

# Mediating Role of Resilience in Relationship Between Attachment Style Dimensions and Quality of Life in High School Students

Habibollah Naderi,<sup>1</sup> Abbas Akbari,<sup>2,\*</sup> and Roya Abbasi-Asl<sup>2</sup>

<sup>1</sup>Psychology Department, Mazandaran University, Babolsar, IR Iran

<sup>2</sup>Department of Educational Psychology, Mazandaran University, Babolsar, IR Iran

\*Corresponding author: Abbas Akbari, Department of Educational Psychology, Mazandaran University, Babolsar, IR Iran. Tel: +98-9171117262, Fax: +98-1135235006, E-mail: abbas.akbari47@yahoo.com

Received 2016 January 09; Revised 2016 February 17; Accepted 2016 February 29.

## Abstract

**Background:** One of the most fundamental constructs in the positive psychology is the quality of life. Quality of life refers to the emotional, social and physical health of individuals and their ability to do daily activities.

**Objectives:** The present study aimed to investigate the mediating role of resilience in relationship between attachment styles and quality of life.

**Materials and Methods:** The population of the study consisted of all male and female high school students in Babolsar, Iran, in the academic year 2014 - 2015. Participants included 367 high school students (226 females and 141 males) from Babolsar city, Iran, selected by multi-stage cluster sampling method. Participants completed attachment styles, quality of life and resilience scales. The research conceptual model was analyzed and assessed using simultaneous sequential regression method and the steps proposed by Baron and Kenny (1986). All analyses were performed by SPSS ver. 22 software.

**Results:** The obtained results showed that: 1) the secure attachment style was a positive predictor of resilience ( $P < 0.01$ ) and quality of life ( $P < 0.01$ ); 2) the insecure attachment avoidant style was a negative predictor of resilience ( $P < 0.01$ ) and the insecure attachment ambivalent style was a negative predictor of resilience ( $P < 0.01$ ) and quality of life ( $P < 0.01$ ); 3) the resilience was a positive predictor of quality of life ( $P < 0.01$ ); 4) the resilience played the role of a partial mediator between insecure attachment ambivalent style and quality of life; 5) the resilience was a complete mediator between secure attachment style and quality of life.

**Conclusions:** This finding confirms the resiliency theory indicating that secure families bring up children resiliently and increase the quality of their lives.

**Keywords:** Resilience, Quality of Life, Attachment Styles

## 1. Background

One of the most fundamental constructs in the positive psychology is the quality of life. Quality of life refers to the emotional, social and physical health of individuals and their ability to do daily activities (1). According to Testa and Simonson (2), quality of life depends on physical, psychological and social grounds and is influenced by the experiences, beliefs, expectations and perceptions of an individual. The world health organization quality of life (WHO-QOL) group (3) defines quality of life as a state of mental satisfaction of an individual from his/her life in a cultural and value-based context of society related to his/her goals, expectations, standards and concerns.

Researches on predictors of quality of life point at two kinds of social and individual factors. In this regard, the style of attachment to parents is considered among the individual factors, which attracted the attention of many researchers (4-10).

Bowlby (11) was one of the first psychologists who examined the process of attachment of infant to mother. According to the Bowlby theory, the infant is born with a biological mental system called attachment behavior system; this system has adaptive value, and leads people toward those who can help them in risky situations and increase their chances of survival. Its purpose is to help children achieve a sense of safety and assure the necessary support at the time of need (12). Ainsworth, Blehar, Waters and Wall (13) proposed three secure, avoidant, and ambivalent attachment styles. In the secure attachment style, the child uses parents as a secure base to explore the environment (14). These children enjoy having a mother sensitive to their needs who responds kindly and with affection when children seek comfort. In the avoidant insecure style, children are indifferent to the presence of parents and are not distressed when parents leave, they do not show interest at reunion with parents. These children do not pay attention

to mothers as a secure base. In the ambivalent insecure attachment, children are distressed in unfamiliar situations; they attach to mother and do not explore the environment. Infant shows signs of intense distress when mother leaves and has an ambivalent behavior at the time of reunion with her; child approaches mother, but may push her away (15).

