

## Self-Compassion as a Mediator Between Perfectionism and Life-Satisfaction Among University Students

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### Abstract

Using a correlational method, this study investigates the mediation role of self-compassion in the relationship between perfectionism dimensions and life satisfaction among university students. A sample of 246 students (171 females and 75 males,  $M = 21.40$  years,  $SD = 2.02$ ) from several universities participated in the study. Turkish versions of the Almost Perfect Scale-Revised, the Self-Compassion Scale, and the Satisfaction with Life Scale were used as data collection tools. Using structural equation modeling, the results show that self-compassion fully mediates the relationship between maladaptive perfectionism and life-satisfaction. On the other hand, there is no significant relationship between adaptive perfectionism and life-satisfaction. The Bootstrap Method that was used to assess the magnitude of the indirect effects indicates that the indirect effect of self-compassion on the relationship between maladaptive perfectionism and life-satisfaction is significant. The implications of these findings for research and practice are discussed in line with the related literature.

**Keywords:** Life-Satisfaction, Perfectionism, Self-Compassion, Structural Equation Modeling

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## INTRODUCTION

Perfectionist individuals are defined as those who have standards that are difficult to achieve, who force themselves towards impossible goals without a break and who base self-values entirely on their productivity and success levels (Burns, 1980). Hollander (1965) defines perfectionism as an individual's demand for higher quality performance for himself or others than the current situation requires. According to Horney (2006), the individual believes that his self must reach the idealized self, in other words, his image of perfection. For this, the individual should forget himself and be able to endure everything, understand everything, love everyone, and always be productive. Horney sees these internal commands as the reason for the high goals that perfectionist individuals have set for themselves and their efforts to reach these goals. When the first theoretical explanations concerning perfectionism are examined, it is observed that a negative and one-dimensional perspective, based on neuroticism, has been adopted. It is understood that the one-dimensional perspective towards perfectionism (Burns, 1980; Hollander, 1965) has been replaced by a multi-dimensional perspective, which draws attention to the social environment of the individual and her/his positive characteristics, as well as negative ones (Frost et al., 1990; Hewitt and Flett, 1991; Slaney et al., 2001) in the historical process.

In the current literature on perfectionism, it can be seen that a two-dimensional approach, that focuses on the adaptive and maladaptive aspects of perfectionism called positive strivings and negative evaluation concerns, has been adopted. According to this approach, a positive strivings dimension indicates the adaptive aspect of perfectionism that motivates the individual, while a negative evaluation concerns dimension indicates a maladaptive aspect that may cause an individual to exhibit various pathological symptoms and is based on the evaluations of others (Stoeber and Damian, 2016). In this study, the strivings dimension is called adaptive perfectionism and the concerns dimension is called maladaptive perfectionism.

In the related literature, while it is stated that many researchers accept the idea that perfectionistic strivings are less harmful than perfectionistic concerns (Molnar et al., 2016), findings revealing the different relationships between the dimensions of strivings and concerns of perfectionism and psychological symptoms are contradictory. For example, one particular meta-analysis study reveals that perfectionist strivings are less associated with psycho-pathological symptoms than perfectionist concerns (Limburg et al., 2017). Additionally, it has been determined that perfectionistic concerns have positive and moderate relationships with anxiety and depression, while perfectionistic strivings have negative and low-level relationships with them (Gnilka and Broda, 2019). In another meta-analysis study, it was found that perfectionistic concerns cause an increase in the level of depression through social disconnection and stress. However, perfectionistic strivings cause an increase in the level of depression only through social disconnection (Smith et al., 2020). On the other hand, it is stated in another particular meta-analyses study that perfectionistic concerns and strivings both have small effects on follow-up depressive symptoms when baseline depression and neuroticism are controlled (Smith et al., 2016). The findings support the contradictory approach to the psycho-pathological impacts of perfectionistic dimensions.

### Perfectionism and Well-being

The positive psychology approach advocates that, instead of the symptoms of the mental health problems and their treatment, mental health professionals should focus on supporting the positive qualities of individuals (Seligman and Csikszentmihalyi, 2000). One important concept introduced into the literature using this approach is subjective well-being. Diener (2009) states that subjective well-being is comprised of emotional and cognitive dimensions. In this regard, well-being is the individual's presence of positive emotions, absence of negative emotions and cognitive judgment of the individual's life satisfaction (Duckworth et al., 2005). Moreover, Pavot and Diener (2008) define life-satisfaction as a cognitive and global judgment of an individual's quality of life. In other words, life-satisfaction represents the cognitive aspect of subjective well-being (Diener et al., 1999). In

addition, life satisfaction, as a cognitive aspect, is accepted a more stable component of subjective well-being than mood and emotions (Eid and Diener, 2004).

It seems important to examine the well-being levels of individuals with perfectionist traits within the scope of the perspective adopted with a positive psychology approach, where the absence of psychopathological symptoms does not automatically indicate the well-being of individuals (Ryff and Singer, 1998). It is indicated that the adaptive and maladaptive dimensions of perfectionism differ in their relationships with psychopathological symptoms, as well as with variables, such as subjective well-being, life satisfaction and happiness, which are considered within the scope of the positive psychology approach. For example, it was found that, adaptive perfectionism has a positive relationship with subjective well-being (Erol-Öngen, 2009; Perrone-McGovern et al., 2015), whereas maladaptive perfectionism has a negative relationship (Erol-Öngen, 2009). Similarly, it has been stated that maladaptive perfectionists have lower life satisfaction levels than adaptive perfectionists (Ashby et al., 2012). Moreover, while no significant relationship between subjective happiness and adaptive perfectionism was found, a significant negative relationship with maladaptive perfectionism was found (Suh et al., 2017). The findings indicate that an increase in the maladaptive perfectionism levels of individuals results in a decrease in their subjective well-being, life-satisfaction and subjective happiness levels.

