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# The Mediator Role of Ego-Strength in the Relationship between Student Self-Esteem and Parental Perfectionism

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## **Quantitative Study**

#### Abstract

Background: Perfectionism as a personality trait is associated with self-esteem. There are many factors that can affect the relationship between perfectionism and self-esteem. The aim of the present study was to examine the mediating effect of ego strength on the relationship between perfectionism and self-esteem.

Methods: The study participants consisted of 200 students. All participants were asked to complete the Perfectionism Scale, Self-Esteem Test, and Ego-Strength Scale (ESS). The obtained data were analyzed using correlation and path analysis in SPSS and LISREL.

**Results:** The results showed that positive perfectionism had a significant positive relationship with self-esteem and negative perfectionism had a significant negative relationship with self-esteem. In addition, the results of the research showed that ego strength mediated between perfectionism and self-esteem.

Conclusion: Based on the findings of this research, it can be concluded that the relationship between perfectionism and self-esteem is not linear and one-dimensional, and ego strength can play a mediator role in the relationship between them.

Keywords: Ego strength, Perfectionism, Self-esteem

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#### Introduction

Although self-esteem is one of the most fundamental concepts studied in many studies, there is not much agreement among psychologists in a way that its definition range includes good or positive emotion up

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to egotism, selfishness, and sense of priority (Sayadpour, 2007). According to Mackie and Smith (2016), self-esteem is what we think about ourselves. Self-esteem is a positive or negative evaluation of and emotion toward oneself. Self-esteem is constructed due to the need for the positive evaluation of others in the form of feedbacks, warm and amicable confrontation, acceptance, and kindness from the one's environment particularly from the parents of a child.

The results of an examination of the value-

making relationship of a family with students' self-esteem showed a positive correlation between the behavioral attitudes of parents and their children's self-esteem. One of the characteristics of parents that are effective on children's characteristics is perfectionism. Perfectionism is defined as a strong tool by which tasks can be performed without error in many dimensions of life (Flett & Hewitt, 2002). People with high perfectionism are very selfcritical in comparison to others with a lower perfectionism for their cognition, emotion, and performance. Therefore, they show a negative reaction to failure and are vulnerable (Besser, Flett, Hewitt, & Guez, 2008; Flett & Hewitt, 2015). Perfectionists prevent a position or delay it if they cannot complete a duty because that position is not based on their perfect criterions. As a result of the most recent research findings, perfectionism has been recognized as a multi-dimensional including the two structure normative (adapted) and neurotoxic (maladapted) dimensions. Hamilton and Schweitzer (2000) have discriminated between normal and neurotoxic (positive and negative) perfectionism. They believe that positive perfectionism is correlated with rational expectations regarding one's abilities, limitations, attempt, and activity, which increase satisfaction and self-esteem. negative perfectionism However, is а collection of unreal, ambitious goals an individual is always afraid of. Negative perfectionism, neurotoxic perfectionism, is the prevention of negative consequences, and positive perfectionism is acquiring positive consequences and includes the 3 components of self-esteem, satisfaction, and acceptance. In fact, self-esteem is evaluated as the principal component of positive perfectionism (Pishva & Besharat, 2011; Slade & Owens, 1998). Dunkley, Zuroff, and Blankstein (2003) concluded that negative perfectionism is correlated with depression, anxiety, and low self-esteem.

Based on the studies on the relationship between self-esteem and perfectionism, it seems that this relationship is not linear and single-dimensional and can be influenced by variables such as ego strength as the mediator factor. Ego strength is one of the main components of psychological models that determine mental harms (Weiner, Tennen, & Suls, 2012) and refers to the combination of the internal psychological capacities of an individual in interaction with and his/her social environment others (Besharat & Tavalayeian, 2016). Ego strength determined based on an individual is psychological ability to solve mental internal conflicts and interaction with the environment including ego strength, resiliency, defensive mechanisms, coping strategies, and cognitive actions (Block, Horwich, & Goodman, 1973; as cited in Besharat et al., 2014). On the other hand, ego weakness is one of the main indexes of mental pathology in psychodrama approaches (Weiner et al., 2012). The results of the research by Besharat and Tavalayeian (2016) with aim of comparing perfectionism, ego strength, and anger rumination in patients with major depression and disorder obsessive-compulsive (OCD) showed a significant difference between depression and OCD in terms of perfectionism dimensions. The score of patients with depression in the dimensions of other-oriented and self-oriented socially perfectionism and prescribed perfectionism (SPP) was higher compared to those with OCD; however, no significant difference was observed between the two groups in terms of the ego strength score.

