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<p>The Relationship Between Self-Compassion And Psychological Resilience in Children: Series Multiple Mediation Analysis</p> <p>Çocuklarda Öz-Şefkat ve Psikolojik Sağlamlık Arasındaki İlişki: Seri Aracılık Analizi</p> <p>Video Link: https://youtu.be/eiwA4mGEaB4</p>	
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Çocuklarda Öz-Şefkat ve Psikolojik Sağlık Arasındaki İlişki: Seri Aracılık Analizi *

Öz

Bu araştırmanın amacı ortaokula devam eden çocukların öz-şefkat ve psikolojik sağlımlıkları arasındaki ilişkide sosyal görünüş kaygısı, olumlu mükemmeliyetçilik ve olumsuz mükemmeliyetçiliğin seri çoklu aracılığının incelenmesidir. Ortaokul çocuklarının öz-şefkat ile psikolojik sağlımlıkları arasındaki ilişkide sosyal görünüş kaygısı, olumlu ve olumsuz mükemmeliyetçilik aracı rolünü inceleyen bu çalışmanın modeli, nicel araştırma çeşitlerinden olan ilişkisel araştırma türüdür. İlişkisel araştırma yöntemi, değişkenler arasındaki ilişkileri belirlemek ve olası sonuçları tahmin etmek için kullanılmıştır. Araştırmanın çalışma grubu için 283 kız (%59,1) ve 196 (%40,9) erkek çocuk olmak üzere toplam 497 çocuğa ulaşılmıştır. Araştırmaya katılan çocukların 55'i (%11,5) düşük, 399'sı (%83,3) orta ve 25'i (%5,2) yüksek sosyoekonomik düzeyde olduğunu ifade etmiştir. Çocukların yaşları ise 10 ile 14 yaş arasındadır. Bu çalışmada verileri toplamak için Öz-şefkat Ölçeği-Kısa Formu, Psikolojik Sağlık Ölçeği, Sosyal Görünüş Kaygısı Ölçeği, Olumlu-Olumsuz Mükemmeliyetçilik Ölçeği ve araştırmacılar tarafından hazırlanan Kişisel Bilgi Formu kullanılmıştır. Verilerin analizinde öncelikle bütün değişkenlere ilişkin betimsel istatistikler hesaplanmış, değişkenler arası ilişkiler Pearson Çarpım Momentler Korelasyon analizi kullanılarak belirlenmiştir. Aracılık analizleri Preacher ve Hayes'in önerileri doğrultusunda gerçekleştirilmiştir. Bu yöntem "Multiple Mediation (INDIRECT)" macrosunun IBM SPSS Statistic 22 programına yüklenmesiyle kullanılmaktadır. Analizde seri çoklu aracı değişken modellerinden model 6 kullanılmıştır. Son olarak seri çoklu analiz sonuçlarına göre öz-şefkat ve psikolojik sağlık arasındaki ilişkide sosyal görünüş kaygısı, olumlu mükemmeliyetçilik ve olumsuz mükemmeliyetçiliğin aracı rolünün anlamlı olduğu görülmüştür. Model, öz-şefkati yüksek olan çocukların daha az sosyal görünüş kaygısı yaşayacaklarını, daha fazla olumlu mükemmeliyetçiliğe sahip olup daha az olumsuz mükemmeliyetçiliğe sahip olacaklarını ve böylece daha yüksek psikolojik sağlımlığa sahip olacaklarını göstermektedir. Elde edilen bulgular alanyazın ışığında tartışılmıştır.

Anahtar Kelimeler: Öz-şefkat, Psikolojik Sağlık, Sosyal Görünüş Kaygısı, Olumlu Mükemmeliyetçilik, Olumsuz Mükemmeliyetçilik

The Relationship Between Self-Compassion And Psychological Resilience in Children: Series Multiple Mediation Analysis **

Abstract

This study examines the serial multiple mediation of social appearance anxiety, positive perfectionism, and negative perfectionism in the relationship between self-compassion

