2016), Sadaqat et al. (2016), and Dashtban et al. (2014). In explaining this finding, it can be said that depressed people have problems in their daily interactions and are less involved in social relations. They are not interested in relationships and withdraw from various social situations. Depressed people did not find their relationship with mother safe during childhood. They have tried to attract the mother's attention with inconsistent behaviors, but when the mother's way of caring for them did not change, they experienced learned helplessness. For this reason, they gradually realized that it is useless to try to keep the mother by their side. This pattern also appears in adulthood, in such a way that depressed people lose their self-esteem and feel that they do not have the necessary abilities and skills to solve problems and establish emotional relationships, and if they do, they suffer from the lack of relationship continuity and failure in the relationship. People prone to anxiety become anxious when communicating with others, do not show a desire to rely on others, are afraid of expecting a lot of intimacy in their emotional relationships, acquaintances and friends, and are withdrawn and irresponsible, and are worried about the continuation of the relationship for no reason. They do not enjoy their relationships (Yusal, 2016). In fact, it can be explained that people with psychological disturbance are worried about the effects of intimacy and find emotional interactions painful. Due to interpersonal problems, they cannot manage their stress and anxiety properly and form negative patterns of themselves and others, which leads to a decrease in the individual's adaptation and increases the possibility of emotional failure.

Another finding of the research showed that the components of dark personality traits (psychopath, narcissism, and Machiavellianism) have a positive and significant relationship with love trauma symptoms. This result or the findings of Yu et al. (2020); Yusal (2016); Brewer and Abel (2017) and Sohri and Dasht-e-Gorgi (2018) are aligned. In explaining this finding, it can be said that dark personality traits are involved in each person's emotional relationships and predict how to deal with upcoming challenges in this type of relationship. Narcissism with a self-centered approach, exploitation, lack of empathy and violence prevent relationships. Also, narcissism affects the quality of interpersonal relationships by reducing the capacity of empathy and prevents the development of interpersonal relationships with others (Yusal, 2016). In addition, researchers believe that narcissism is associated with low emotional relationship satisfaction and a lack of commitment in the relationship (Abel, 2017). These people are usually impulsive people who prefer immediate rewards, are adventurous and seek new sensations. In their relationships with others in general and with their spouses in particular, they try to abuse and exploit them and do not feel any guilt or anxiety in this regard. These people usually seek to maximize their interests, and in their relationships, even marital relationships, are irresponsible and avoid intimacy. As a result, they are not satisfied with their emotional relationships, which causes their emotional partner to end this relationship (Yu et al., 2020). In fact, it can be explained that these personality traits reduce the level of intimacy and commitment, which, according to Sternberg's theory, form the two sides of the love triangle and make the relationship stable, between men and women; Because intimacy and commitment is a basic human need and is one of the important characteristics of successful and long-term marriages. Intimacy is an interactive, dynamic and combined process and includes emotional, psychological, intellectual, sexual and physical dimensions, etc., and on the other hand, the degree of intimacy depends on the ability of spouses to clearly and correctly convey their thoughts, feelings, needs and desires. Based on this, problems related to intimacy and commitment can lead to failure in relationships, and as a result, the possibility of being abandoned by the other party increases.