### **Perfectionism and Self-compassion**

Self-compassion means the individual's openness to his pain, his desire to approach himself compassionately by alleviating this pain, instead of avoiding or breaking away from his pain. It involves the individual grasping his pain, inadequacies and mistakes without judgment and thus seeing these experiences as part of wider human life (Neff, 2003a). The concept of self-compassion consists of three components; self-kindness, common humanity and mindfulness (Neff, 2003a; Neff 2003b, Neff, 2016). When the individual faces pain or personal failure, self-compassion causes these three basic components. In this regard, self-kindness means an understanding approach to the individual instead of him criticizing himself ruthlessly, common humanity, sees the experience as part of larger human experience rather than isolating it, while mindfulness refers to addressing painful feelings and thoughts with a balanced awareness, rather than identifying them (Neff, 2003a).

In the related literature, it is emphasized that self-compassion provides self-affect and self-acceptance to individuals (Neff et al., 2007). This situation might ease the university experiences of students. Thus, it was found that when students had failed in a midterm exam, self-compassionate students coped with this failure in more adaptive ways (Neff et al., 2005). In addition, a large effect size was documented in the relationship between self-compassion and psychopathology (MacBeth and Gumley, 2012). It seems that self-compassionate students have some advantages in terms of problem-solving and mental health. Although findings emphasizing the relationship between perfectionism and psychological symptoms are frequently encountered in the literature, it has been determined that self-compassion has a mediator role in this relationship. For example, it is stated that the strength of the relationship between maladaptive perfectionism and depression decreases with self-compassion (Mehr and Adams, 2016; Ferrari et al., 2018). Similarly, for individuals with bipolar disorder, it has been reported that self-compassion has a partial mediating role in the relationships between maladaptive perfectionism and depression, anxiety, and emotion regulation difficulties (Fletcher et al., 2019). At the same time, self-compassion mediates the relationship between maladaptive perfectionism and body image dissatisfaction among college women (Barnett and Sharp, 2016). In the literature, it is indicated that self-compassion has a mediating role, not only in the relationship between perfectionism and psychological symptoms, but also in the relationship with subjective well-being (Stoeber et al., 2020), considered within the scope of the positive psychology approach. The findings reveal that self-compassion has an effect on the emotional states of perfectionists.

### Self-compassion and Well-being

In a pioneer study conducted by Neff and McGehee (2010), it was found that self-compassion is strongly associated with increasing levels of connectedness, maternal support, family functioning, and secure attachment. Moreover, it is also associated with decreasing depression, anxiety, insecure attachment, and personal fable among adolescents and young adults. The researchers interpret the findings as a strong association between self-compassion and well-being.

In the current literature, findings can be seen which indicate a positive association between self-compassion and positive psychology variables; such as subjective well-being (Ge et al., 2019), life-satisfaction (Booker and Dunsmore, 2019; Demirci et al., 2019; Shin, 2019; Wayment et al., 2016), happiness (Booker and Dunsmore, 2019; Wilson et al., 2020), and optimism (Grevenstein et al., 2016) among university students from various cultures. In a meta-analyses study which investigated the relationship between self-compassion and well-being, it is shown that these variables are relatively closely related with an  $r = .47$  (Zessin et al., 2015). This result supports the idea that an increase in self-compassion levels results in an increase in well-being levels of individuals.

In a recent study, the link between self-compassion and life-satisfaction was investigated among Chinese adults who were self-quarantined residents during the COVID-19 pandemic. The findings reveal that self-compassion and life-satisfaction are positively correlated. Moreover, positive coping has a partial mediator role on this relationship for men, but not for women (Li et al., 2021). The finding shows that self-compassion has a protective role for mental health, not only in predictable life conditions, but also in crises.

### The Present Study

This study was designed as a correlational study to investigate the relationship between adaptive perfectionism, maladaptive perfectionism, self-compassion and life satisfaction. Apart from studies investigating the mediator role of self-compassion in the relationship between perfectionism and psychological symptoms, there is one study, which investigates the mediator role of self-compassion in the relationship between perfectionism and well-being (Stoeber et al., 2020). In this study, the self-oriented, other oriented and socially prescribed dimensions of perfectionism are analyzed. In addition, the mediator roles of self-compassion and compassion for others are tested together in the same model. On the other hand, perfectionism is measured with a two-dimensional approach and the mediating role of self-compassion alone is analyzed in this study. Therefore, in the current research, the aim is to investigate the mediator role of self-compassion in the relationship between adaptive and maladaptive dimensions of perfectionism and life-satisfaction. Considering that the data was collected during the pandemic conditions related to Covid-19, by taking into consideration the potential emotional effect of this process on individuals, it was decided not to include the emotional components of subjective well-being in the research, studying only life-satisfaction, and the cognitive dimension of well-being. The hypothetical research model is presented in Figure 1.

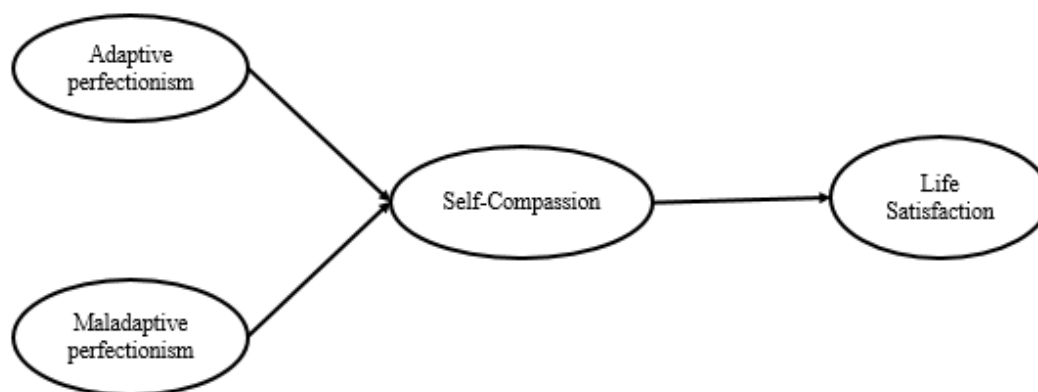


Figure 1. The hypothetical model.