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and resilience to observe the psychosocial development of children attending secondary school. The model of this study, which examines the role of social appearance anxiety, positive perfectionism, and negative perfectionism in the relationship between secondary school children's self-compassion and resilience, is a relational research type, which is one of the quantitative research types. Relational research method is used to determine the relationships between variables and to predict possible outcomes. A total of 497 children, 283 girls (59.1%) and 196 (40.9%) boys were reached for the study group. 55 (11.5%) of the children stated that they had a low socioeconomic level, 399 (83.3%) had a medium socioeconomic level, and 25 (5.2%) had a high socioeconomic level. Children's ages range from 10 to 14 years old. In this study, Self-Compassion Scale-Short Form, Psychological Resilience Scale, Social Appearance Anxiety Scale, Positive-Negative Perfectionism Scale, and Personal Information Form were used to collect data. Firstly, descriptive statistics for all variables were calculated, and the relations between variables were determined using Pearson Product Moments Correlation analysis. Mediation analyses were performed in line with the recommendations of Preacher and Hayes. This method is used by loading the "Multiple Mediation (INDIRECT)" macro into the IBM SPSS Statistic 22 software. Model 6, one of the serial multiple mediator variable models, was used in the analysis. Finally, according to the results of serial multiple analysis, it was observed that the mediation role of social appearance anxiety, positive perfectionism, and negative perfectionism was significant in the relationship between self-compassion and psychological resilience. The model shows that children with high self-compassion will experience less social appearance anxiety, have more positive and less negative perfectionism, and thus have higher psychological resilience.

Keywords: Self-Compassion, Psychological Resilience, Social Appearance Anxiety, Positive-Negative Perfectionism

Introduction

The age group of children studying at the secondary school level in Turkey is between the ages of 10 and 14 (European Commission, 2021). The World Health Organization (2021) defined individuals between the ages of 10 and 19 within the adolescence period. The adolescent period has an important place as an interesting and potential period in which rapid and fundamental changes occur in biological, cognitive, social, and emotional areas and the development of stress and coping processes (Lerner & Steinberg, 2009). The adolescence period covers a psychosocial area where changes are experienced in social roles and relationships and in the body (Viner et al., 2015). Therefore, it can be said that it is important to examine the emotional state of the individuals in this group. This is because emotions are vital for individuals and groups in terms of establishing relationships, being informed, and focusing attention (Lewis & Haviland-Jones, 2000). Also, a complete understanding of the situations experienced in adolescence and the mediating roles that affect is important for necessary interventions to understand and prevent stressful events (Compas, Davis, & Forsythe, 1985). In this direction, this study was conducted to examine the mediation of social appearance anxiety, positive

perfectionism, and negative perfectionism in the relationship between self-compassion and psychological resilience to observe adolescents' psychosocial development.

The Model Created

The adolescence period covers a period of multiple transitions in many areas, such as school, relationships, and abilities, and this process leads to an increase in risky behaviors (Michael & Ben-Zur, 2007). Adolescents' risk situations are related to the perceived environment and their personality and behavioral systems (Gençtanırım-Kurt & Ergene, 2017). The success in adaptation of the individual to these environmental risks is expressed by the term psychological resilience (Luthar, Cicchetti, & Becker, 2000). It is significant to state certain points when defining psychological resilience. These points ensure the individual faces a challenging or risky situation, develops coping skills against risk, and ensures that psychological resilience can be improved, learned, increased, or decreased (Southwick et al., 2014). The basic theory of the concept is in the framework of the person's positive development against negative situations. In this framework, risk factors and protective factors are a whole. As risk factors are explained by exposure to adverse situations, protective factors are explained as those that eliminate exposure to risks (Masten, 2001; Leipold & Greive, 2009). Thus, concepts perceived as risk and protective factors were chosen while selecting the study variables and establishing the related model.

Having a healthy attitude towards oneself has a remarkable place in the protection of mental health and the individual's resistance (Baumeister & Vohs, 2004). Self-compassion, which includes being helpful and kind to one's faulty and hopeless moments, can be described as a protective factor for psychological health. Self-compassion is thought to be a useful emotional regulation that ensures we welcome feelings that cause pain or sadness, rather than avoiding and ignoring them, with kindness and understanding (Neff, 2003). A study that compares studies on self-compassion suggested that low levels of self-compassion in individuals significantly affect psychopathology, including depression, anxiety, and stress symptoms (MacBeth & Gumley, 2012). When the studies conducted in recent years are examined (Ferrari, et al., 2018; MacBeth & Gumley, 2012; Marsh, Chan & MacBeth, 2018), it was observed that self-compassion and psychopathological conditions such as social anxiety, depression, stress, and anxiety have an inverse proportion. In this context, it can be said that self-compassion has a protective and coping feature against negative emotional states.

Social relations gain more importance during adolescence, and adolescents become more proficient in considering themselves or their emotional reactions, social, and emotional hints (Herba & Phillips, 2004). Therefore, relationships become more complex, and being in a good position among friends becomes a considerable issue (Brown & Larson, 2009). In this process, with the increase of egocentrism, the belief that everyone around is watching him/her (imaginary audience) develops (Ahioglu-Lindberg, 2011), and individuals begin to compare themselves with others and attach too much importance to what others think of them (Sebastian, Burnett & Blakemore 2008). The fact that people know that their physical appearance is evaluated by others and the feeling of tension they experience expresses the concept of social appearance anxiety (Hart, Leary & Rejeski,

1989). Adolescence is of importance in examining the development of emotional, mental, and social processes during adolescence as well as constitutes the whole of physical changes that are considered to affect a person's self-image, cognitive development, and social level, and the process brings the evaluation of the individual's physical appearance (Harter, 1990). The fact that changing physical conditions become the focal point of the adolescent, and these changes are perceived negatively (Harris, 1987) may indicate that this concept is a significant risk factor encountered in this period. The reason for it is that social appearance anxiety does not only include the evaluation of physical appearance but also it is thought of in a position close to social anxiety since it brings with it evaluations of the general appearance of the individual (White, 2008).