The aim of this research was to study the mediator role of ego strength in the relationship between the students' selfesteem and their parents' perfectionism. The findings of this research can familiarize parents with the consequences of their perfectionism behavior in their children and help them select the most accurate way of reaching their goals. Clinical research has shown that the supportive behavior of parents can help children form and use effective coping strategies in the face of environmental stress factors. The results of a research by Bulanda and Majumdar (2008) on the relationship between parents and their children and adolescents' self-esteem showed that the relationship and involving quality in their relationship is positive and significant.

Khanbani (2006) in his research found a significant relationship between perfectionism and self-esteem in intelligent and ordinary students. It seems that ego strength as a characteristic plays a role in the relationship between self-esteem and perfectionism. Singh and Anand investigated self-concept and ego strength in both genders. Their results showed that teenage girls generally obtain a better ego strength score and have a more positive self-concept than boys. Results of the study by Tolooee Qarachanaq, Pormouzeh, and Mirza Loo (22015) on the relationship between ego strength, self-control, and self-esteem showed that these 3 variables have a positive and significant relationship with each other. Of course, the girls' role was higher than boys'. Moreover, the mediator role of ego strength was investigated in another research on the relationship between attachment styles and cognitive emotion regulation strategies (Besharat, Asadi, & Gholamali Lavasani (2017). The results showed the mediator role of ego strength in the relationship between attachment styles and the two groups of adapted and maladapted policies of cognitive emotion regulation strategies. Fayyaz, Sarmast, Ameri, and Besharat (2016)conducted a research to compare the effect of parenting styles and ego strength of parents on children among 190 girls in the third grade of high school. They showed that the more authoritative the parenting style is, the more ego strength is observed in children. Pourhosein, Dehghani, and Darabi (2018) found that ego strength and body image had a significant relationship with psychological well-being in high school girls.

Thus, the main aim of the present research was to examine the mediator role of ego strength in the relationship between perfectionism and self-esteem.

## Methods

This descriptive (non-experimental), correlative research was conducted using path analysis. Self-esteem is indigenous, perfectionism is exogenous, and ego strength is a mediator variable.

## Statistical population and sample

The statistical population of this research consisted of all high school girls in Natanz, Iran, in 2016-2017. The sampling method used was random cluster sampling method; Badrud was selected from among various counties of Natanz city, and 2 out of the 5 high schools of Badrud were selected. In total, 13 girls were selected from among the 200 students who participated in this research.

## **Research tool**

The tools used in this research included the Ego Strength Inventory (Besharat, 2011) and self-esteem inventory (Pourhosein, 2010).

1. Ego Strength Scale: This 25-item scale is used to measure and normalize ego abilities to control and manage situations and difficult life conditions by adopting ego control, egoresiliency, defense mechanisms, and coping strategies measurement tools (Besharat, This scale measures individual 2011). reactions to difficult living conditions based on the 5 subscales of ego strength, ego resiliency, mature defense mechanisms, problem-focused coping strategies, and positive emotional-focused coping. The minimum and maximum test scores in each subscale are 5 and 25, respectively. The items are scored on a 5-point Likert scale ranging from 1 (very low) to 5 (very high). The psychometric properties of the Ego Strength Scale have been investigated and confirmed in several studies in 2005-2014 in patient (n = 372) and normalized samples (n = 1257)(Besharat, 2011; Besharat & Tavalayeian, 2016). In these studies, Cronbach's alpha coefficient of the total Ego Strength Scale was reported as 0.89-0.93. These coefficients are the internal consistency coefficients of the Ego Strength Scale. Test-retest reliability of the scale for the patients (m = 122) and normalized patients (n = 274) was obtained to be 0.83-0.88 in two shifts and within a 2-6-week interval for the total score of ego strength. These coefficients confirm the testretest reliability of ego strength that is all significant (P < 0.001).