## METHOD

### Participants

The snowball sampling method was used in the current study. Before carrying out the model test, power analyses was conducted to clarify the adequate number of participants. The analyses indicated that a sample of 138 would be adequate to detect mediate effect and assess the measurement model given 4 latent and 14 observed variables (Soper, 2020). A total of 268 university students completed the data collection tools. The Mahalanobis distance was calculated and twenty-two cases were omitted. The final participants of the study consisted of 246 university students [171 (69.5%) females and 75 (30.5%) males] of several universities from different cities of Turkey. Among the participants, eight (3.2%) were studying at English Preparatory School, 44 (17.9%) were freshmen, 69 (28%) were sophomores, 44 (17.9%) were juniors, and 58 (23.6%) were seniors from different faculties. Moreover, 23 (9.4%) were fifth, and sixth class students enrolled in the Faculty of Medicine. The ages of the students ranged from 18 to 33 years, with a mean age of 21.40 (SD= 2.02).

### Measures

*Almost Perfect Scale-Revised (APS-R; Slaney et al., 2001)*: The scale, which includes twenty-three items, is a seven-point Likert type with three subscales mentioned; High Standards, Discrepancy and Order. The Turkish adaptation of the scale was conducted by Ulu (2007). Within the two-dimensional approach of perfectionism framework (Stoeber and Otto, 2006), the high standards subscale of the APS-R was used to measure adaptive perfectionism, and the discrepancy subscale was used to measure maladaptive perfectionism in the present study, with the Cronbach's alpha values being calculated as .81 and .94, respectively.

*Self-Compassion Scale (SCS; Neff, 2003b)*: The scale, which includes twenty-six items, is a five-point Likert type with six subscales; Self-kindness, Common Humanity, Mindfulness, Self-judgment, Isolation, and Over-identification. The Turkish adaptation of the scale was conducted by Akın et al. (2007). In the present study, a three subscales version of the SCS was used as in previous studies (Joeng and Turner, 2015; Yang et al., 2016) and Cronbach's alpha values of the subscales are calculated as .91 for Self-Kindness, .74 for Common Humanity, and .84 for Mindfulness.

*Satisfaction with Life Scale (SWLS; Diener et al., 1985)*: The scale is unidimensional with five items; a seven-point Likert type. Higher scores indicate greater levels of life satisfaction. The Turkish version of the scale was conducted by Dağlı and Baysal (2016) as a five-point Likert type. The Cronbach's alpha value of the scale is calculated as .85 in this study.

### Procedure

After the approval of the ethics committee was obtained, data was collected online by way of Google forms on July, 2020. The participants were accessed by sharing the study link with certain explanations on a few social media accounts, which university students follow, such as the National Medicine School Students' Facebook group or the Whatsapp (a message communication application) group of peer counselors involving students from various faculties, and requested to share the link with their friends.

### Data Analyses

Firstly, skewness and kurtosis values of the observed variables were computed. The hypothetical model was then tested via Structural Equation Analysis with latent variables, and the analysis was run by IBM SPSS Amos 21.0 and the Maximum Likelihood Method was applied as an estimation method. The linearity relationship between variables was evaluated and it was determined that all the correlation values of the latent variables were below .71. Path coefficients in the model were assessed by *t* values. Chi square difference test ( $\chi^2$ ), Akaike Information Criterion (AIC), and

Expected Cross Validation Index (ECVI) were used to determine the final model. The significance of indirect effects was examined via the Bootstrapping method. Additionally, a nested model method was used for the mediation test.

## FINDINGS

As preliminary analyses, skewness and kurtosis values were computed for the observed variables. It was found that skewness values ranged from -.88 to .39, and kurtosis values ranged from -.98 to .70. Therefore, all values were in normal distribution limits (Tabachnick and Fidell, 2013). Mean and standard deviations and bivariate correlations between the observed variables were also computed (see Table1). The results show that the highest correlation was computed as -.64 between one of the observed variables of maladaptive perfectionism (CONCERN3) and self-compassion (HUMANITY). The result shows that there is no multicollinearity problem among the observed variables.

**Table 1. Descriptive statistics and bivariate correlations between observed variables**

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.STRIVE1	-													
2.STRIVE2	.50**	-												
3.STRIVE3	.61**	.67**	-											
4.CONCERN1	.25**	.49**	.54**	-										
5.CONCERN2	.15*	.42**	.44**	.83**	-									
6.CONCERN3	.20**	.46**	.51**	.86**	.88**	-								
7.KINDNESS	.07	-.12	-.24**	-.58**	-.59**	-.57**	-							
8.HUMANITY	.01	-.18**	-.22**	-.63**	-.64**	-.63**	.80**	-						
9.MINDFUL	.05	-.11	-.19**	-.51**	-.51**	-.52**	.77**	.72**	-					
10.LS1	.18**	.09	.08	-.23**	-.35**	-.26**	.24**	.31**	.18**	-				
11.LS2	.14*	.05	.05	-.14*	-.20**	-.14*	.11	.19**	.01	.57**	-			
12.LS3	.18**	.02	.00	-.32**	-.38**	-.32**	.38**	.44**	.30**	.62**	.58**	-		
13.LS4	.20**	.06	.11	-.21**	-.24**	-.20**	.28**	.35**	.22**	.63**	.53**	.66**	-	
14.LS5	.08	-.06	.01	-.21**	-.23**	-.20**	.24**	.35**	.24**	.39**	.40**	.53**	.50**	-
M	17.40	9.87	10.87	16.02	14.74	16.00	31.90	24.65	25.97	3.39	2.95	3.18	3.22	2.50
SD	2.87	2.75	2.56	6.33	5.98	6.36	9.06	5.81	6.64	1.08	1.11	1.23	1.18	1.25

Note. N=246. \* $p < .05$ , \*\* $p < .01$ . STRIVE1–STRIVE3=three parcels of adaptive perfectionism; CONCERN1–CONCERN3=three parcels of maladaptive perfectionism; MINDFUL=Mindfulness and Over-identification; HUMANITY=Common humanity and Isolation; KINDNESS=Self-kindness and Self-judgment; LS1–LS5=five items of life-satisfaction.