A review of research suggests that the relationship between attachment styles with the quality of life, in which secure attachment is compared with insecure attachment; people have better mental health (16). In addition, McWilliams and Bailey (17) indicated that insecure attachment styles have a negative relationship with health.

Resiliency is another individual factor which is important in prediction of quality of life. Many researchers reported the positive relationship between resiliency with life quality and satisfaction (18-20). Walsh (21) pointed to two resilience levels in his study: personal and communicative. The personal level refers to the ability to cope with and overcome the problems and the communication level refers to the family system and shows how the family confronts with adverse experiences and conditions and prepares its members for a long-term adaptation. This concept is considered as an important construct in positive psychology and has attracted the attention of many researchers (22, 23), for which numerous definitions are made. Agaibi and Wilson (24) argued that resilience refers to the ability to overcome high stress events and maintain mental health and mental vitality in spite of facing unpleasant events. Shannon (25) stated that resilience is the capacity to face and overcome problems or damages and even become stronger by the experience.

On the other hand, researches indicate resiliency predicted by parent attachment styles. Sevanberg (26) found that secure attachment gives the person the resilience to deal with many adverse events. Simpson and Rholes (27) argued that secure attachment style is an internal way to help people deal with stressful experiences in a positive and constructive way and improve their health and well-being. Furthermore, this attachment style causes the person to have optimistic expectations as well as efficacy, control and high confidence; and to seek help from others when in need. All of these emotions can be considered as sources for resiliency. However, an insecure attachment style acts as a risk factor and reduces resilience and disturbs the factors that help a person to adapt and cope with stressful situations.

According to what is said so far, and with respect to the importance and status of quality of life in the human society, it seems necessary to pay more attention to this concept and precisely investigate its predicting factors. A review of literature on the relationship between attachment

styles and quality of life shows that most of them are focused on predicting the quality of life based on the styles of attachment to parents and less attention is paid to the role of mediating variables. Hence, the present study aimed to investigate the mediatory variable of resilience between styles of attachment to parents and the quality of life. For this purpose, attachment styles with three dimensions as exogenous variable, resiliency as the mediating variable and quality of life as the endogenous variable were used.

Hence, the research questions were as follows:

1. Which of the attachment styles (secure, avoidant and ambivalent) predict the quality of life of students?
2. Which of the attachment styles (secure, avoidant and ambivalent) predict the resiliency of students?
3. Does resilience have a mediating role in the relationship between attachment styles (secure, avoidant and ambivalent) and the quality of life of the students?

## 2. Objectives

The present study aimed to investigate the mediating role of resilience in relationship between the attachment styles and quality of life.

## 3. Materials and Methods

The present study correlational research was conducted through pathway analysis method. In this study, attachment styles were the predictor variables and resiliencies the mediating variable and life quality was the variable criterion. The statistical population included all male and female students enrolled at high schools of Bobalsar, Iran, in the academic year 2014 - 2015. According to the table to determine sample size for research activities (28), the study participants included 367 students (226 females, 141 males) selected by multi-stage clustered random sampling from different high schools of Babolsar. It means that, after selecting five schools randomly three classes were selected in each school. All students of these classes were enrolled into the study. They completed questionnaires in the classroom during a 50-minute school lesson. The participants whose questionnaires were completed incorrectly were excluded from the final analyses ( $n = 14$ ). Therefore, in the final analysis there were 353 students from the high schools. All descriptive statistics and path analyses were performed by SPSS ver.22. The mean age of the students was 16.48 ( $SD = 1.97$ ).

