The Effect of Rumination and Retrospective Negative Memory on Depression Symptoms of Love Trauma in Young: Positive Strengths as a Moderator

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Introduction: Most young people will have been exposed to at least one traumatic event in their lifetime. The main aim of this research was to investigate how Positive Strengths can moderate the impact of rumination and negative memories on depression symptoms in young individuals who have experienced love failure.

Method: The study employed a cross-sectional design and utilized descriptive-correlational research techniques, as well as structural model and path analysis methods. The study population included young individuals seeking counseling for emotional issues related to relationships in Tehran between July and October 2023. A sample of 147 individuals was selected using a multi-stage cluster sampling method. Various instruments, such as Virtues in Action- Inventory of Strengths (VIA-IS), Beck Depression Inventory-II (BDI-II), love Trauma Inventory (LTI), Time Attitude Questionnaire (TAQ), and Rumination scale (RRS) were used for data collection and analysis. Data analysis was conducted using SPSS version 27 for descriptive statistics, Pearson's correlation, SmartPLS version 4, and JAMOVI version 2.4.14 for data analysis and standard coefficients. The significance level was set at 0.05.
Results: Based on the findings, the variable of Excellence played a crucial role as a moderating factor in the relationship between the Retrospective negative memory variable and Depression (β= -0.188, P= 0.022), turning this relationship negative. Additionally, the Humanity variable also had a significant impact as a moderating factor in the connection between the Retrospective negative memory variable and Depression (β= -0.127, P= 0.042). Furthermore, the Excellence variable was found

to have a significant role as a moderating factor in the relationship between the Rumination variable and Love trauma (β= 0.236, P= 0.025).

Conclusion: the findings suggest that Positive Strengths can help alleviate depression following love trauma in young individuals, while negative memories and rumination can exacerbate depressive symptoms. Additionally, the moderating effects of transcendence and humanity can mitigate the negative impact of negative memories and rumination, thus reducing the severity of depression. These findings have implications for the development of treatment programs and psychological interventions aimed at reducing depression in young people who have experienced love failure.

Keywords: Positive Strengths, Rumination, Negative memories, Depression, Love failure

1. Introduction

Engaging in romantic relationships is a common occurrence among young individuals. These relationships help in the development of personal identity, creating opportunities for intimacy and fostering independence. However, the distress experienced by young people during breakups can result in rumination and various issues among them [1]. The aftermath of failed romantic relationships often leads to emotions like sadness, hopelessness, and low self-esteem, which can impact a person's psychological and social well-being and worsen symptoms of depression [2].

Depression, identified as a prevalent and severe medical condition that affects a person's emotions, thoughts, and actions, is usually accompanied by symptoms such as consistent sadness, loss of interest in enjoyable activities, tiredness, changes in sleep and appetite patterns, and, in severe cases, suicidal thoughts [3]. Surveys have indicated that individuals may encounter symptoms of depression like apathy, intense sadness, and anxiety following a breakup, with some cases leading to prolonged periods of depression [4]. A study has also mentioned that romantic breakups can result in depression, anxiety, and anger [5].

Individuals experiencing higher levels of depressive symptoms may be susceptible to recalling negative memories due to rumination. In these circumstances, rumination, characterized by continuous and focused negative thoughts and analyzing the causes of an event, plays a crucial role in sustaining and worsening symptoms of depression as a negative cognitive process [6]. In reality, rumination is considered one of the unproductive responses in people dealing with a romantic breakup, where they repeatedly concentrate on negative emotions, their origins, and outcomes, hindering adaptive responses to psychological distress. Studies reveal that students going through a breakup often engage in rumination, self-criticism, and negative thoughts [7]. Another study in this field proved that post-breakup rumination enhances the severity of depressive symptoms because the individual continues to dwell on negative past experiences, unable to break free from this negative cycle [8].

Negative occurrences like breakups are an inherent part of life that gets stored in the memory system and may linger in the mind for an extended period. Research indicates that these negative memories can significantly affect an individual's well-being and, when recalled, rekindle similar negative emotions and experiences, worsening the person's emotional state [9]. Recalling general negative memories may intensify rumination in individuals experiencing depression and disrupt the process of establishing specific goals, causing them to fixate on the negative aspects of the breakup and hinder moving on. A study discovered that individuals with depression may frequently and intensely recall negative memories due to rumination, creating a detrimental cycle where depression amplifies rumination, leading to increased negative emotions and a gradual decline in positive emotions [11]. Another study found that intense rumination was linked to less comprehensive memories of emotionally charged events and higher emotional engagement with negative incidents over time, irrespective of their seriousness [12].