Slaney, Rice, Mobley, Trippi & Ashby (2001) state that perfectionism manifests itself in two different ways as adaptive and maladaptive. While positive perfectionism involves setting high goals and personal standards and striving to achieve them, and being satisfied with one's capacity for rewards, negative perfectionism is setting unattainable high standards and questioning one's capacity when it is not achieved (Enns, Cox & Clara, 2002). Positive perfectionism traits allow the individual to be adaptable because people with these traits tend to change the standards they cannot reach or strive to achieve more. On the contrary, negative perfectionism is harmful to individuals and is far from reality when setting standards, and is intertwined with a situation that fails (Hamachek, 1978). While individuals with positive perfectionism have a more positive attitude towards themselves, people with negative perfectionism have high anxiety regarding failure and making mistakes, and they regularly focus on their own mistakes (Enns & Cox, 2002). Recent studies have concluded that negative perfectionism brings along stress, anxiety, and depression (Bynum & Artino, 2018; Hu, Chibnall & Slavin, 2019). Positive perfectionism was observed to be positively proportioned to hope, self-efficacy, resilience, optimism, and goal setting (Hicks & Wu, 2015). Considering this information, it can be said that positive perfectionism plays a protective role and negative perfectionism plays a risk factor. In summary, this study investigating the mediation role of social appearance anxiety, positive perfectionism, and negative perfectionism in the effect of secondary school children's self-compassion levels on resilience will be conducted by establishing a serial mediation model. In this style, it will contribute to the literature with its original quality. In addition, Neuroscience studies on early adolescence assume that this period will be a critical period affecting cognitive health and cognitive maturation in the future (Lamblin et al., 2017; Wong et al., 2018). In addition, there are opinions that internal (depression and anxiety) and external (aggression, breaking rules) behavioral problems may also begin in this period and may continue in adulthood (Perrino et al., 2016). In line with this information, it is thought that our study is important in terms of investigating positive and negative emotions experienced in this period, giving clues for future life and shedding light on preventive studies. In this sense, this study aims to analyze the relationships between self-compassion, social appearance anxiety, positive perfectionism, negative perfectionism, and resilience (1) and to examine the mediating effect of social appearance anxiety, positive perfectionism, and negative perfectionism on the relationship between self-compassion and resilience (2).

Method

Research Design

The research was designed on the relational survey model, which is included in general survey research. Survey researches are researches that aim to describe a phenomenon that has taken place before or now as it is (Büyüköztürk et al., 2017). Relational research method is used to determine the relationships between variables and to predict possible outcomes (Karasar, 2016). It is aimed to explain the relationships between the variables handled in relational screening models and to make predictions about the results (Fraenkel, Wallen, & Hyun, 2012). This study examines the serial multiple mediation of social appearance anxiety, positive perfectionism, and negative perfectionism in the relationship between self-compassion and resilience of children secondary school. Therefore, this study is in the type of predictive relationship research.

Sample

The study sample was selected from secondary schools in Istanbul, Turkey, by a convenient sampling method. After the children to be included in the study were determined, the children and their parents were informed related to the purpose of the study. The study group consists of 479 children between the ages of 10 and 14 attending secondary school. The convenience sampling method was used while choosing the study group of the study. Convenience sampling is a sampling method made on individuals who are in the immediate vicinity and are easy to reach, available at hand and willing to participate in the research (Büyüköztürk et al., 2017). A total of 497 children, 283 girls (59.1%) and 196 (40.9%) boys were reached for the study group. 55 (11.5%) of the children stated that they had a low socioeconomic level, 399 (83.3%) had a medium socioeconomic level, and 25 (5.2%) had a high socioeconomic level.

Ethical Prosedure

The research was conducted according to the Declaration of Helsinki (WMA). The research was approved by relevant institutional board / ethical committee. Before the data collection process, the necessary ethics committee approval was obtained from the Yıldız Technical University Social and Human Sciences Ethics Committee. All participants have signed the informed consent.