### 3.1. Research Instruments

#### 3.1.1. Attachment Styles Questionnaire

This scale is constructed by Collins and Read (29) and has 18 questions. Each question includes 5 items that are

scored from zero to four, and evaluates three subscales including: 1) D subscale which is used to evaluate avoidant attachment style. Sample item is: "I find it difficult to trust others completely"; 2) C subscale, which evaluates secure attachment style. Sample item is: "I am comfortable depending on others" and 3) A subscale which indicates insecure ambivalent attachment style. Sample item is: "I want to merge completely with another person". Collins and Read (29) reported the retest reliability of this instrument in the A subscale between 0.83 to 0.85; and 0.78 to 0.80 in D subscale, and 0.81 to 0.82 for C subscale. Different researches gained acceptable validity and reliability for this questionnaire (30). The current study used Cronbach's alpha coefficient to determine the reliability and found 0.76, 0.79, and 0.70 for secure, avoidant and ambivalent attachment styles, respectively.

### 3.1.2. Connor and Davidson Questionnaire of Resilience

The CD-RISC is a 25-item scale developed by Connor and Davidson (31) to measure resilience. It uses a five-point Likert response format ranging from zero (not true at all) to four (true nearly all the time), with a total score range of 0 to 100. A preliminary study of the psychometric properties of the scale in a general population and a patient sample indicated adequate reliability and validity (31). Sample item is: "I believe in my abilities". Different researches gained acceptable validity and reliability of this questionnaire (32). In the present study the Cronbach's alpha coefficient was 0.84. The correlation among the items and the total scale score was in the range of 0.33 to 0.51, significant at the level of 0.001.

### 3.1.3. The Short Scale of Quality of Life by World Health Organization

This scale has 26 items. It was built in 1996 and evaluates four dimensions of quality of life including: 1) physical health; sample item is: "How satisfied are you with your sleep?"; 2) mental health; sample item is: "How much do you enjoy life?"; 3) relationship with others; sample item is: "How satisfied are you with your personal relationships?" and 4) the quality of living place. Sample item is: "How satisfied are you with the conditions of your living place?". The reliability of this scale was evaluated by its developers in 10 international WHO centers with the reported alpha coefficient from 0.73 to 0.89 for the subscales and the total scale (33). The psychometric properties of the world health organization quality of life-BREF (WHOQOL-BREF) were previously evaluated in different cultures and societies (34). Also, in another study, the Persian version of the WHOQOL-BREF indicated adequate reliability and validity (35). The current study used Cronbach coefficient and internal consistency to examine reliability and validity of measures, re-

spectively. Cronbach's alpha for total scale was 0.87. For test validity, the correlation of all items with the total score was calculated and the range of correlation coefficients was 0.31-0.56.

## 4. Results

Participants of the study included 367 students (226 females, 141 males) selected from different high schools of Babolsar. The participants whose questionnaires were completed incorrectly were excluded from the final analyses ( $n = 14$ ). Therefore, in the final analysis there were 353 students from the high schools. All descriptive statistics and path analyses were performed by SPSS ver. 22. The mean age of the students was 16.45 ( $SD = 1.97$ ).

The findings of the study are presented in two parts of descriptive and path analyses and include the impact of attachment styles on quality of life, the impact of attachment styles on resilience and the impact of attachment styles and resilience on quality of life. The descriptive findings including the mean and standard deviation and correlation matrix of attachment styles, resilience and quality of life variables are shown in Table 1.

As shown in Table 2, a positive significant relationship was found between the secure attachment with resilience ( $r = 0.52, P = 0.001$ ) and quality of life ( $r = 0.23, P = 0.014$ ). A positive significant relationship was found between the insecure attachment avoidant with insecure attachment ambivalent ( $r = 0.44, P = 0.001$ ). A negative significant relationship was found between the insecure attachment avoidant with resilience ( $r = -0.26, P = 0.002$ ) and quality of life ( $r = -0.45, P = 0.001$ ). A negative significant relationship was found between the insecure attachment ambivalent with resilience ( $r = -0.28, P = 0.001$ ) and quality of life ( $r = -0.44, P = 0.001$ ). In addition, a positive significant correlation was observed between resiliency and quality of life ( $r = 0.46, P = 0.001$ ).