2. Self-Esteem Scale: This scale was made by Pourhosein (2010) based on the cognitive developmental theory of Damon and Hart (1991). This test is an abbreviated form of the 30-question test made by Pourhosein (2007). Pourhosein (2010) used Cronbach's alpha correlation coefficient and Pearson's coefficient to estimate the validity of the 10-question Self-Esteem Test. The test results showed that the 10-question Self-Esteem Test has high content and face validity and high internal consistency (0.843) based on the 30question criterion, and high and significant structure validity. In addition, the 10-question test consists of two subscales (self-psychological and self-social). The reliability of each subscale was measured and both have high and significant internal consistency. The construct validity of the scale was calculated using factor analysis, and the result showed that 54% of the total variance was measured by two factors. This means that the scale reached self-esteem measurement level. Moreover, the results showed that the 10-question Self-Esteem Test has high content and face validity and internal consistency (0.825) based on the Rosenberg self-esteem criterion, and high and significant construct validity.

**3. Perfectionism Scale:** This sale has 59 questions that are scored on a 5-point Likert scale ranging from totally agree to totally

disagree. In addition, it measures positive and negative perfectionism. Positive perfectionism is measured by the 3 subscales of organizing, purposefulness, and attempt to be excellent. Negative perfectionism is measured by the 3 subscales of high criterions for others, negative self-concept, and pressureperception by parents. A Cronbach's alpha coefficient (internal consistency) of 0.90 was obtained after factor analysis by distributing the scale among 313 participants.

#### Results

For data analysis, first, the related descriptive indexes and the examined variables were taken into the sample, then, the correlation matrix of variables, path coefficients, fitness goodness values, and fitted model figures are shown. All studied variables and descriptive indexes such as mean and standard deviation, skewness, kurtosis, and minimum and maximum scores are reported in table 1 for each variable individually to report the mean performance and scores distribution of the participants.

As the results presented in table 1 show, since the skewness and kurtosis of all research variables are within the range of +2 and -2, the cores distribution of the research variables is normal.

Path analysis was used to answer the research hypotheses. Since the casual analysis basis of the correlation matrix, the correlation matrix of all variables showed a significant correlation among all variables. The relationship between positive perfectionism, and ego strength (0.49) and self-esteem (0.35) was positive and significant. The relationship between negative perfectionism, and ego strength (0.62) and self-esteem (0.59) was negative and significant.

Table 1. Descriptive indexes of the research variables
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Variable	Min	Max	Mean ± SD	Skewness	Kurtosis
Positive perfectionism	2.00	5.00	$4.084\pm0.562$	-0.87	1.22
Negative perfectionism	2.00	5.3	$3.430\pm0.620$	-0.06	-0.37
Ego strength	1.72	4.48	$3.365\pm0.577$	-0.31	-0.23
Self-esteem	1.20	5.00	$3.793 \pm 0.731$	-0.91	0.97
SD: Standard deviation	1.20	5.00	5.775 ± 0.751	-0.91	0.97

Variable	Positive perfectionism	Negative perfectionism	Ego strength	Self- esteem
Positive perfectionism	1			
Negative perfectionism	-0.52**	1		
Ego strength	0.49**	-0.62**	1	
Self-esteem	0.35**	-0.59**	0.58**	1
**P < 0.01				

Table 2. Correlation coefficients between the research variables

The relationship between ego strength and self-esteem (0.58) was positive and significant. Moreover, the correlation value showed no collinearity problem among the predictive factors in this research (Table 2).

Lisrel path analysis method was used to examine the mediator role of ego strength in the relationship between perfectionism and self-esteem. Before the statistical test, the presumption of path analysis, including the linearity relationship among variables, variance homogeneity, residuals independency, or errors, was tested (Table 3).

As shown in table 3, there is no linear relationship among the variables ( $R^2 = 0.72$ ;  $F_{1,184} = 1025.96$ ; P < 0.05). Therefore, the variables are independent, there is no correlation among errors and residuals (D-W < 4), and variances are homogeneous. Therefore, it can be concluded that the path analysis presumptions were considered and the results were reliable. The model presented in figure 1 was examined after investigating the presumptions. The results showed that the variables of positive perfectionism, negative

perfectionism, and ego strength predict 62% of self-esteem variance. A general schema of the suggested model, general fitting indexes, standardized and non-standardized path coefficients, regression coefficients, and t-values are presented in figure 1 (see Figure 1 and Table 4).