Depression has detrimental impacts on different aspects of life, such as social interactions, job performance, and economic well-being. These effects extend to personal and interpersonal areas. However, having a positive outlook on time and strong personality traits are crucial in promoting overall well-being [13]. These traits are beneficial characteristics evident in emotions, thoughts, determination, and actions. These 24 strengths can significantly enhance the quality of life by decreasing feelings of depression, increasing satisfaction with life, improving performance at work, and boosting self-esteem and self-confidence

[14].　Studies have demonstrated that focusing on personality strengths can lead to improved well-being, stronger relationships with others, and lower stress, depression, anxiety, and academic pressure [15]. Furthermore, research has indicated that personality strengths indirectly alleviate depression and enhance psychological well-being through the influence of social support and self-confidence [16].

In young individuals, going through love-related traumas can have profound impacts on mental health.　Unhappy romantic relationships filled with emotions like hatred, anger, deception, infidelity, guilt, and a shift in perspective on life can lead to various problematic issues for those experiencing failed relationships [5]. Therefore, it is essential to conduct further research to explore the factors that may hinder the recovery process in young individuals dealing with heartbreak. Despite numerous studies focusing on rumination and negative memories in depression, there is a lack of research on the role of positive strengths in mitigating the impact of these factors on depression stemming from love-related traumas in young individuals. Most studies have examined these concepts in isolation, overlooking their relationship in the context of depression caused by romantic failures.　Hence, conducting research in this area can help bridge this gap.　The objective of this study is to investigate how positive strengths can act as moderators in reducing depression symptoms caused by romantic traumas in young individuals. The study aims to determine how positive strengths can aid in alleviating depression symptoms resulting from failed relationships by reducing rumination and the negative impact of memories.　The researcher outlined the conceptual framework of the study in Figure 1.　I'm sorry, but you forgot to provide the text that needs to be paraphrased.　Please provide the text you would like me to paraphrase.

Figure 1: Conceptual framework of the research

Method

The current research was a cross-sectional study using a descriptive-correlational research method. The study utilized the structural model method and path analysis to investigate the impact of a moderating variable. The independent variables in this study were rumination and retrospective negative memory, while the dependent variables were depression and love trauma in youth. Positive Strengths were considered as the moderating variables.

The statistical population of the study included all young individuals seeking counseling for emotional relationships in Tehran between July and October 2023. A sample of 147 participants was selected through a multi-stage cluster sampling method.　The sample size was determined using Cohen's formula in 2013 for the SEM method, the number of observed and latent variables, anticipated effect size, and desired probability and statistical power levels [17]. With an anticipated effect size of 0.3, a desired statistical power level of 0.8, 5 latent variables, 111 observed variables, and a probability level of 0.05, the researcher calculated the number of participants to be 150. To account for potential attrition in the sample, the researcher decided to include 160 participants.

The study's selection criteria involved individuals visiting counseling centers in Tehran, possessing at least a high school diploma, and providing informed consent to partake in the research. Those excluded from the study were individuals who failed to respond to more than eight items in the questionnaires, leading to their withdrawal from the study.

Individuals were guaranteed that the research forms did not contain any personal information, and they had the option to opt out of the research if they chose.　The research process, which involved interviewing and collecting responses in person, lasted four months due to limited cooperation from the youth participants.　Out of the 160 completed questionnaires, 147 were ultimately used for the study.　Thirteen questionnaires were excluded from the analysis because they were incomplete or deliberately filled out with errors.　The participants completed the questionnaires themselves.

The following instruments were used in the study:

Virtues in Action- Inventory of Strengths (VIA-IS): In 2004, Peterson and Seligman et al. created a survey to assess the personality strengths of individuals [18]. The purpose of this questionnaire is to evaluate six universal virtues - wisdom, humanity, courage, justice, piety, and transcendence - found in various religions and groups. Originally, the test consisted of 240 statements, with each virtue being measured by 10 statements. Respondents use a 5-point Likert scale to indicate their agreement or disagreement with each statement. To address the length of the survey, a shorter version with 24 items was developed. Researchers have reported a Cronbach's alpha of 0.80 for this scale [19]. In a recent study, Cronbach's alpha values for knowledge and wisdom, humanity, courage, justice, abstinence, and excellence were found to be 0.91, 0.85, 0.76, 0.83, 0.766, and 0.723, respectively.