Multiple regression analysis was used to investigate the questions of the research, simultaneously. The main purpose of the study was to investigate the mediating role of resiliency using the proposed stages by Baron and Kenny (36). Thus, in the first stage, quality of life regression was performed on attachment styles (Table 3). In the second phase, resilience regression was done in relation to the attachment styles (Table 4) and in the third stage quality of life regression was applied to the resilience by controlling the attachment styles (Table 5).

According to Table 3, secure attachment was a positive significant predictor of quality of life in students ( $P = 0.014, \beta = 0.18$ ) and insecure attachment avoidant ( $P = 0.009, \beta = -0.23$ ) and insecure attachment ambivalent ( $P = 0.001, \beta = -0.34$ ) were negative significant predictors of quality of

**Table 1.** Mean and Standard Deviation of the Variables

Variables	Average	Standard Deviation
Secure attachment	14.70	2.93
Insecure attachment avoidant	9.10	2.81
Insecure attachment ambivalent	10.80	4.92
Resiliency	78.20	14.71
Quality of life	79.10	13.34

**Table 2.** Correlation Matrix Between the Variables

Variables	1	2	3	4	5
Secure attachment	1				
Insecure attachment avoidant	-0.10	1			
Insecure attachment ambivalent	-0.02	0.44 <sup>a</sup>	1		
Resilience	0.52 <sup>a</sup>	-0.26 <sup>a</sup>	-0.25 <sup>a</sup>	1	
Quality of life	0.23 <sup>a</sup>	-0.45 <sup>a</sup>	-0.44 <sup>a</sup>	0.46 <sup>a</sup>	1

<sup>a</sup>All coefficients are significant at 0.01 level.

**Table 3.** Predicting the Quality of Life Based on Attachment Styles (First Stage)

Predictor Variables	Criterion Variable	F	P <	R <sup>2</sup>	SE	$\beta$	T	P
Secure attachment	Quality of life				0.33	0.18	2.49	0.014
Insecure attachment avoidant		19.40	0.001	%28	0.40	-0.23	2.65	0.009
Insecure attachment ambivalent					0.23	-0.34	4.05	0.001

Abbreviations:  $\beta$ , coefficient of regression; F, F-test; P, level of significance; SE, standard error of coefficients; R<sup>2</sup>, coefficient of determination; T, T-test.

life. It should be noted that all the predictor variables presented 28% of variance of quality of life.

According to Table 4, secure attachment was a positive significant predictor of resilience in students ( $P = 0.001$ ,  $\beta = 0.49$ ) and insecure attachment ambivalent ( $P = 0.004$ ,  $\beta = -0.24$ ) was a negative significant predictor of resilience. But, insecure attachment avoidant ( $P = 0.402$ ,  $\beta = -0.07$ ) was not a significant predictor of resilience. It should be noted that secure attachment and insecure attachment ambivalent variables presented 32% of variance of resilience.

According to Table 5, resilience was a positive significant predictor of quality of life in students ( $P = 0.001$ ,  $\beta = 0.36$ ) and insecure attachment avoidant ( $P = 0.013$ ,  $\beta = -0.20$ ) and insecure attachment ambivalent ( $P = 0.002$ ,  $\beta = -0.26$ ) were negative significant predictors of quality of life. But, secure attachment ( $P = 0.980$ ,  $\beta = 0.02$ ) was not a significant predictor of quality of life. It should be noted that resilience, insecure attachment avoidant and insecure at-

tachment ambivalent variables presented 36% of variance of quality of life.

According to Figure 1, to investigate the mediating role of resiliency in the relationship among attachment styles and the quality of life, the coefficient paths of attachment styles were analyzed in three stages.