The two-step approach was adopted for testing the structural model. Therefore, the measurement model was applied in the first step. The model includes four latent variables (adaptive and maladaptive dimension of perfectionism, self-compassion, and life-satisfaction) and fourteen observed variables. The fit values of the measurement model are acceptable and are indicated by the following goodness of fit statistics:  $\chi^2/df$  (154.31/71) = 2.17; RMSEA = .069 [90% C.I. = .054, .084]; CFI = .96; TLI = .95; AIC = 222.309; ECVI = .907. Standardized factor loadings of the observed variables range between .60 and .94 signifying that all the latent factors are well represented by their respective observed variables. When the measurement model was tested, correlation values among the latent variables were obtained. The obtained values are presented in Table 2.

**Table 2. Correlations among the Latent Variables**

Latent Variables	1.	2.	3.
1. Adaptive perfectionism	-		
2. Maladaptive perfectionism	.57*	-	
3. Self-compassion	-.22*	-.71*	-
4. Life-satisfaction	.10	-.36*	.43*

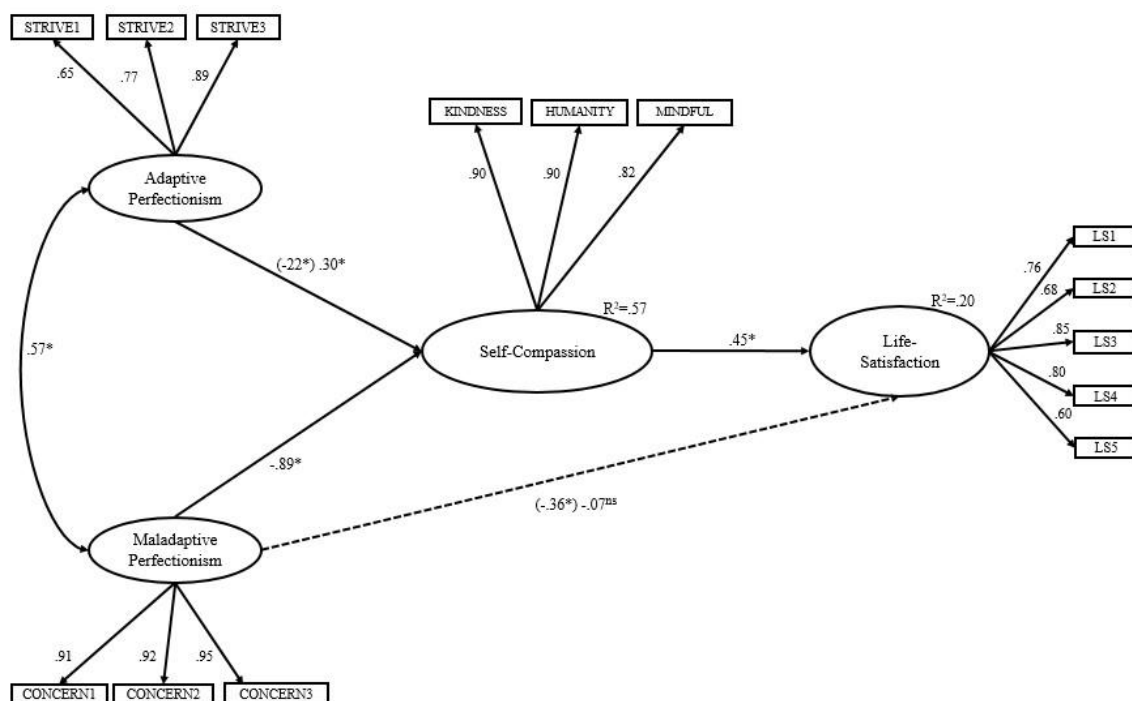
\* $p < .00$

When the correlation values, presented in Table 2, are examined, it can be seen that except for the link between adaptive perfectionism and life-satisfaction, all the correlations are statistically

significant. While the highest significant correlation between latent values is observed between maladaptive perfectionism and self-compassion ( $r = -.71, p < .00$ ), the lowest significant correlation is observed between adaptive perfectionism and self-compassion ( $r = -.22, p < .01$ ).

Because the correlation between adaptive perfectionism and life-satisfaction was determined to be statistically non-significant in the measurement model test, the path from adaptive perfectionism to life-satisfaction in the structural model test was discarded. After this, the mediating role of self-compassion on the relationship between perfectionism dimensions and life-satisfaction was tested (Model 1). The results suggest good fit to the data:  $\chi^2/df (173.70/72) = 2.41$ ; RMSEA = .076 [90% C.I. = .062, .090]; CFI = .96; TLI = .95; AIC = 239.704; ECVI = .978. Maladaptive perfectionism is negatively associated with self-compassion ( $\beta = -.88, p < .001$ ), adaptive perfectionism is positively associated with self-compassion ( $\beta = .29, p < .001$ ) and self-compassion is positively associated with life-satisfaction ( $\beta = .39, p < .001$ ). After accounting for the mediating effect of self-compassion, the direct effect of maladaptive perfectionism on life-satisfaction is no longer significant ( $\beta = -.07, p > .05$ ). In order to test the fully mediated model, the direct path from maladaptive perfectionism to life-satisfaction was removed (Model 2). The model reveals good fit to the data:  $\chi^2/df (174.15/73) = 2.39$ ; RMSEA = 0.075 [90% C.I. = 0.061, 0.090]; CFI = .96; TLI = .95; AIC = 238.151; ECVI = .972. A significant chi square difference is obtained between the models,  $\Delta\chi^2 (1, N = 246) = .45, p > .001$ , along with smaller AIC and ECVI for Model 2. These leads us to decide that Model 2 is more satisfactory.