Beck Depression Inventory-II (BDI-II): This questionnaire was designed by Beck et al. in 1996 to measure depression and depressive symptoms in individuals [20]. This questionnaire consists of 21 questions each, question has a score between 0 and 3, where a score of 0 to 13 indicates relative depression, 14 to 19 indicates mild depression, 20 to 28 indicates moderate depression, and 29 to 63 indicates severe depression. The total score of the questionnaire is between 0 and 63. Beck et al. reported its concurrent validity as 0.79 and test-retest validity as 0.67. In Iran, a study reported a Cronbach's alpha coefficient of 0.92 [21]. The researcher obtained a Cronbach's alpha coefficient of the scale of 0.784.

love trauma inventory (LTI): Rosse developed a self-report questionnaire in 2007 aimed at assessing the severity of love trauma and the physical, emotional, cognitive, and behavioral disturbances experienced by individuals after experiencing love trauma [22]. The questionnaire consists of 10 items that are rated on a 4-point Likert scale (ranging from "not at all" to "most of the time"). Each question on the questionnaire is scored individually, with the total score ranging from 10 to 40. A higher score on the scale indicates a higher level of love trauma experienced by the individual. A study conducted in Iran found the Cronbach's alpha coefficient of this questionnaire to be 0.80, indicating good internal consistency [23]. Another study reported a Cronbach's alpha coefficient of 0.687 for this scale.

Time Attitude Questionnaire (TAQ): The questionnaire was created by Khezria Azar and colleagues in 2018 to evaluate attitudes toward time and an individual's positive and negative memories of the past [24]. Responses were rated on a five-point Likert scale, ranging from strongly disagree to strongly agree. This questionnaire consists of 34 items across eight dimensions: positive future (5 items), negative future (4 items), negative present (4 items), present hedonism (5 items), prospective present (4 items), negative past (4 items), acceptance of the past (4 items), and positive past (4 items). In this particular study, the researcher focused on four questions related to retrospective negative memories, including regret, dissatisfaction, suppression of the past, and thoughts of returning to the past for compensatory reasons. The reliability of the questionnaire was assessed through Cronbach's alpha, yielding values between 0.79 and 0.82 [25]. In this study, the researcher reported a Cronbach's alpha coefficient of 0.846 for the Retrospective negative memory dimension.

Rumination scale (RRS): Treynor et al. developed this survey in 2003 [25]. It assesses rumination levels in individuals through 22 questions, with responses on a Likert scale from never (1) to always (4). The survey has three components: expressing (questions 7, 11, 12, 20, 21), thinking (questions 5, 10, 13, 15, 16), and depression (questions 1-4, 6, 8-9, 14, 17-19, 22). Scores range from 22 to 88, with low rumination at 22-33, moderate at 33-55, and high above 55. In Iran, the Cronbach's alpha coefficient was measured at 0.78 [26]. The research in this study found the Cronbach's alpha coefficient of 0.789 for this scale.

Statistical analyses

The researchers used SPSS version 27 software for analyzing data, including descriptive statistics and Pearson's correlation. They also utilized SmartPLS version 4 and JAMOVI version 2.4.14 software to analyze data and calculate standard coefficients. To check the normality of the research variables' distribution, they used the Shapiro-Wilk test. The significance level for the study was set at 0.05.   Similarly, the researcher evaluated the assumptions of the test. The normality of the distribution of the research variables was assessed using the Shapiro-Wilk test, which showed significance. This implied that the research variables did not have a normal distribution, leading to SmartPLS software to conduct the structural equation model. The sampling method employed by the researcher was random, adhering to the required assumption. The sample size of 147 individuals was deemed sufficient for running the structural equation model using the partial least squares method. Following the model's execution, the researcher examined the path coefficients and significance levels between the research variables as presented in Table 4. For this study, the researcher set the bootstrap value at 5000.

Results

Initially, the researcher analyzed the descriptive statistics of the research variables. The participants were gender into two groups, with males comprising 53.1% and females 46.9%. Similarly, the participants were divided into three age groups: 20 to 25 years (78.9%), 25 to 30 years (14.3%), and 30 to 35 years (6.8%).