It can be observed that in the third stage, after the introduction of resiliency, the regression coefficient of insecure ambivalent style reduced (from -0.34 to -0.26). Hence, it can be concluded that resiliency had played a mediating role in the relationship among insecure ambivalent style and the quality of life. Regarding the secure attachment after the introduction of resiliency in the third stage, the regression coefficient of secure attachment style decreased and this relationship lost its significance (from 0.18 to 0.02). Hence, it can be said that resiliency had played a complete mediating role in the relationship among secure attachment style and the quality of life. Regarding the insecure avoidant attachment style it was observed that after

**Table 4.** Resiliency Regression on Attachment Styles (Second Stage)

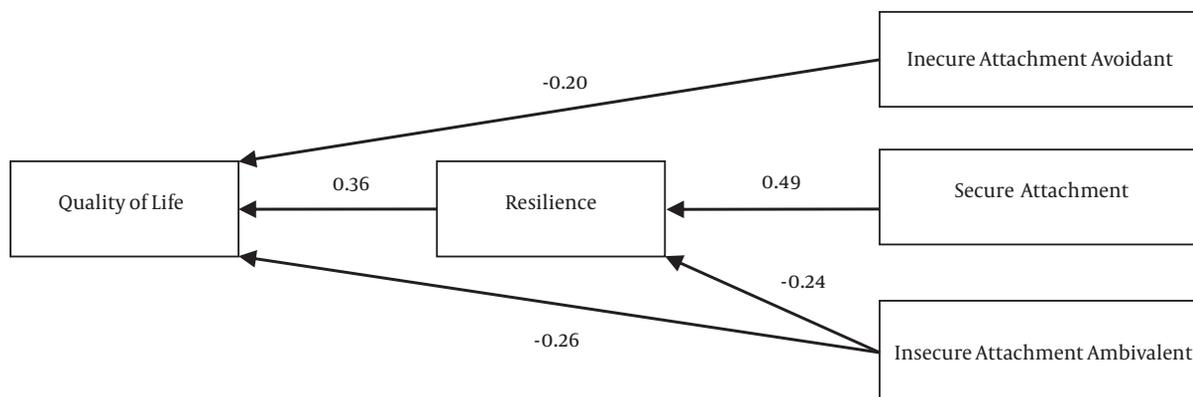
Predictor Variables	Criterion Variable	F	P <	R <sup>2</sup>	SE	β	T	P
Secure attachment	Resilience				0.35	0.49	7.10	0.001
Insecure attachment avoidant		23.30	0.001	%32	0.42	-0.07	0.85	0.402
Insecure attachment ambivalent					0.24	-0.24	2.95	0.004

Abbreviations: β, coefficient of regression; F, F-test; P, level of significance; SE, standard error of coefficients; R<sup>2</sup>, coefficient of determination; T, T-test.

**Table 5.** Regression of Quality of Life Based on Resiliency by Controlling the Dimensions of Attachment Styles (Third Stage)

Predictor Variables	Criterion Variable	F	P <	R <sup>2</sup>	SE	β	T	P
Secure attachment	Quality of life				0.36	0.02	0.25	0.980
Insecure attachment avoidant		21.20	0.001	%36	0.38	-0.20	2.50	0.013
Insecure attachment					0.22	-0.26	3.10	0.002
Ambivalent Resilience					0.08	0.36	4.35	0.001

Abbreviations: β, coefficient of regression; F, F-test; P, level of significance; SE, standard error of coefficients; R<sup>2</sup>, coefficient of determination; T, T-test.



**Figure 1.** Figure 1.

the introduction of resilience in the third stage, the regression coefficient of avoidant attachment style decreased (from -0.23 to -0.20); however since avoidant attachment was not a significant predictor of resiliency, it can be concluded that resiliency had no mediating role in the relationship between avoidant style and the quality of life.