Another finding of the research showed that adaptive emotional schemas have a negative and significant relationship with love shock syndrome. This result is consistent with the findings of Baloch et al. (2018) and Pirsaghi et al. (2016). In explaining this result, it can be said that adaptive emotional schemas are important in emotional relationships and marriage and affect the nature and function of the marital relationship; Because the ability to identify positive emotions, accept emotions and express them plays a significant role in creating and maintaining a satisfactory relationship with each other and in the ability to understand and accept the emotions of the other partner. Pirsaghi et al. (2016), in fact, increasing people's awareness and insight about their emotional schemas and understanding their role and trying to manifest higher values in solving problems and problem situations such as ending a relationship and experiencing emotional failure can work. Therefore, compatible emotional schemas are among the deep and strong beliefs of a person about himself and the world and can have a positive effect on different areas of life, especially emotional relationships. In addition to this, another finding of the research showed that non-adaptive emotional schemas have a positive and significant relationship with love shock syndrome. This result or the findings of Karatzias et al. (2016), Baloch et al. (2018) and Pirsaghi et al. (2015) are consistent. In explaining this finding, it can be said that non-adaptive emotional schemas cause negative interpretation and evaluation of emotions. Therefore, a negative evaluation of an emotion is actually a form of forming a negative belief towards that emotion. Usually, the inconsistent nature of emotional schemas appears when people act in their life process and in interaction with others, especially in emotional relationships, in such a way that their schemas are confirmed or they impose their opinions against themselves due to having a control schema. It causes emotional relationships between two people to suffer. Therefore, based on cognitive models, schemas or what are the key beliefs of the family, play a role in creating issues and problems, and often non-adaptive emotional schemas are considered the core of conflict in emotional relationships. The results related to the mediation of the role of adaptive emotional schemas in the path of psychological disturbance and its components with love shock syndrome showed that this

mediation was significant for the two components of anxiety and depression, but not for stress. A research that can directly explain this relationship was not found, but it is indirectly aligned with the findings of Leahy (2015) and Mohammadi et al. (2018). In explaining this finding, according to Tirch et al.'s research (2013), the results showed that compatible emotional schemas have a significant negative relationship with anxiety and depression. In addition, various results showed that emotional schemas are the best predictors for depression. The model of emotional schemas reduces the symptoms of depression and anxiety, which are caused by suppressing emotions and feelings, having feelings of guilt and shame, rumination, and having negative self-thoughts, by increasing adaptive emotional schemas such as accepting and expressing emotions. In addition, among the key features of people with love failure syndrome are emotional and emotional symptoms of anxiety such as feeling worried, restlessness, waiting for the worst event, rumination of memories and reduced experience of various emotions (Leahy, 2015). Therefore, the emotional schema model can indirectly and directly reduce the severity of negative symptoms and negative self-thoughts on people with psychological disturbances and those who experienced emotional failure.

Investigating the mediation of maladaptive emotional schemas in the path of psychological disturbance and its components (anxiety, depression and stress) with the symptoms of love shock showed that this mediation is significant for all three components. This result is consistent with the findings of Karatzias et al. (2016), Rolfs et al. (2013) and Akbari et al. (2012). In explaining this finding, it can be said that non-adaptive emotional schemas lead to a person's vulnerability to various types of psychological and personality disturbances. This will be an obstacle to satisfaction in life and relationship. Since emotional schemas are inconsistent, ineffective, they lead to dissatisfaction in relationships and provide the basis for emotional failure. When the levels of satisfaction and social support are low and the anxiety component of the attachment scale is high, avoidance and depressive symptoms are also increased (Rolfs et al., 2013). Emotional schemas cause biases in the interpretation of events, these biases appear in interpersonal psychopathology in the form of

misunderstandings, distorted attitudes, false assumptions and unrealistic expectations in relationships. Due to the fact that schemas continue throughout life, they affect how a person relates to himself and others. According to this attitude, the arousal of ineffective emotional schemas formed over years of personal experiences is always accompanied by the emergence of emotional disorders. These evoked schemas make a person prone to bias in evaluating, recalling and interpreting everyday experiences. According to Leahy's research (2015), maladaptive emotional schemas are correlated with a wide range of disorders such as depression, anxiety, chronic worry and some other disorders. In explaining this finding, based on the model of emotional schemas, it can be believed that when an emotion is evoked or evoked, the interpretations, reactions and emotion regulation strategies will determine whether this emotion will continue, intensify or decrease. On the other hand, as mentioned, during the experience of emotional failure, a person experiences intense emotions, the person's view and outlook on life and emotions changes and he forms certain beliefs and schemas regarding negative emotions. Some emotional schemas are more characteristic of specific disorders than others. For example, emotional schemas of guilt and individual's beliefs about the duration of emotion are the most predictors of mental disturbance. When the fact that failure, pain and suffering are inevitable in life is ignored by these people due to the existence of a denial schema or when the person fights with it, the anxiety in the person is greatly increased and they drown in their problems. As a result, they lose their ability to deal with these problems and do not consider that other people may also have these problems.