Table 1. Description of the demographic variables

variables	Groups	Frequency	Percent	Sample size	Median
Gender	Man	78	53.1	147	1
	Female	69	46.9		
Age	20-25	116	78.9	147	1
	25-30	21	14.3		
	35-30	10	6.8		

Table 2 shows the mean and standard deviation of the research variables.

Table 2. Description of the main research variables

Variables	Mean	SD	Max	Min	N	Skewness	Kurtosis
Depression	22.3	3.80	29.0	17.00	147	0.1963	-1.365
Love trauma	22.1	3.98	29.0	14.00	147	-0.1119	-0.911
Rumination	41.0	7.92	57.0	30.00	147	0.6799	-0.839
Retrospective negative memory	13.1	2.31	17.0	10.00	147	0.2306	-1.315
knowledge and wisdom	11.7	2.81	16.0	7.00	147	0.1341	-1.323
Humanity	11.9	3.29	16.0	7.00	147	0.0458	-1.629
Courage	11.6	3.33	16.0	7.00	147	0.0795	-1.561
Justice	12.1	3.26	16.0	7.00	147	-0.1078	-1.570
Abstinence	12.2	3.25	16.0	7.00	147	-0.1602	-1.561
Excellence	11.8	3.29	16.0	7.00	147	0.0895	-1.613

Table 3 shows the correlation between research variables based on Pearson's correlation coefficient.

Table 3. Correlation between variables

Variables	1	2	3	4	5	6	7	8	9	10
Depression	—									
Love trauma	0.511 ***	—								
Rumination	0.510 ***	0.412 ***	—							
Retrospective negative memory	0.635 ***	0.458 ***	0.402 ***	—						
knowledge and wisdom	-0.697 ***	-0.491 ***	-0.377 ***	-0.608 ***	—					

Table 3. Correlation between variables

| Variables	1	2	3	4	5	6	7	8	9	10
Humanity	-0.231 **	-0.190 *	-0.211 *	-0.303 ***	0.184 *	—				
Courage	-0.722 ***	-0.468 ***	-0.469 ***	-0.590 ***	0.659 ***	0.234 **	—			
Justice	-0.219 **	-0.225 **	-0.178 *	-0.302 ***	0.230 **	0.290 ***	0.305 ***	—		
Abstinence	-0.204 *	-0.139	-0.212 **	-0.068	0.130	0.298 ***	0.049	0.113	—	
Excellence	-0.351 ***	-0.268 **	-0.146	-0.198 *	0.252 **	0.457 ***	0.212 *	0.227 **	0.412 ***	—

Note. * p < .05, ** p < .01, *** p < .001

Based on Table 3, Rumination showed a strong and positive correlation with Depression (r=0.510, p<0.001) and Love trauma (r=0.412, p<0.001).   Similarly, Retrospective negative memory exhibited a strong and positive relationship with Depression (r=0.635, p<0.001) and Love trauma (r=0.458, p<0.001). Additionally, Rumination was negatively correlated with Positive Strengths (p<0.05), while no significant correlation was with Excellence (r=-0.146, p>0.05).   Similarly, Retrospective negative memory had a negative and significant correlation with Positive Strengths (p<0.05), but no significant correlation was with the Abstinence dimension (r=-0.068, p>0.05).