### 5. Discussion

The current study showed that the secure attachment style had a positive significant relationship with the quality of life and securely attached people enjoy a higher quality of life. These people have mothers or caregivers who

are sensitive and responsive, evaluate themselves as valuable and qualified (4), and have a higher self-confidence, and better social skills (6); make wider social connections through trusting themselves and others (5) in addition to enjoying their relationship with others they trust people and have the feeling of being accepted by others (6). All of these features result in establishing a better social relationship by the people with secure attachment style compared to the ones with avoidant and ambivalent styles.

Furthermore, secure attachment style protects the individual when facing mental problems (37) and helps him to reduce the stress by relying on effective coping strategies (10). Hence it can be expected that having two features of secure attachment, i.e., desired social relationships and

controlling negative emotions, such individuals can prevent problems such as depression, anxiety and their mental and physical outcomes and experience a higher quality of life.

Another research finding showed that the insecure avoidant and ambivalent styles had a negative relationship with the quality of life. This finding is consistent with the statement that such people use weak coping strategies (8) that can lead to increased anxiety and threaten their mental health.

Also, it was found that secure attachment style had a positive significant relationship and ambivalent insecure attachment style had a negative significant relationship with resilience which again confirms the attachment theory; since according to this theory it is expected that the existence of a secure base in the family functions as a supportive factor and helps people face stressful events in a positive way and cope with them constructively, it also improves their health and wellbeing; however insecure attachment styles lead to weak coping and adaptation.

Another finding of this research indicated resiliency as a significant positive predictor of quality of life. This finding was consistent with the belief that resiliency is an individual factor that increases the level of psychological health and life satisfaction (18, 19), and the belief that resiliency increases satisfaction through reducing emotional problems (depression, anxiety and mental pressure) (20). Moreover, the resilient people have some features that probably affect the quality of their lives in a positive and effective way. In this regard (22), it should be pointed that resilient people have the ability to grow and progress even in the difficult or unpleasant situations. Also, this group does not have self-destructing behaviors and are emotionally calm (23).

The most important finding of the study indicated that avoidant attachment style directly reduces the quality of life while ambivalent attachment style with the mediating role of resiliency directly and indirectly reduces the quality of life. Also, secure attachment style with the mediating role of resiliency increases the quality of life. This finding confirms the resiliency theory indicating that secure families bring up children resiliently and increase the quality of their lives.

Regarding the above findings, it is suggested that to promote and enhance secure attachment in the families, and to make families aware of the growth and promotion of features such as resiliency, more activities are done and the capacities of some institutions such as education system, welfare organization and pre-marriage counseling centers are utilized.

## Acknowledgments

This article was not supported by any specific organization or university.