The final model is presented in Figure 2:



**Figure 2.** The final model (Model 2) *Note.* N=246; \* $p < .01$ ; ns=non-significant; STRIVE1–STRIVE3=three parcels of adaptive perfectionism; CONCERN1–CONCERN3=three parcels of maladaptive perfectionism; MINDFUL=Mindfulness and Over-identification; HUMANITY=Common humanity and Isolation; KINDNESS=Self-kindness and Self-judgment; LS1–LS5=five items of life-satisfaction. Values on arrows represent standardized beta coefficients; the value shown in parenthesis is the direct effect of adaptive perfectionism on self-compassion and maladaptive perfectionism on life-satisfaction.

According to the results of the structural model test, maladaptive ( $\beta = -.89, p < .001$ ) and adaptive ( $\beta = .30, p < .001$ ) perfectionism predict self-compassion and self-compassion predict life-

satisfaction ( $\beta = .45$ ,  $p < .001$ ) significantly. In addition, self-compassion is a full-mediator in the relationship between maladaptive perfectionism and life-satisfaction. It is interesting to note that, the negative relationship between adaptive perfectionism and self-compassion obtained in the measurement model turns positive in the structural model test. This change could be explained by the suppression effect of the relationship between maladaptive perfectionism and self-compassion (Shrout and Bolger, 2002). It is also determined that maladaptive perfectionism and adaptive perfectionism explain 57% of the self-compassion variance and maladaptive perfectionism, and that adaptive perfectionism and self-compassion variables explain 20% of the life-satisfaction variance.

A bootstrapping method was performed to test the significance of indirect effects of self-compassion on the relationship between maladaptive perfectionism and life-satisfaction. The results from 1000 bootstrap samples are reported in Table 3.

**Table 3. Parameters and 95% CI for the paths of the acceptable model**

	Estimated	95% CI		
		Lower	Upper	p
<i>Model 2</i>				
Adaptive P. →Self-compassion	.296	.139	.439	.003
Maladaptive P. →Self-compassion	-.886	-.993	-.772	.002
Self-compassion →Life-satisfaction	.446	.308	.563	.003
Maladaptive P.→ Self-compassion →Life-satisfaction	-.395	-.521	-.255	.002

The indirect effect of maladaptive perfectionism on life-satisfaction mediated by self-compassion is significant (Shrout and Bolger, 2002).

## DISCUSSION

This study is designed to investigate the mediator role of self-compassion in the relationship between the adaptive and maladaptive dimensions of perfectionism and life-satisfaction. The findings indicate that adaptive perfectionism has a positive relationship with self-compassion, while maladaptive perfectionism has a negative relationship with it. In addition, there was no significant relationship between adaptive perfectionism and life-satisfaction. This non-significant relationship is consistent with previous research conducted with different samples, including English (Stoeber et al., 2020) and Canadian university students (Smith et al., 2017), black female college students (Chang et al., 2004), and Chinese high school students (Wang et al., 2009). On the other hand, the findings of a study conducted by Ashby et al. (2012) indicate a positive association between the variables discussed among female American university students. In brief, the relationship between adaptive perfectionism and life-satisfaction seems contradictory among various age groups and cultures. Adaptive perfectionism forces people to achieve positive aspects of having high standards without the concerns of evaluations of other people (Slaney et al., 2001). When the individualistic culture of Americans is taken into consideration, the positive association makes sense and the non-significant relationship of this research can be explained by the collectivistic culture of the participants. In addition to cultural background, findings show that maladaptive perfectionism positively relates to psychological symptoms such as depression, anxiety, and stress. On the other hand, adaptive perfectionism has inconsistent results. These findings support the non-significant relationship found in this study.

Despite a lack of association between adaptive perfectionism and life satisfaction, maladaptive perfectionism is negatively associated with life satisfaction. This negative relationship is consistent with a previous result (Erol-Öngen, 2009). Subjective happiness, one of the other indicators of positive affection, also has a negative relationship with maladaptive perfectionism (Suh et al., 2017). Furthermore, there is a positive relationship between maladaptive perfectionism and depression, which represents negative affection (Mehr and Adams, 2016; Ferrari et al., 2018). In summary, maladaptive perfectionism has a negative relationship with the indicators of positive affection and has a positive relationship with negative affection. Moreover, it is indicated that individuals who maintain maladaptive perfectionism evaluate their lives as non-satisfactory. This may be explained by the effect



of negative evaluations of the differences between actual and ideal selves, and the unmet perfectionistic life purposes of maladaptive perfectionists.

While the relationship between adaptive perfectionism and self-compassion is negative in the measurement model, it turns positive in the structural model. The negative relationship is in accordance with a previous finding (Stoeber et al., 2020). It seems that an increasing adaptive perfectionism level causes a decrease in the self-compassion level of individuals. When the controversial findings on the effects of adaptive perfectionism are considered, this negative relationship supports the negative effects. On the other hand, the relationship changes to positive in the structural model when tested with maladaptive perfectionism. This change could be evidence of the agreed-upon negative effects of maladaptive perfectionism on positive affection. The strong negative path from maladaptive perfectionism to self-compassion of the current model seems to support this idea. Moreover, Linnett and Kibowski (2020) also emphasize the inconsistent findings between adaptive perfectionism and self-compassion. In conclusion, it seems that the dimensions of perfectionism have an effect on each other and that they effect self-compassion in opposing directions.

The association between maladaptive perfectionism and self-compassion is negative. This result is also in accordance with previous research demonstrating that higher levels of maladaptive perfectionism are related to lower levels of self-compassion (Barnett and Sharp, 2016; Ferrari et al., 2018; Mehr and Adams, 2016; Neff, 2003b; Stoeber et al., 2020). This negative relationship can be explained by the approach to failures. It was reported that self-compassionate individuals approach their mistakes with a nonjudgmental understanding (Neff, 2003). When it comes to maladaptive perfectionists, failures seem unacceptable experiences.