Data Collection

Self-Compassion Scale-Short Form

The Self-Compassion Scale Short Form, developed by Raes, Pommier, Neff, & Van Gucht (2011), and adapted into Turkish by Yıldırım & Sarı (2018), consists of 11 items. To examine the psychometric properties of the scale, construct validity, criterion-related validity, internal consistency coefficient, and test-retest reliability were discussed. As a result of EFA, it was seen that the scale had a single factor structure, and this factor consisted of two subcomponents. The factor structure of the scale was confirmed in the CFA. The internal consistency coefficient of the scale was calculated as .75. Finally, it was observed that there was a high level of correlation between test-retest measurements

applied at 17-day intervals (Yıldırım& Sarı, 2018). The reliability coefficient of the scale for this study is .83.

Social Appearance Anxiety Scale

This scale was developed by Hart et al. (2008) to measure individuals' social appearance anxiety. Doğan (2010) adapted the scale into Turkish by working with a sample of university students. The validity and reliability of the adolescent form of the scale were examined by Doğan (2011) on adolescents aged between 11 and 15 years. The Social Appearance Anxiety Scale is a one-dimensional measurement tool consisting of 16 items. The scale is a five-point Likert type (1= not at all appropriate and 5= completely appropriate). The first item of the scale is reverse-coded. The total score obtained from the scale indicates the high level of social appearance anxiety. Factor analysis was performed for the validity of the scale, and the single factor structure was confirmed. The Cronbach's alpha coefficient for reliability was determined as .91. The correlation of the scale with the Social Appearance Anxiety Scale for Adolescents was .76, and the test-retest reliability coefficient was .80. The reliability coefficient of the scale for this study was found to be .95.

Psychological Resilience Scale

The scale developed by Liebenberg, Ungar and LeBlanc (2013) was adapted to Turkish culture by Arslan (2015). The adaptation study showed that the item factor loads of the scale ranged from .53 to .81 and the internal consistency coefficient was .91. According to the results of the confirmatory factor analysis, it can be said that the scale fits adequately [$\chi^2(N =256) = 105.498, p < .0001; \chi^2/df= 2.03; GFI = .94, CFI = .97, RMSEA = .060, RMR = .039$]. The reliability coefficient was found to be .83.

Positive-Negative Perfectionism Scale

The Positive-Negative Perfectionism Scale was developed by Kırđök (2004) to apply to secondary school students. Consisting of 17 items and 2 subscales, this scale is a 4-point Likert scale. While a score between 10-40 points is obtained from the 10-item positive perfectionism sub-dimension, a score between 7-28 points is obtained from the 7-item negative perfectionism scale. The Cronbach's alpha internal consistency coefficient of the Positive Perfectionism subscale is .81, and the Cronbach's alpha internal consistency coefficient of the Negative Perfectionism subscale is .78. The test-retest reliability coefficients of the scale are .75 for the positive perfectionism sub-dimension and .78 for the negative perfectionism sub-dimension.

Data Analysis

In the data analysis, Kolmogorov-Smirnov Test and skewness and kurtosis coefficients were used to test the conformity of the variables to the normal distribution. For the data to have a normal distribution, the Kolmogorov-Smirnov Test z-value should be insignificant at the $p>.05$ level, and the skewness and kurtosis values should be between -1.5 and +1.5 (Tabachnick& Fidel, 2013). It was concluded in this study that skewness and kurtosis values of self-compassion ($S= -.191$ and $S= .223$), social appearance anxiety ($S= -$

.718 and $S= .223$), positive perfectionism ($S= -.764$ and $S= .223$), negative perfectionism ($S= -1.013$ and $S= .223$) and psychological resilience ($S= .684$ and $S= .223$) were between -1.5 to $+1.5$. Accordingly, the scales have a normal distribution.

Independent Groups T-Test and One-Way ANOVA tests were conducted to see whether the study differed according to the dependent variable and demographic variables. According to the results of the analysis, psychological resilience according to gender ($t= .06$; $p> .05$); It was observed that there was no significant difference according to age ($F= 1.233$; $p> .05$) and socio-economic level ($F= 2.468$; $p> .05$). In addition, Correlation analysis was used to determine the relationships between variables. The Regression-Based Bootstrapping Technique developed by Hayes (2013) was used to determine the serial multiple mediator effect of social appearance anxiety, positive perfectionism, and negative perfectionism on the relationship between self-compassion and resilience. This method is used by loading the "Multiple Mediation (INDIRECT)" macro into the IBM SPSS Statistic 22 software. Model 6, one of the serial multiple mediator variable models, was used in the analysis. In this model, the aim is to investigate the mediating effect of the M1 variable (first mediating variable), M2 variable (second mediating variable), and M3 variable (third mediating variable) on the relationship between variable X (independent variable) and variable Y (dependent variable) (Hayes, 2013). In this study, self-compassion is the independent variable, resilience is the dependent variable, social appearance anxiety is the first mediator variable, positive perfectionism is the second mediating variable, and negative perfectionism is the third mediating variable.