## Footnotes

**Authors' Contribution:** All authors participated equally in study.

**Financial Disclosure:** There was no conflict of interest regarding the items used in the current study.

**Funding/Support:** It was a self-funded study.

## References

1. Donald A. What is quality of life? 2001. Available from: [WWW.Jr2.Ox.ac.uk](http://WWW.Jr2.Ox.ac.uk).
2. Testa MA, Simonson DC. Assessment of quality-of-life outcomes. *N Engl J Med*. 1996;**334**(13):835-40. doi: [10.1056/NEJM199603283341306](https://doi.org/10.1056/NEJM199603283341306). [PubMed: [8596551](https://pubmed.ncbi.nlm.nih.gov/8596551/)].
3. World Health Organization. . ICDH-2: International classification of impairments, activities, and participation. ; 1997.
4. Diamond LM. Attachment style, current relationship security, and negative emotions: The mediating role of physiological regulation. *J Soc Pers Relatsh*. 2005;**22**(4):499-518. doi: [10.1177/0265407505054520](https://doi.org/10.1177/0265407505054520).
5. Woodward MJ, Patton SC, Olsen SA, Jones JM, Reich CM, Blackwell N, et al. How do attachment style and social support contribute to women's psychopathology following intimate partner violence? Examining clinician ratings versus self-report. *J Anxiety Disord*. 2013;**27**(3):312-20. doi: [10.1016/j.janxdis.2013.02.007](https://doi.org/10.1016/j.janxdis.2013.02.007). [PubMed: [23602945](https://pubmed.ncbi.nlm.nih.gov/23602945/)].
6. Dereli E, Karakus O. An examination of attachment styles and social skills of university students. *Electronic J rese educ psychol*. 2011;**9**(2):731-44.
7. Shaver PR, Mikulincer M. Adult attachment and cognitive and affective reactions to positive and negative events. *Soc Personal Psychol Compass*. 2008;**2**(5):1844-65. doi: [10.1111/j.1751-9004.2008.00146.x](https://doi.org/10.1111/j.1751-9004.2008.00146.x).
8. Heath-Gainer W. The mediating role of coping on the relationship between attachment style and posttraumatic stress disorder among suicidal african american women. 2012
9. Mikulincer M, Florian V. The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. 1998
10. Mikulincer M, Shaver PR. Adult attachment orientations and relationship processes. *J Fam Theory Rev*. 2012;**4**(4):259-74. doi: [10.1111/j.1756-2589.2012.00142.x](https://doi.org/10.1111/j.1756-2589.2012.00142.x).
11. Bowlby J. Attachment and loss: Separation. New York: Basic Books; 1973.
12. Ainsworth MD. Attachments beyond infancy. *Am Psychol*. 1989;**44**(4):709-16. [PubMed: [2729745](https://pubmed.ncbi.nlm.nih.gov/2729745/)].
13. Ainsworth MDS, Blehar MC, Waters E, Wall SN. Patterns of attachment: A psychological study of the strange situation. Psychology Press; 2015.
14. Berk L. Development through the lifespan. 4 ed. Illinois State University; 2007.
15. Crain W. Theories of development: Concepts and applications. Psychology Press; 2010.
16. Ozturk A, Mutlu T. The relationship between attachment style, subjective well-being, happiness and social anxiety among university students. *Procedia Soc Behav Sci*. 2010;**9**:1772-6.
17. McWilliams LA, Bailey SJ. Associations between adult attachment ratings and health conditions: evidence from the National Comorbidity Survey Replication. *Health Psychol*. 2010;**29**(4):446-53. doi: [10.1037/a0020061](https://doi.org/10.1037/a0020061). [PubMed: [20658833](https://pubmed.ncbi.nlm.nih.gov/20658833/)].