The standard parameter values for each factor show their factor load on the latent variable whose corresponding value (T > 2)shows their significant role in measuring the latent variable. As seen in figure 1, the direct effect of positive perfectionism on ego strength (0.54) was positive and significant, the direct effect of negative perfectionism on ego strength (-0.32) was negative and significant, and the direct effect of ego strength on self-esteem (0.27) was positive and significant. Moreover, the indirect effect of positive perfectionism on self-esteem by the mediator role of ego strength (0.14) was positive and significant, and the indirect effect of negative perfectionism on the mediator ego strength (-0.09) was negative and significant.

Test variable	Positive perfectionism	Negative perfectionism	Ego strength	Self- esteem	Desirable value	Index condition
Variance homogeneity (Levene's test)	$\begin{array}{c} F_{1,184} = 0.32 \\ P > 0.05 \end{array}$	$\begin{array}{c} F_{1,184} = 0.34 \\ P > 0.05 \end{array}$	$\begin{array}{c} F_{1,184} = 3.36 \\ P > 0.05 \end{array}$	$\begin{array}{l} F_{1,184} = \\ 1.07 \\ P > 0.05 \end{array}$	P > 0.05	Confirmed
Measurement level of variables	Interval	Interval	Interval	Interval	Interval	Confirmed
Residuals independency		D-W = 1			D-W < 4	Confirmed
Linear relationship	$R^{2} LINER = 0.72 F_{1,184} = 1025.57 P < 0.05$				$R^2$ LINER > Log, cubic, inverse, quadratic P < 0.05	Confirmed
Theoretical non- linearity						Confirmed

Tab	le 3.	Presum	ptions	of	path	anal	ysis

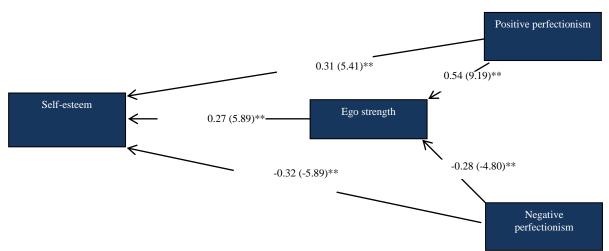


Figure 1. A model of the relationship between perfectionism and self-esteem with the mediator role of ego strength

Furthermore, the absolute, comparative, and parsimonious fitting indexes were tested. Path analysis test indexes of the model showed a desirable fitting model for data, and path coefficient and significant tests were found to be relied. The results related to the fitting indexes are summarized in table 4.

Absolute fit indexes of the suggested model covariance matrix were compared to the collected data covariance matrix. For example, if Sig > 0.05 in chi-square, it could be concluded that the model covariance structure was not significantly different from the observed covariance structure, and claimed by confirming H<sub>0</sub>, which means H<sub>0</sub>:  $S = \Sigma$ ; thus, the model formulated by the researcher is generally confirmed, although some parts of the model may not be acceptable statistically. The absolute fit

indexes were all confirmed, as seen in table 4.

## Discussion

The objective of this research was to investigate the mediator role of ego strength in the relationship between perfectionism and self-esteem. The findings of this research showed the positive and significant relationship between positive perfectionism and ego strength, and the negative and significant relationship between negative perfectionism and self-esteem. These findings are in agreement with the findings of previous studies including those by Flett and Hewitt (2015); Besharat et al. (2014), Besharat and Tavalayeian (2016), Besharat et al. (2017). It can be claimed in the determination of the non-adjusted aspects of perfectionism (other-oriented and socially prescribed