Table 4. Standard research coefficients

Result of the hypothesis	Path	STDEV	P-value	T-value	Result
Abstinence -> Depression	-0.068	0.061	0.271	1.102	rejection
Abstinence -> Love trauma	0.001	0.074	0.994	0.008	rejection
Courage -> Depression	-0.243	0.097	0.012	2.514	confirmation
Courage -> Love trauma	-0.078	0.120	0.516	0.649	rejection
Excellence -> Depression	-0.159	0.079	0.043	2.020	confirmation
Excellence -> Love trauma	-0.126	0.089	0.154	1.427	rejection
Humanity -> Depression	0.079	0.074	0.288	1.063	rejection
Humanity -> Love trauma	0.011	0.075	0.885	0.145	rejection
Justice -> Depression	0.018	0.056	0.750	0.319	rejection
Justice -> Love trauma	-0.059	0.080	0.456	0.745	rejection
Retrospective negative memory -> Depression	0.263	0.068	0.000	3.885	confirmation
Retrospective negative memory -> Love trauma	0.186	0.097	0.055	1.923	rejection
Rumination -> Depression	0.202	0.078	0.010	2.592	confirmation
Rumination -> Love trauma	0.134	0.086	0.119	1.559	rejection
knowledge and wisdom -> Depression	-0.192	0.083	0.021	2.306	confirmation
knowledge and wisdom -> Love trauma	-0.133	0.120	0.267	1.109	rejection
knowledge and wisdom x Rumination -> Depression	-0.085	0.103	0.410	0.824	rejection
knowledge and wisdom x Rumination -> Love trauma	-0.133	0.144	0.357	0.922	rejection
Humanity x Rumination -> Depression	-0.021	0.098	0.828	0.217	rejection
Humanity x Rumination -> Love trauma	0.124	0.106	0.239	1.177	rejection
Courage x Rumination -> Depression	0.094	0.098	0.336	0.963	rejection
Courage x Rumination -> Love trauma	-0.102	0.137	0.459	0.741	rejection
Justice x Rumination -> Depression	-0.091	0.068	0.176	1.355	rejection
Justice x Rumination -> Love trauma	0.152	0.084	0.071	1.806	rejection
Abstinence x Rumination -> Depression	0.101	0.072	0.160	1.406	rejection
Abstinence x Rumination -> Love trauma	-0.160	0.091	0.077	1.767	rejection
Excellence x Rumination -> Depression	0.190	0.104	0.068	1.822	rejection
Excellence x Rumination -> Love trauma	0.236	0.105	0.025	2.249	confirmation
Excellence x Retrospective negative memory -> Depression	-0.188	0.082	0.022	2.287	confirmation
Excellence x Retrospective negative memory -> Love trauma	0.013	0.094	0.890	0.138	rejection
Abstinence x Retrospective negative memory -> Depression	0.032	0.064	0.624	0.491	rejection
Abstinence x Retrospective negative memory -> Love trauma	0.029	0.073	0.697	0.390	rejection
Justice x Retrospective negative memory -> Depression	-0.014	0.060	0.809	0.242	rejection

Justice x Retrospective negative memory -> Love trauma	-0.104	0.080	0.193	1.302	rejection
Courage x Retrospective negative memory -> Depression	-0.080	0.097	0.408	0.827	rejection
Courage x Retrospective negative memory -> Love trauma	-0.107	0.122	0.380	0.878	rejection
Humanity x Retrospective negative memory -> Depression	-0.127	0.062	0.042	2.036	confirmation
Humanity x Retrospective negative memory -> Love trauma	0.013	0.071	0.856	0.182	rejection
knowledge and wisdom x Retrospective negative memory -> Depression	-0.114	0.089	0.203	1.272	rejection
knowledge and wisdom x Retrospective negative memory -> Love trauma	-0.132	0.121	0.274	1.094	rejection

figure 2: Path coefficients between variables and significance level
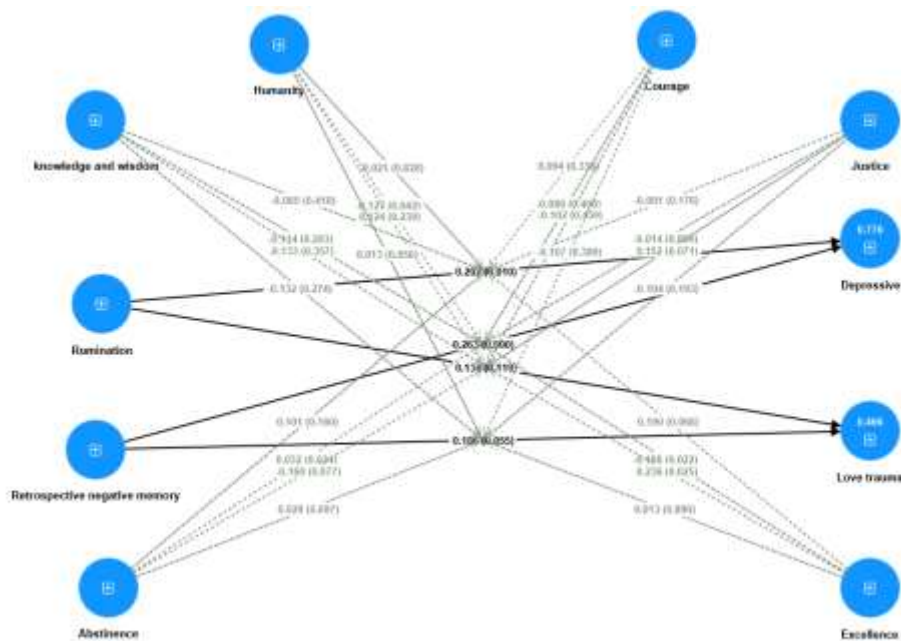
According to the data presented in Table 4 and Figure 2, the Courage factor was found to have a significant negative impact on Depression (β= -0.243, P=0.012). Similarly, the Excellence factor also had a negative and significant influence on Depression (β=-0.159, P=0.043). On the other hand, Retrospective negative memory was shown to have a positive and significant effect on Depression (β=0.263, P=0.000). Concurrently, Rumination was found to have a positive and significant impact on Depression (β=0.202, P=0.010). The knowledge and wisdom component had a negative and significant effect on Depression as well (β=-0.192, P=0.021).