Considering the significance of the mediation of adaptive emotional schemas in the relationship between dark personality traits and love trauma syndromes, dark personality traits may have an indirect effect on love trauma syndromes, in addition to the direct effect, through adaptive emotional schemas. This finding is in line with the research results of Wai and Tilopoulou (2012). Cognitive-behavioral theorists believe that people with narcissistic personality disorder have inconsistent beliefs about themselves, including that they believe that they are exceptional people who should be treated

differently than ordinary people. Entitlement schemas arise when children are over-facilitated by their parents and are allowed to do whatever they want without considering the needs of others. In addition, it can be said that the vulnerability of the self-esteem of people with narcissistic personality disorder makes them very sensitive to the damage caused by criticism or failure, and as a result, they try to do things efficiently to avoid embarrassment. Stubborn criteria schema Since the inconsistent schemas of obedience, sacrifice, failure and emotional inhibition were negative predictors of narcissistic personality disorder, it can be said that because narcissistic personalities value themselves too much and are self-satisfied, arrogant and proud. When revealing themselves, they get a low score in sacrifice and obedience schemas, and the level of emotional schemas in them is low. Also, the relative lack of expressing positive emotions and vulnerability to criticism or failure are other characteristics of narcissistic people. But in order to make themselves look positive, they exaggerate the schemas of emotional inhibition and failure.

The last result that can be obtained from the findings of this research was that non-adaptive emotional schemas have an indirect effect on the relationship between dark personality traits (psychopath, narcissism and Machiavellianism) and love shock symptoms. A study that could be directly aligned with this finding was not found, but studies that could indirectly infer this finding were found. Therefore, this result is in line with the findings of Sadeghzadeh et al. (2020) and Mesbahi et al. (2020). In explaining this finding, it can be stated that cognitive theory is based on the belief that there are many inconsistent emotional schemas in personality traits and therefore, they are represented in the mind in many situations. They seem to direct behaviors and behavioral strategies that are likely to be ineffective in certain environmental conditions. For example, people with antisocial personality who exhibit aggressive and belligerent behaviors have a deep-rooted belief that they can always exploit and control others for their own benefit. They don't have any regrets or excitement about their work, as a result of which they have a control schema, emotional numbness and lack of understanding of others (Akbari et al., 2012). Since emotional numbness is one of the key features of emotional failure and according to the emotional schema model, emotional numbness is

one of the non-adaptive emotional schemas (Leahy, 2015). It can be concluded that negative emotional schemas perpetuate themselves through cognitive distortions, self-destructive life patterns, and incompatible coping styles and directly and indirectly lead to incompatibility in interpersonal relationships, especially emotional relationships.

In general, the findings of the present study showed that psychological disturbance, dark personality traits and emotional schemas played an important role in the rate of love shock syndrome in Mohaghegh Ardabili University students. Therefore, considering the importance of discussing emotional relationships, targeting these three components in virtual preventive trainings and psychological treatments can be effective in reducing the incidence of emotional failure and its subsequent destructive consequences in students. This research, like other researches, faced some limitations, such as the fact that this study was conducted on students, so it should be done with caution in generalizing its results to other age groups. The use of a questionnaire tool was also one of the other limitations of this research, because there is a possibility of bias in self-report tools. Considering the aforementioned limitations and the final findings of this study, it is suggested that in future research plans, other researches should be conducted in order to clarify the relationship between these variables in different statistical societies and other age groups, so that the relationship of the studied variables becomes clearer. Designing and implementing researches with predictive variables in other cognitive and emotional fields, such as emotional and metacognitive beliefs and introducing identity and demographic variables as moderating variables in researches with goals aligned with the current research, can be among the fundamental suggestions for researchers in this field in future researches.

Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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