Consistent with previous findings (Demirci et al., 2019; Neff, 2003b; Stoeber et al., 2020; Yang et al., 2016), higher levels of self-compassion are related to higher levels of life satisfaction in this study. It seems that, opposite to maladaptive perfectionism, self-compassion has a supporter role from the point of life satisfaction levels. The universal humanity dimension of self-compassion might lead to accepting the failures as a general experience rather than a personal inadequacy for perfectionists. In addition to these findings, the current study analyzes self-compassion as a mediator between perfectionism dimensions and life-satisfaction. The hypothesis is partially supported, which indicates that self-compassion only mediates the relationship between maladaptive perfectionism and life-satisfaction fully. That is, how life-satisfaction level is not directly influenced by the levels of maladaptive perfectionism, but indirectly through the levels of self-compassion.

Maladaptive perfectionists have a tendency toward self-criticism (Sherry et al., 2016; Erol-Öngen, 2011; Smith et al., 2016), rumination (Kaap-Deeder et al., 2016; Macedo et al., 2017), and self-comparison (Stoeber and Damian, 2016). In addition, they have difficulty in emotion regulation (Juliana et al., 2016). These relationships show that maladaptive perfectionists might have a problem with accepting themselves and their experiences. On the other hand, based on theoretical explanations regarding self-compassion, it can be stated that self-compassionate people accept and respect themselves as they are. In this context, maladaptive perfectionism and self-compassion seem contradictory traits, having opposite relationships with life-satisfaction. A judgmental approach of maladaptive perfectionism reduces life-satisfaction, and a non-judgmental approach of self-compassionates increases it. The full mediation role of self-compassion shows that, maladaptive perfectionist university students could be trained on self-compassion with the intent of enhancing their life-satisfaction level.

The results of this study show that counselors could consider focusing on ways to increase the self-compassion levels of maladaptive perfectionists in order to increase their life-satisfaction levels. When the high negative association between maladaptive perfectionism and self-compassion is considered, it seems that the characteristics of maladaptive perfectionists, such as self-criticism and rumination, retain them to approach themselves in a compassionate way. Additionally, maladaptive perfectionists tend to set unrealistically high standards for themselves in their daily lives. Therefore, it seems that maladaptive perfectionists may benefit from intervention aimed at an increase at the self-

kindness, mindfulness and common humanity levels. For this aim, counselors could try to transform the unrealistic beliefs of perfectionistic clients and teach them how to be self-compassionate humans. Counselors may also benefit from online mindfulness exercises by assisting these clients in using these platforms. Finally, counselors may organize or benefit from group programs to increase the self-compassion level of maladaptive perfectionists.

The present study has certain limitations that should be noted. The most important limitation of the study concerns the period of data collection. The data was collected during the first summer of the Covid-19 pandemic process. Further research should be conducted at a time, when the emotional effects of the pandemic have subsided. In addition, two factors of the APS-R were used to measure the perfectionism dimensions. In the relevant literature, there are other perfectionism scales and further research could reply to test the model using these scales. For example, socially prescribed, self-oriented, and other-oriented dimensions of perfectionism might be used. Furthermore, as Turkish culture holds collectivistic values, further research could be designed to obtain data in a cross-cultural design and researchers could compare the models between cultures. This type of research could enhance our knowledge regarding the cultural factors on the variables.

To exhibit the individual mediator roles of self-compassion dimensions, an additional analysis using six factors was conducted. However, the data does not support the six-factor CFA model. Future research could try to test the model with six-factors. The results could guide practitioners in trying to focus more on the targeted factor, which has a greater effect than other self-compassion factors on life-satisfaction. In addition, the relationships between the dimensions of perfectionism and positive and negative dimensions of self-compassion could be revealed in more detail.

Finally, yet most importantly, the effects of any demographic variables, such as gender, income or religious belief that would have had an effect on the self-compassion or life-satisfaction levels of the participants, were not checked. Further studies are needed to test whether these demographic variables could act as suppressors on the study variables.

## REFERENCES

- Akın, Ü., Akın, A., and Abacı, R. (2007). Self-Compassion Scale: The study of validity and reliability. *Hacettepe University Journal of Education*, 33, 1-10.
- Ashby, J. S., Noble, C. L. and Gnilka, P. B. (2012). Multidimensional perfectionism, depression, and satisfaction with life: Differences among perfectionists and tests of a stress-mediation model. *Journal of College Counseling*, 15(2), 130-143. <https://doi.org/10.1002/j.2161-1882.2012.00011.x>
- Barnett, M. D. and Sharp, K. J. (2016). Maladaptive perfectionism, body image satisfaction, and disordered eating behaviors among US college women: The mediating role of self-compassion. *Personality and Individual Differences*, 99, 225-234. <https://doi.org/10.1016/j.paid.2016.05.004>
- Booker, J. A. and Dunsmore, J. C. (2019). Testing direct and indirect ties of self-compassion with subjective well-being. *Journal of Happiness Studies*, 20(5), 1563-1585. <https://doi.org/10.1007/s10902-018-0011-2>
- Burns, D. D. (1980, November). The perfectionist's script for self-defeat. *Psychology Today*, 34-51.
- Chang, E. C., Banks, K. H., and Watkins, A., (2004). How adaptive and maladaptive perfectionism relate to positive and negative psychological functioning: Testing a stress-mediation model in black and white female college students. *Journal of Counseling Psychology*, 51(1), 93-102. <https://doi.org/10.1037/0022-0167.51.1.93>