Findings

In this part of the study, the statistical analyses applied in line with the purpose of the study and the order of the sub-problems and the findings obtained as a result of the analysis are included.

Findings on Relationships

In the study, the answer to the question "How are the relationships between self-compassion, resilience, social appearance anxiety, positive perfectionism, and negative perfectionism?" has been sought. To reach the answer, Pearson Product-Moment Analysis was performed, and the results are presented in Table 1.

Table 1

Pearson Product-Moment Analysis of the Relationships Between Self-Compassion, Resilience, Social Appearance

Variables		1	2	3	4	5
Self-Compassion	(1)	1	.51**	-.59**	.33**	-.74**
Psychological Resilience	(2)	.51**	1	-.37**	.47**	-.30**
Social Appearance Anxiety	(3)	-.59**	-.36**	1	-.11*	.64**
Positive Perfectionism	(4)	.33**	.47**	-.11*	1	-.13**
Negative Perfectionism	(5)	-.74**	-.30**	.64**	-.13**	1

The Relationship Between Self-Compassion And Psychological Resilience in Children: Series Multiple Mediation Analysis

Average	36.35	17.91	30.75	22.84	17.91
Standard Deviation	8.40	5.33	7.51	6.28	5.33

** $p < .01$

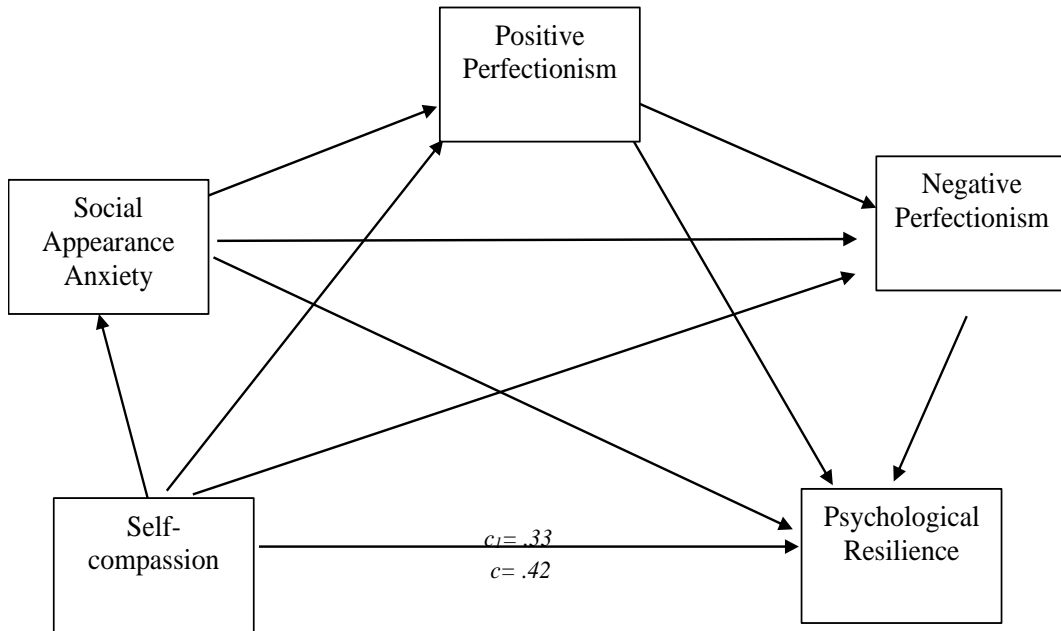
* $p < .05$

As seen in Table 1, according to the results of Pearson Correlation Analysis conducted to reveal the relationship between self-compassion, psychological resilience, social appearance anxiety, positive perfectionism, and negative perfectionism variables, there is a moderately positive and significant relationship ($r = .51, p < .01$) between self-compassion and resilience, a moderate negative significant relationship between self-compassion and social appearance anxiety ($r = -.59, p < .01$), low level of positive and significant correlation between self-compassion and positive perfectionism ($r = .33, p < .01$), a highly negative significant relationship between self-compassion and negative perfectionism ($r = -.77, p < .01$), a moderate negative significant relationship between psychological resilience and social appearance anxiety ($r = -.37, p < .01$), a moderately positive and significant relationship between psychological resilience and positive perfectionism ($r = .47, p < .05$), a moderately negative and significant relationship between psychological resilience and negative perfectionism ($r = -.30, p < .01$), and a low level of negative and significant relationship between positive perfectionism and negative perfectionism ($r = -.13, p < .01$).