18. Liu Y, Wang Z, Lu W. Resilience and affect balance as mediators between trait emotional intelligence and life satisfaction. *Pers Individ Dif*. 2013;**54**(7):850–5. doi: [10.1016/j.paid.2012.12.010](https://doi.org/10.1016/j.paid.2012.12.010).
19. Liu Y, Wang ZH, Li ZG. Affective mediators of the influence of neuroticism and resilience on life satisfaction. *Pers Individ Dif*. 2012;**52**(7):833–8. doi: [10.1016/j.paid.2012.01.017](https://doi.org/10.1016/j.paid.2012.01.017).
20. Basu D. Quality-of-life issues in mental health care: Past, present, and future. *Ger J Psychiatry*. 2004;**7**(3):35–43.
21. Walsh F. Family Resilience: A Framework for Clinical Practice. *Family Process*. 2003;**42**(1):1–18. doi: [10.1111/j.1545-5300.2003.00001.x](https://doi.org/10.1111/j.1545-5300.2003.00001.x).
22. Masten AS, Best KM, Garmezy N. Resilience and development: Contributions from the study of children who overcome adversity. *Dev Psychopathol*. 1990;**2**(04):425–44.
23. Letzring TD, Block J, Funder DC. Ego-control and ego-resiliency: Generalization of self-report scales based on personality descriptions from acquaintances, clinicians, and the self. *J Res Pers*. 2005;**39**(4):395–422.
24. Agaibi CE, Wilson JP. Trauma, PTSD, and resilience: a review of the literature. *Trauma Violence Abuse*. 2005;**6**(3):195–216. doi: [10.1177/1524838005277438](https://doi.org/10.1177/1524838005277438). [PubMed: [16237155](https://pubmed.ncbi.nlm.nih.gov/16237155/)].
25. Shannon CA. Adult children of alcoholics and non alcoholics: a comparative of resiliency, attachment and individual protective factors. university of Hartford; 2008.
26. Svanberg POG. Attachment, resilience and prevention. *JMH*. 2009;**7**(6):543–78. doi: [10.1080/09638239817716](https://doi.org/10.1080/09638239817716).
27. Simpson JA, Rholes WS. Attachment and relationships: Milestones and future directions. *J Soc Pers Relatsh*. 2010;**27**(2):173–80. doi: [10.1177/0265407509360909](https://doi.org/10.1177/0265407509360909).
28. Krejcie RV, Morgan DW. Determining sample size for research activities. *Educ psychol meas*. 1970.
29. Collins NL, Read SJ. Adult attachment, working models, and relationship quality in dating couples. *J Pers Soc Psychol*. 1990;**58**(4):644–63. doi: [10.1037/0022-3514.58.4.644](https://doi.org/10.1037/0022-3514.58.4.644).
30. Collins NL, Feeney BC. A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *J Pers Soc Psychol*. 2000;**78**(6):1053–73. doi: [10.1037/0022-3514.78.6.1053](https://doi.org/10.1037/0022-3514.78.6.1053).
31. Connor KM, Davidson JR. Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). *Depress Anxiety*. 2003;**18**(2):76–82. doi: [10.1002/da.10113](https://doi.org/10.1002/da.10113). [PubMed: [12964174](https://pubmed.ncbi.nlm.nih.gov/12964174/)].
32. Jowkar B, Friborg O, Hjemdal O. Cross-cultural validation of the Resilience Scale for Adults (RSA) in Iran. *Scand J Psychol*. 2010;**51**(5):418–25. doi: [10.1111/j.1467-9450.2009.00794.x](https://doi.org/10.1111/j.1467-9450.2009.00794.x). [PubMed: [20149146](https://pubmed.ncbi.nlm.nih.gov/20149146/)].
33. The World Health Organization. The world health organization quality of life assessment (whoqol): Development and general psychometric properties. *Soc Sci Med*. 1998;**46**(12):1569–85. [PubMed: [9672396](https://pubmed.ncbi.nlm.nih.gov/9672396/)].
34. Berlim MT, Pavanello DP, Caldieraro MA, Fleck MP. Reliability and validity of the WHOQOL BREF in a sample of Brazilian outpatients with major depression. *Qual Life Res*. 2005;**14**(2):561–4. [PubMed: [15892446](https://pubmed.ncbi.nlm.nih.gov/15892446/)].
35. Yousefy AR, Ghassemi GR, Sarrafzadegan N, Mallik S, Baghaei AM, Rabiei K. Psychometric properties of the WHOQOL-BREF in an Iranian adult sample. *Community Ment Health J*. 2010;**46**(2):139–47. doi: [10.1007/s10597-009-9282-8](https://doi.org/10.1007/s10597-009-9282-8). [PubMed: [20063062](https://pubmed.ncbi.nlm.nih.gov/20063062/)].
36. Baron RM, Kenny DA. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J Pers Soc Psychol*. 1986;**51**(6):1173–82. doi: [10.1037/0022-3514.51.6.1173](https://doi.org/10.1037/0022-3514.51.6.1173).
37. Shaver PR, Hazan C. Adult romantic attachment: Theory and evidence. *Advances in personal relationships*. 1993;**4**:29–70.