- Dağlı, A. and Baysal, N. (2016). Adaptation of the Satisfaction with Life Scale into Turkish: The study of validity and reliability. *Electronic Journal of Social Sciences*, 15(59), 1250-1262. <https://doi.org/10.17755/esosder.75955>
- Demirci, I., Eksi, H., and Eksi, F. (2019). Narcissism, Life Satisfaction, and Harmony: The Mediating Role of Self-Esteem and Self-Compassion. *Eurasian Journal of Educational Research*, 84, 159-176.
- Diener, E. (2009). Subjective well-being. In *The science of well-being* (pp. 11-58). Springer, Dordrecht.
- Diener, E., Emmons, R. A., Larsen, R. J., and Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75. [https://doi.org/10.1207/s15327752jpa4901\\_13](https://doi.org/10.1207/s15327752jpa4901_13)
- Diener, E., Suh, E. M., Lucas, R. E., and Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302.
- Duckworth, A.L., Steen, T.A., and Seligman, M.E.P. (2005). Positive psychology in clinical practice. *Annual Review of Clinical Psychology*, 1, 629-651. <https://doi.org/10.1146/annurev.clinpsy.1.102803.144154>
- Eid, M., & Diener, E. (2004). Global judgements of subjective well-being: Situational variability and long-term stability. *Social Indicators Research*, 65, 245-277.
- Erol-Öngen, D. (2009). The relationship between perfectionism and multidimensional life satisfaction among high school adolescents in Turkey. *Journal of Multicultural Counseling and Development*, 37(1), 52-64. <https://doi.org/10.1002/j.2161-1912.2009.tb00091.x>
- Erol-Öngen, D. (2011). The relationships among perfectionism, self-criticism and identity styles in Turkish university students. *Procedia-Social and Behavioral Sciences*, 30, 565-572. <http://dx.doi.org/10.1016/j.sbspro.2011.10.110>
- Ferrari, M., Yap, K., Scott, N., Einstein, D. A., and Ciarrochi, J. (2018). Self-compassion moderates the perfectionism and depression link in both adolescence and adulthood. *PloS one*, 13(2), 1-19. <https://doi.org/10.1371/journal.pone.0192022>
- Fletcher, K., Yang, Y., Johnson, S. L., Berk, M., Perich, T., Cotton, S., Jones, S., Lapsley, S., Michalak, E., Murray, G. (2019). Buffering against maladaptive perfectionism in bipolar disorder: the role of self-compassion. *Journal of Affective Disorders*, 250, 132-139. <https://doi.org/10.1016/j.jad.2019.03.003>
- Frost, R.O., Marten, P., Lahart, C., Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14(5), 449-468.
- Ge, J., Wu, J., Li, K., and Zheng, Y. (2019). Self-compassion and subjective well-being mediate the impact of mindfulness on balanced time perspective in Chinese college students. *Frontiers in Psychology*, 10, 367. <https://doi.org/10.3389/fpsyg.2019.00367>
- Gnilka, P. B. and Broda, M. D. (2019). Multidimensional perfectionism, depression, and anxiety: Tests of a social support mediation model. *Personality and Individual Differences*, 139, 295-300. <https://doi.org/10.1016/j.paid.2018.11.031>
- Grevenstein, D., Aguilar-Raab, C., Schweitzer, J., and Bluemke, M. (2016). Through the tunnel, to the light: Why sense of coherence covers and exceeds resilience, optimism, and self-

- compassion. *Personality and Individual Differences*, 98, 208-217.  
<http://dx.doi.org/10.1016/j.paid.2016.04.001>
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*, 15 (1), 27-33.
- Hewitt, P. L. and Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60 (3), 456-470. <https://doi.org/10.1037/0022-3514.60.3.456>
- Hollander, M.H. (1965). Perfectionism. *Comprehensive Psychiatry*, 6(2), 94-103.  
[https://doi.org/10.1016/S0010-440X\(65\)80016-5](https://doi.org/10.1016/S0010-440X(65)80016-5)
- Horney, K. (2006). *Neurosis and human growth: The struggle towards self-realization* [Nevrozlar ve insan gelişimi: Öz gerçekleştirme kavgası]. Öteki Yayınevi. (Original work published 1950).
- Joeng, J. R., and Turner, S. L. (2015). Mediators between self-criticism and depression: Fear of compassion, self-compassion, and importance to others. *Journal of Counseling Psychology*, 62(3), 453–463. <https://doi.org/10.1037/cou0000071>
- Juliana, C., Soares, M. J., Pereira, A. T., and Macedo, A. (2016). Perfectionism, cognitive emotion regulation and perceived distress/coping. *European psychiatry*. 33S. (pp. S213). Elsevier Masson SAS <http://dx.doi.org/10.1016/j.eurpsy.2016.01.513>
- Kaap-Deeder, J. van der, Soenens, B., Boone, L., Vandenkerckhove, B., Stengée, E., and Vansteenkiste, M. (2016). Evaluative concerns perfectionism and coping with failure: Effects on rumination, avoidance, and acceptance. *Personality and Individual Differences*, 101, 114-119. <http://dx.doi.org/10.1016/j.paid.2016.05.063>
- Limburg, K., Watson, H. J., Hagger, M. S., Egan, S. J. (2017). The relationship between perfectionism and psychopathology: A meta-analysis. *Journal of Clinical Psychology*, 73(10), 1301-1326. <https://doi.org/10.1002/jclp.22435>
- Linnett, R. J. & Kibowski, F. (2020) A multidimensional approach to perfectionism and self-compassion, *Self and Identity*, 19(7), 757-783.  
<https://doi.org/10.1080/15298868.2019.1669695>
- Macedo, A., Marques, C., Quaresma, V., Soares, M. J., Amaral, A. P., Araújo, A. Í., and Pereira, A. T. (2017). Are perfectionism cognitions and cognitive emotion regulation strategies mediators between perfectionism and psychological distress? *Personality and Individual Differences*, 119, 46-51. <http://dx.doi.org/10.1016/j.paid.2017.06.032>
- MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical psychology review*, 32(6), 545-552. <https://doi.org/10.1016/j.cpr.2012.06.003>
- Mehr, K. E., and Adams, A. C. (2016). Self-compassion as a mediator of maladaptive perfectionism and depressive symptoms in college students. *Journal of College Student Psychotherapy*, 30(2), 132-145. <https://doi.org/10.1080/87568225.2016.1140991>
- Molnar, D. S., Sirois, F. M. and Methot-Jones, T. (2016). Trying to be perfect in an imperfect world: Examining the role of perfectionism in the context of chronic illness. In F. M. Sirois and D. S. Molnar (Eds.), *Perfectionism, health, and well-being* (pp. 69-99). Cham: Springer International Publishing.