Serial Mediation Analyzes Between Variables

In the study, the answer to the question "Does children's self-compassion significantly predict their psychological resilience through social appearance anxiety, positive perfectionism, and negative perfectionism?" was sought. To reach the answer, the data were analyzed with the Regression-Based Bootstrapping Technique. The model used for the mediator role was designed according to the Serial Multiple Mediation Model (Model 6) proposed by Hayes (2013). In the model, the independent variable, self-compassion, is expressed by the expression x , the dependent variable, psychological resilience by the expression y , among the mediator variables, the social appearance anxiety with m_1 , positive perfectionism with m_2 , and negative perfectionism with m_3 expression. This model with three mediating variables includes seven indirect effects and one direct effect. These indirect effects are the effect of self-compassion on resilience through social appearance anxiety ($Ind1$), the effect of self-compassion on psychological resilience through positive perfectionism ($Ind2$), the effect of self-compassion on resilience through negative perfectionism ($Ind3$), the effect of self-compassion on resilience through social appearance anxiety and positive perfectionism ($Ind4$), the effect of self-compassion on resilience through social appearance anxiety and negative perfectionism ($Ind5$), The effect of self-compassion on resilience through positive perfectionism and negative perfectionism ($Ind6$), and the effect of self-compassion on resilience through social appearance anxiety, positive perfectionism, and negative perfectionism ($Ind7$). The sum

of these seven indirect effects represents the total indirect effect of self-compassion on resilience. When the direct effect of self-compassion on resilience (c_1) is added to the total indirect effects, it shows the total effect of self-compassion on resilience (c).



Şekil 1. The Mediating Role of Social Appearance Anxiety, Positive Perfectionism, and Negative Perfectionism in the Relationship Between Self-Compassion and Resilience

In this study, the PROCESS add-on was used through the SPSS program to examine the indirect effects. In the analysis, 10000 bootstrap samples were used, and the estimates were evaluated at a 95% confidence interval, reflecting the corrected and bias-free results. The expressions ind1, ind2, ind3, ind4, ind5, ind6, and ind7 were used to explain the indirect mediation effects. The shape of the model is given in Figure 1. The results of the Bootstrapping Technique analysis of the mediation of social appearance anxiety, positive perfectionism, and negative perfectionism in the relationship between self-compassion and psychological resilience are given in Table 2.

Table 2
Serial multi mediation variable analysis

Variable	Social A. A. (m ₁)			Positive P.. (m ₂)			Negative P. (m ₃)			Psychological R. (y)		
	Coeff(β)	SH	p	Coeff(β)	SH	p	Coeff(β)	SH	p	Coeff(β)	SH	p
Self-Compassion (x)	-1.11	.07	.00	.28	.04	.00	-.39	.02	.00	.33	.05	.03
Social A. Anxiety (m ₁)	---	---	---	.05	.02	.00	.10	.01	.00	-.08	.02	.00
Positive Perfect.	---	---	---	---	---	---	.10	.03	.00	.42	.05	.00

The Relationship Between Self-Compassion And Psychological Resilience in Children: Series Multiple Mediation Analysis

(m ₂)														
Negative	Perfect.	---	---	---	---	---	---	---	---	---	---	.20	.08	.00
(m ₃)														
Constant		<i>R</i> ² = .35			<i>R</i> ² = .16			<i>R</i> ² = .63			<i>R</i> ² = .38			
		<i>F</i> (1,477)=253.63			<i>F</i> (2,476)=34.06			<i>F</i> (3,475)=265.20			<i>F</i> (4,474)=71.91			

According to serial multiple mediator variable analysis, the overall effect of self-compassion on psychological resilience is significant ($c; \beta = .42, SH = .03, t = 12.76, p < .01, CI [.35, .48]$). On the other hand, when the mediating variables (social appearance anxiety, positive perfectionism, and negative perfectionism) were taken simultaneously into the equation, the direct relationship between self-compassion and resilience decreased; but it has not lost the level of significance ($c'; \beta = .33, SH = .05, t = 6.68, p < .01, CI [.23, .43]$). These findings indicate that some indirect effects mediated by social appearance anxiety, positive perfectionism, and negative perfectionism may be significant in the relationship between self-compassion and psychological resilience.

The first indirect effect (ind1) is the indirect effect of self-compassion on psychological resilience through social appearance anxiety (self-compassion → social appearance anxiety → psychological resilience) = .09. This indirect effect was found to be statistically significant as there was no zero value in the bootstrap confidence interval (CI [.04, .14]). These findings show that the mediation effect of social appearance anxiety is significant in the relationship between self-compassion and psychological resilience.

The second indirect effect (ind2) is the indirect effect of self-compassion on psychological resilience through positive perfectionism (self-compassion → positive perfectionism → psychological resilience) = .12. This indirect effect was found to be statistically significant as there was no zero value in the bootstrap confidence interval (CI [.08, .16]). These findings show that the mediation effect of positive perfectionism is significant in the relationship between self-compassion and psychological resilience.