According to the data presented in Table 4 and Figure 2, the Courage factor was found to have a significant negative impact on Depression (β=-0.243, P=0.012). Similarly, the Excellence factor showed a significant negative relationship with Depression (β=-0.159, P=0.043). On the other hand, Retrospective negative memory was positively and significantly associated with Depression (β=0.263, P=0.000). Additionally, Rumination was found to have a significant positive effect on Depression (β=0.202, P=0.010). Lastly, the component of knowledge and wisdom had a significant negative impact on Depression (β=-0.192, P=0.021).

Simultaneously, the variable of Excellence played an important role as a moderating factor in the relationship between the Retrospective negative memory variable and Depression (β=-0.188, P=0.022), resulting in a negative regression path. This suggests that Excellence can moderate the connection between Retrospective negative memory and Depression. Similarly, the variable of Humanity also acted as a significant moderating factor in the relationship between Retrospective negative memory and Depression (β=-0.127, P=0.042), leading to a negative regression path. This indicates that Humanity can moderate the association between Retrospective negative memory and Depression. Additionally, Excellence played a significant role as a moderating variable in the relationship between Rumination and Love trauma (β=0.236, P=0.025). To further explore the

impact of this variable in the model and delve into the effects of the moderating variables, the researcher examined each moderator model separately using JAMOVI software.   Subsequently, the researcher looked into the predictive effects of Retrospective negative memory and Rumination on Depression and Love trauma at different levels of the moderating variable.

Discussion

   The main goal of the current study was to explore how Positive Strengths can influence the impact of rumination and negative memories on depression symptoms stemming from love-related trauma in young individuals.   The findings revealed that courage, knowledge, wisdom, and transcendence were able to alleviate depression, while rumination and negative memories were associated with an increase in depression symptoms.   Additionally, transcendence and humanity were found to moderate the relationship between negative memories and depression, with transcendence playing a role in reducing and moderating the impact of negative memories on depression. Moreover, transcendence was identified as a significant moderating factor for rumination and love-related trauma. The results of this study, indicating that Positive Strengths mitigate depression while negative memories and rumination exacerbate it, are consistent with previous research [7, 8, 11, 12, 15, 16].   Previous studies have shown that focusing on personal strengths can reduce stress, depression, and anxiety levels [15].   It has also been suggested that personal strengths indirectly lead to a decrease in depression and an increase in psychological well-being through social support and self-efficacy [16].   Individuals with depression tend to dwell on negative memories due to rumination [11]. Moreover, intense rumination is linked to less detailed memories of emotional events and heightened emotional reactions to negative situations over time, regardless of severity [12].   Students experiencing romantic breakups often engage in rumination, self-criticism, and automatic negative thoughts [7].   This constant revisiting of past negative experiences after a breakup can worsen depressive symptoms [8].

   Positive Strengths enable individuals to better cope with life's challenges, reducing the impact of negative thoughts and depression.   These capabilities may foster positive self-perceptions and outlooks on the future, ultimately decreasing depressive symptoms [14]. Conversely, negative memories and rumination contribute to depressive feelings.   Negative memories involve recalling past negative experiences and analyzing them repeatedly, which can reinforce feelings of sadness, regret, and hopelessness.   Rumination entails continuous negative thought patterns that often involve unhelpful analysis of past or future concerns.   This behavior exacerbates depression and impedes mental health improvement [6, 9].   Psychological research demonstrates that negative memories and rumination operate in a cycle, reinforcing each other and perpetuating depressive states.   Positive Strengths, such as courage, knowledge, wisdom, and transcendence, allow individuals to critically evaluate the past and avoid rumination, leading to improved emotional well-being [10, 13].