- Neff, K. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2(2), 85-101. <https://doi.org/10.1080/15298860309032>
- Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223-250. <https://doi.org/10.1080/15298860309027>
- Neff, K. D. (2016). The self-compassion scale is a valid and theoretically coherent measure of self-compassion. *Mindfulness*, 7(1), 264-274. <https://doi.org/10.1007/s12671-015-0479-3>
- Neff, K. D., Hseih, Y., & Dejithirath, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, 4, 263-287. <https://doi.org/10.1080/13576500444000317>
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41(1), 139-154. <https://doi.org/10.1016/j.jrp.2006.03.004>
- Pavot, W., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology*, 3(2), 137-152. <https://doi.org/10.1080/17439760701756946>
- Perrone-McGovern, K. M., Simon-Dack, S. L., Beduna, K. N., Williams, C. C., and Esche, A. M. (2015). Emotions, cognitions, and well-being: The role of perfectionism, emotional overexcitability, and emotion regulation. *Journal for the Education of the Gifted*, 38(4), 343-357. <https://doi.org/10.1177/0162353215607326>
- Ryff, C. D., and Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, 9(1), 1-28. [https://doi.org/10.1207/s15327965pli0901\\_1](https://doi.org/10.1207/s15327965pli0901_1)
- Seligman, M. E., and Csikszentmihalyi, M. (2014). Positive psychology: An introduction. In *Flow and the foundations of positive psychology* (pp. 279-298). Springer, Dordrecht.
- Sherry, S. B., Stoeber, J., and Ramasubbu, C. (2016). Perfectionism explains variance in self-defeating behaviors beyond self-criticism: Evidence from a cross-national sample. *Personality and Individual Differences*, 95, 196-199. <http://dx.doi.org/10.1016/j.paid.2016.02.059>
- Shin, J. Y. (2019). "Will I find a job when I graduate?": Employment anxiety, self-compassion, and life satisfaction among South Korean college students. *International Journal for Educational and Vocational Guidance*, 19(2), 239-256. <https://doi.org/10.1007/s10775-018-9378-1>
- Shrout, P. E., and Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422-445. <https://doi.org/10.1037/1082-989X.7.4.422>
- Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., Ashby, J. S. (2001). The revised Almost Perfect Scale. *Measurement and Evaluation in Counseling and Development*, 34(3), 130-145. <https://doi.org/10.1080/07481756.2002.12069030>
- Smith, M. M., Saklofske, D. H., Stoeber, J., and Sherry, S. B. (2016). The big three perfectionism scale: A new measure of perfectionism. *Journal of Psychoeducational Assessment*, 34(7), 670-687. <https://doi.org/10.1177/0734282916651539>
- Smith, M. M., Saklofske, D. H., Yan, G., and Sherry, S. B. (2017). Does perfectionism predict depression, anxiety, stress, and life satisfaction after controlling for neuroticism? *Journal of Individual Differences*, 38, 63-70. <https://doi.org/10.1027/1614-0001/a000223>

- Smith, M. M., Sherry, S. B., Rnic, K., Saklofske, D. H., Enns, M., and Gralnick, T. (2016). Are perfectionism dimensions vulnerability factors for depressive symptoms after controlling for neuroticism? A meta-analysis of 10 longitudinal studies. *European Journal of Personality*, 30(2), 201-212. <https://doi.org/10.1002/per.2053>
- Smith, M. M., Sherry, S. B., Vidovic, V., Hewitt, P. L., and Flett, G. L. (2020). Why does perfectionism confer risk for depressive symptoms? A meta-analytic test of the mediating role of stress and social disconnection. *Journal of Research in Personality*, 103954. <https://doi.org/10.1016/j.jrp.2020.103954>
- Soper, D. S. (2020). A-priori sample size calculator for structural equation models [Software]. Retrieved from <https://www.danielsoper.com/statcalc/calculator.aspx?id=89>
- Stoeber, J. and Damian, L. E. (2016). Perfectionism in employees: Work engagement, workaholism, and burnout. In F. M. Sirois and D. S. Molnar (Eds.), *Perfectionism, health, and well-being* (pp. 265-283). Cham: Springer International Publishing.
- Stoeber, J., Lalova, A. V., and Lumley, E. J. (2020). Perfectionism, (self-)compassion, and subjective well-being: A mediation model. *Personality and Individual Differences*, 154, 109708. <https://doi.org/10.1016/j.paid.2019.109708>
- Suh, H., Gnulka, P. B., and Rice, K. G. (2017). Perfectionism and well-being: A positive psychology framework. *Personality and Individual Differences*, 111, 25-30. <https://doi.org/10.1016/j.paid.2017.01.041>
- Tabachnick, B. G., and Fidell, L. S. (2013). *Using Multivariate Statistics* (6th Ed.). Pearson.
- Ulu, İ. P. (2007). *An investigation of adaptive and maladaptive dimensions of perfectionism in relation to adult attachment and big five personality traits* (Unpublished doctoral dissertation). Middle East Technical University.
- Wang, K. T., Yuen, M., and Slaney, R. B. (2009). Perfectionism, depression, loneliness, and life satisfaction: A study of high school students in Hong Kong. *The Counseling Psychologist*, 37(2), 249-274. <https://doi.org/10.1177/0011000008315975>
- Wayment, H. A., West, T. N., and Craddock, E. B. (2016). Compassionate values as a resource during the transition to college: Quiet ego, compassionate goals, and self-compassion. *Journal of the First-Year Experience & Students in Transition*, 28(2), 93-114.
- Wilson, J. M., Weiss, A., and Shook, N. J. (2020). Mindfulness, self-compassion, and savoring: Factors that explain the relation between perceived social support and well-being. *Personality and Individual Differences*, 152, 109568. <https://doi.org/10.1016/j.paid.2019.109568>
- Yang, Y., Zhang, M., and Kou, Y. (2016). Self-compassion and life satisfaction: The mediating role of hope. *Personality and Individual Differences*, 98, 91-95. <https://doi.org/10.1016/j.paid.2016.03.086>
- Zessin, U., Dickhäuser, O., and Garbade, S. (2015). The relationship between self-compassion and well-being: A meta-analysis. *Applied Psychology: Health and Well-Being*, 7(3), 340-364. <https://doi.org/10.1111/aphw.12051>