The third indirect effect (ind3) is the indirect effect of self-compassion on psychological resilience through negative perfectionism (self-compassion → negative perfectionism → psychological resilience) = -.07. This indirect effect was statistically significant as there was no zero value in the bootstrap confidence interval (CI [-.14, -.02]). These findings show that the mediation effect of negative perfectionism is significant in the relationship between self-compassion and psychological resilience.

The fourth indirect effect (ind4) is the indirect effect of self-compassion on resilience through social appearance anxiety and positive perfectionism (self-compassion → social appearance anxiety → positive perfectionism → psychological resilience) = -.02. This indirect effect was statistically significant as there was no zero value in the bootstrap confidence interval (CI [-.04, -.00]). These findings show that the mediation effect of social appearance anxiety and positive perfectionism is significant in the relationship between self-compassion and psychological resilience.

The fifth indirect effect (ind5) is the indirect effect of self-compassion on resilience through social appearance anxiety and negative perfectionism (self-compassion → social appearance anxiety → negative perfectionism → psychological resilience) = -.02. This indirect effect was statistically significant as there was no zero value in the bootstrap confidence interval (CI [-.04, -.00]). These findings show that the mediation effect of social appearance anxiety and negative perfectionism is significant in the relationship between self-compassion and psychological resilience.

The sixth indirect effect (ind6) is the indirect effect of self-compassion on psychological resilience through positive perfectionism and negative perfectionism (self-compassion → positive perfectionism → negative perfectionism → psychological resilience) = .00. This indirect effect was statistically significant as there was no zero value in the bootstrap confidence interval (CI [.00, .00]). These findings show that the mediation effect of positive perfectionism and negative perfectionism is significant in the relationship between self-compassion and psychological resilience.

The seventh indirect effect (ind7) is the indirect effect of self-compassion on psychological resilience through social appearance anxiety, positive perfectionism, and negative perfectionism (self-compassion → social appearance anxiety → positive perfectionism → negative perfectionism → psychological resilience) = -.00. This indirect effect was found to be statistically significant as there was no zero value in the bootstrap confidence interval (CI [-.00, -.00]). These findings show that the mediation effect of social appearance anxiety, positive perfectionism, and negative perfectionism is significant in the relationship between self-compassion and psychological resilience. In addition to these results, it is observed that the whole model is significant ($F(4,474) = 71.91, p < .001, R^2 = .38$) and explains 38% of the total variance.

Discussion And Conclusion

In this sense, this study aims to analyze the relationships between self-compassion, social appearance anxiety, positive perfectionism, negative perfectionism, and resilience (1) and to examine the mediating effect of social appearance anxiety, positive perfectionism, and negative perfectionism on the relationship between self-compassion and resilience (2) in students attending secondary school. As a result of our study, it was observed that there is a positive and significant relationship between self-compassion and psychological resilience. With this result, it can be stated that the psychological resilience of children with high self-compassion will also be high. Also, the serial mediation model (self-compassion → social appearance anxiety → positive perfectionism → negative perfectionism → psychological resilience) was found to be significant. The model shows that children with high self-compassion will experience less social appearance anxiety, have more positive and less negative perfectionism, and thus have higher psychological resilience.

In many studies in the literature, it was found that self-compassion positively affects the psychological structure of adults in many ways and increases psychological resilience (Neff, Rude, & Kirkpatrick, 2007; Breines & Chen 2012; Neff & Faso 2014). In this study, a similar result was obtained in the child population at the secondary school level. Psychological resilience is defined as personal or interpersonal abilities and strengths that

are used to develop despite adversity (Richardson, 2002). In the studies conducted (Masten, 2001; Wrigt & Masten, 2005), it is stated that it is considerable for an individual with psychological resilience to have experienced a problem in his life and to remain strong despite this distress. When self-compassion is considered taking care of oneself rather than being harsh and judgmental towards oneself, people with high self-compassion are expected to be compassionate towards themselves in the face of problems or during a failure, being aware of their feelings. In this case, self-compassion can be considered a protective factor that strengthens psychological resilience when experiencing stressful events. Neff (2011) also stated that self-compassion is an incredibly powerful tool to cope with difficult emotions and that it can even protect people from the destructive cycle of emotional reactions that often govern our lives.