Table 4. Model fitting indexes						
Test variable	Index	Desired value	T-value of model			
	Chi-square	Close to 1	1.55			
		P > 0.05	P > 0.05			
Absolute indexes	The goodness of the fit index	> 0.09	1			
	Adjusted goodness of fit index	> 0.09	0.99			
	Root mean square residual	Close to 0	0.008			
	Tucker-Lewis Index or Non-normed fit index	> 0.09	1			
Comparative indexes	Normed fit index or Benthall-Bonnet fitting index	> 0.09	1			
	Comparative fit index	> 0.09	1			
	Relative fit index	> 0.09	1			
	Incremental fit index	> 0.09	1			
	Parsimonious normed fit index	> 0.50	0.33			
Parsimonious indexes	Root mean square error of approximation	> 0.05	< 0.05			
	Normed chi-square	> 2	1.55/2 = 0.77			

self-criticize perfectionism) а lot by characteristics of concerns about committing the mistake, parent's critic, others expectations particularly parents, and they prevent challenging and difficult situations for the failure panic. This group of people shows a negative reaction to failure. Thus, they are vulnerable to life events and challenges and have low resiliency. On the contrary, people with higher adaptable perfectionism (selforiented perfectionism) enjoy difficult challenges and try to reach their goals by focusing on their assignments. Therefore, selforiented perfectionists have high motivation, balanced expectations and demands, and lower vulnerability to difficult events.

Moreover, the results of this research showed positive significant and а relationship between positive perfectionism and self-esteem and a negative and significant relationship between negative perfectionism and self-esteem. These findings are in agreement with the findings of previous studies by Dunkley, Zuroff and Blankstein (2003), Slade and Owens (1998), Saadat, Shahyad, Pakdaman, and Shokri (2017), and Tolooee Qarachanaq, et al. (2015). In addition, these studies also reported a relationship between perfectionism and selfesteem. In explaining these findings, it can be claimed that positive perfectionism obtaining positive consequences and includes the 3 components of self-esteem, satisfaction, and acceptance. In fact, self-esteem is evaluated as the principal component of positive perfectionism (Slade & Owens, 1998) and is tied to a positive sense of self-worth and attention to positive personal characteristics. A person with a rational expectation of him/herself determines goals within his/her ability which increases the objectives of self-worth, and thus, selfesteem. Therefore, according to Erikson, perfectionistic parents do not allow their children to express a sense of guilt, lowworth, and isolation. These children are afraid to express themselves, have low selfesteem, and do not participate actively in

groups because of their dependency on their parents, and most of them live in isolation (Biabangard, 2011). Perfectionist parents dismiss their children's successes, and find it difficult to reward their children for their attempts. They are permanently making their children do better and reprimand them instead of confirming their behaviors. These children never feel validated because their behaviors are not sufficiently good to result in their parents' satisfaction. Thus, these children, like their parents, do not see their own successes and will never satisfy their parents (Missildine, 1963). As a result, their self-esteem is threatened.

## Conclusion

According to the findings, the direct relationship between self-esteem and ego strength is positive and significant. Moreover, the indirect effect of positive perfectionism on self-esteem by the mediation of ego strength (0.14) is positive and significant, and the indirect effect of negative perfectionism on self-esteem by the mediation of ego strength (-00.09) is negative and significant. This result is in agreement with the results of previous studies (Tolooee Qarachanaq et al., 2015; Karami Khajelu, 2015). Resiliency, as the principle factor of ego strength, promotes self-esteem in people out-expressing bv facilitating positive emotions and reducing negative emotions. Moreover, people particularly adolescents who can face life challenges rationally and move toward successes through an accurate path with high resiliency have a sense of satisfaction about themselves and high selfesteem. This requires the support of relatives particularly parents and that parents not this process. In fact, disturb positive perfectionism increases the sense of competence in adolescents by reinforcing self-esteem so that they can use their maximum capacities; however, negative reduces perfectionism the sense of competence in adolescents. In addition, ego strength shows an individual's attitude toward problems, measured and coherent reaction toward crises, clarifying ability, and individual adaptability and can play a mediator role in the relationship between perfectionism and self-esteem.

**Limitations and suggestions:** This research had some limitations. The present study was a correlational research; thus, the causal relationship is not obtainable. Moreover, this research was only conducted on girl students; therefore, the generalizability of its results is limited.

Therefore, it is suggested that this research be conducted on a larger statistical population in future studies. Moreover, it is suggested that this research be conducted on other social classes particularly university students in various cities. It is also recommended that the mediator role of other psychological components such as ego development be examined.

In subsequent studies, the relationship between perfectionism and low self-esteem can be assessed and "self-depletion" be evaluated. Findings on these relationships can be used in psychological interventions to increase ego strength and self-esteem.

#### **Conflict of Interests**

Authors have no conflict of interests.

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