   In regards to a different discovery from the current research, it was revealed that transcendence and humanity can serve as potential moderators and lessen the adverse impacts of negative memories and depression. These factors also play a role in decreasing repetitive thinking and emotional distress in relationships. Although no prior studies have directly explored these particular aspects due to the unique nature of the topic and the variables involved, the outcomes of this research align with previous studies on the influence of positive personality traits on mental well-being [27-29].

   The research results revealed that having character strengths can not only boost students' confidence, but also contribute to increased levels of joy [27].   Additionally, a study suggested that qualities like love, gratitude, and hope have an indirect influence on thriving through the involvement of self-compassion [28].   Moreover, the research findings indicated a direct link between personality strengths and mental wellness, emphasizing that all 24 personality traits can impact emotional health positively and offer individuals tools to enhance their well-being and cope with distress [29].   The discovery can be explained by pointing out that transcendence and humanity are essential psychological and social qualities that empower people to confront life's obstacles and crises with greater adaptability and optimism. Transcendence typically involves personal and spiritual development, as well as advancements in ethical and human aspects, allowing individuals to embrace broader perspectives in times of trouble and extract valuable lessons from challenging experiences to enhance themselves. Similarly, humanity is viewed as a communal aspect of human beings, emphasizing the importance of looking out for the well-being and necessities of others.   Qualities like empathy, kindness, and assisting others enable individuals to extend beyond the personal realm to the communal sphere and form meaningful human connections [30].

These qualities can diminish the impacts of psychological encounters. Dwelling on negative memories can often result in feelings of depression, as individuals constantly revisit and analyze past negative experiences. But by transcending and embracing humanity, one can break free from these harmful thoughts and adopt a more optimistic outlook on themselves and their surroundings. These attributes empower individuals to effectively control negative emotions and prevent getting trapped in a cycle of negative thinking and overthinking [27]. Rumination, as a continuous and unproductive cycle of thinking about past issues and problems, can worsen feelings of depression and anxiety. Both transcendence and humanity play roles in diverting an individual's mind from negative thinking patterns. Those who practice transcendence tend to show empathy and forgiveness towards themselves and others, leading to a decrease in rumination intensity and allowing room for more positive thoughts. Humanity, on the other hand, emphasizes the importance of positive connections and caring for others, shifting focus away from personal issues towards helping others and ultimately reducing rumination and critical self-analysis [1,5]. Transcendentalism and human connection are key in addressing the emotional impact of romantic traumas, which can be highly distressing and lead to feelings of sadness and hopelessness. In some cases, these traumas may even lead to emotional breakdowns, but finding empowerment can help individuals navigate these challenges with more resilience. By embracing these experiences as opportunities for personal growth and focus on the positive aspects, one can transform them into valuable lessons for the future [31].

The current study had limitations that should be taken into account when interpreting the results. One constraint was the reliance on self-reporting for assessing retrospective negative memories, which could have introduced social bias or selective memory. Therefore, future studies should utilize standardized memory tests and structured interviews to enhance the accuracy and validity of the findings. Additionally, confounding variables like socio-economic status, physical health issues, and cultural and family influences may have influenced the outcomes. Thus, it is suggested that these variables be controlled for in future research to eliminate their indirect impact on the results. The outcomes may only pertain to a specific subset of young individuals and may not be readily generalizable to other age groups, cultures, or geographical regions. Hence, employing more advanced methods like neuroimaging and dynamic psychometrics of rumination is recommended to gain a more comprehensive understanding of this phenomenon.

Conclusion

Positive abilities play a crucial role in alleviating depression stemming from romantic trauma in adolescents, according to the findings of this research. Conversely, negative reflective memories and repetitive negative thoughts are linked to an increase in depression. However, transcendence and humanity, when considered as moderating factors, can help mitigate the adverse impact of negative memories and rumination, ultimately reducing the severity of depression. These results can guide the development of treatment programs and psychological interventions aimed at addressing depression resulting from romantic trauma in young individuals, underscoring the significance of focusing on positive personal attributes during the treatment and prevention of depression.

Acknowledgments

Conflict of interest

There is no conflict of interest.

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