As a result of the study, significant relationships were found between social appearance anxiety, positive perfectionism, negative perfectionism, and psychological resilience. In studies conducted (Cash & Fleming, 2002), it was observed that people with social appearance anxiety have low psychological resilience due to not being accepted by others, thoughts of being unloved, anxiety of being ridiculed, and comparing themselves with others too often. It is known that social appearance anxiety negatively affects a person's self-perception and well-being (Levinson & Rodebaugh, 2015). From this point of view, it is considered that individuals who experience this anxiety may experience negative emotions and have difficulties in coping with difficulties due to their negative beliefs regarding themselves. Contrary to these people, it is considered that individuals who love themselves, accept themselves as they are, and see themselves as sufficient have high internal motivation, will not experience social anxieties in this context. Their psychological resilience will be high since they are happier, more harmonious, and positive. On the other hand, when a person uses perfectionism as an impulse to increase performance with the need for high standards and regularity, it can be thought that it is a feature that improves him/her psychologically. In this context, positive perfectionism is a protective factor that increases the psychological resilience of the person in the face of a negative situation. People who adopt negative perfectionism may feel anxious and devastated when they cannot reach their goals, which may create a risk factor for the person's psychological resilience. In studies conducted (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993; Kottman & Ashby, 2000), while positive perfectionism was found to be associated with positive emotions and psychological resilience, negative perfectionism was evaluated as a risk factor for a person to struggle with difficult living conditions.

In the study, the results related to the mediation effect of social appearance anxiety show that children with higher self-compassion will experience less social appearance anxiety and thus have higher psychological resilience. In addition, the study results related to the positive and negative perfectionism mediation effect show that the positive perfectionism of children with higher self-compassion will increase, their negative perfectionism will decrease, and thus their psychological resilience will increase. Consistent with the studies in the literature (Ferrari et al. 2018), it was found that self-compassion contributes to the development of positive psychological feelings and thoughts and the reduction of negative emotions and thoughts. Children not being affectionate towards themselves will

also be worried about negative thoughts and their social relationships and may feel inadequate while struggling with the difficulties they face. The fact that children between the ages of 10 and 14 are self-focused with the effect of adolescence suggests that they often compare themselves with others, and as a result, they may engage in negative perfectionism-based behaviors. It can be said that among the factors that increase children's positive perfectionism and, therefore, their psychological resilience, it is important to meet themselves and their lives within the framework of kindness and understanding. In other words, one's self-compassion can affect their acceptance of mistakes and be open to learning from them, especially when one experiences a failure.

The final finding of this study is the serial mediation effects of social appearance anxiety, positive perfectionism, and negative perfectionism. Accordingly, it is observed that self-compassionate children may have less social appearance anxiety and negative perfectionism and more positive perfectionism. It can be claimed that if the presence of positive perfectionism reduces negative perfectionism, the psychological resilience of the person will be strengthened. Similar to the studies in the literature (Leary, Tate, Adams, Allen, & Hancock, 2007), people with high self-compassion will act lovingly towards themselves and set goals and personal standards and strive with positive perfectionism to reach them, instead of experiencing tension and anxiety with the thought that their physical appearance is evaluated by others. The existence of positive perfectionism will also decrease the negative feelings towards failure and making mistakes, and thus it will be possible to strengthen psychological resilience.

Our study results showed that if children develop self-compassion, they focus less on what they think of themselves when communicating with other people, and they can cope with difficulties by using perfectionism in their life in a harmonious way. The findings of this study, which used multi serial mediation, revealed that self-compassion had positive effects on the psychological resilience of children attending secondary school but allowed us to reach more of this. The main contribution of this study is to prove that social appearance anxiety, positive perfectionism, and negative perfectionism mediate children's self-compassion and psychological resilience levels. Theoretical developments in the future will benefit from the close relationship of self-compassion, psychological resilience, social appearance anxiety, and positive-negative perfectionism.

Two limitations can be mentioned for the study. First of all, it was not tested whether different models were more suitable for the data since alternative models were not considered while planning the study. On the other hand, the study focused on social appearance anxiety, positive-negative perfectionism in the relationship between self-compassion and psychological resilience. At this stage, it can be mentioned that other variables have been ignored and may have an effect. It can be recommended for future studies that this study, which was conducted on children attending secondary school, should be investigated in different populations. In addition to it, future studies may include more factors, and this study can be extended within the framework of different models.

Yazar Katkıları/ Author Contributions

Çalışmanın Tasarlanması | Design of Study: HY (%40), EK (%35), YAÖ (%25)

Veri Toplanması | Data Acquisition: HY (%40), EK (%35), YAÖ (%25)

Veri Analizi | Data Analysis: HY (%40), EK (%35), YAÖ (%25)

Makalenin Yazımı | Writing up: HY (%40), EK (%35), YAÖ (%25)

Makale Gönderimi ve Revizyonu | Submission and Revision: HY (%40), EK (%35), YAÖ (%25)

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Çıkar Çatışması/ Conflict of Interest

Yazarlar çıkar çatışması bildirmemiştir. | The authors have no conflict of interest to declare.

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