

# Self-Compassion Scale for Youth: Turkish Adaptation and Exploration of the Relationship with Resilience, Depression, and Well-being

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### **Abstract**

Self-compassion refers to being kind, understanding, and accepting toward oneself in times of failure, frustration, or negative feelings. Since self-compassion is related to both physical and psychological well-being, measuring and understanding selfcompassion in different populations carries importance for their mental well-being and life satisfaction outcomes. One such group is the youth, who experience unique developmental challenges. For this purpose, a Self-Compassion Scale for Youth (SCS-Y) was developed (Neff et al., 2021) and this paper presents its Turkish adaptation. The Turkish translation of SCS-Y was tested on a sample of Turkish youth  $(N=450, 61.8\% \text{ female}, M_{age}=13.09\pm1.59, \text{ range}=11-15)$  and was found to have acceptable reliability. The scale showed a similar structure to the original testing on American youth with a bifactor model of a general self-compassion score and six subscale scores, and a two-bifactor model where negative and positive aspects are grouped together. Self-compassion was positively related to resilience and wellbeing, and negatively related to depression. A serial mediation analysis showed selfcompassion to have a direct and positive effect on resilience, and to have an indirect effect on well-being mediated by resilience and depression. Given that the trainable skill of self-compassion is associated with higher resilience, lower depression, and better well-being, the value of this scale and its different adaptations becomes evident, as they enable measuring self-compassion in youth in various populations such as the present Turkish one and guiding the design of future interventions to increase self-compassion, targeted for the specific concerns of the youth.

**Keywords** Self-compassion · Depression · Resilience · Well-being · Turkey · Youth



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# 1 Introduction

Self-compassion is a concept that includes self-kindness, common humanity, and mindfulness (Neff, 2003a). These components refer to being understanding and kind towards oneself instead of self-critical during times of failure or pain (self-kindness), rather than seeing one's experience as isolating or separating, considering it as part of the greater human experience (common humanity), and regarding painful feelings and thoughts in a balanced awareness instead of over-identifying with them (mindfulness) (Neff, 2003a). The scores on the validated self-compassion scale were shown to be associated with better mental health as indicated by lower levels of anxiety and depression, and higher life satisfaction (Neff, 2003b). Though it may be intuitive to assume that self-compassion may be related with compassion for others, it was shown that self-compassion and compassion for others were not significantly related, and self-compassion was more strongly related to affect than compassion for others (López et al., 2018). This relationship between self-compassion and well-being has been further explored, which yielded specifications about how different components of self-compassion relate to different aspects of well-being, such as isolation and selfjudgment components of negative self-compassion predicting depression, and isolation predicting stress (Soysa & Wilcomb, 2015). Furthermore, the self-judgment vs. self-kindness (SJ-SK) component and the isolation vs. common humanity component predict both depressive symptomatology and physical well-being, while the SJ-SK and the over-identification vs. mindfulness predict the management of life stressors (Hall et al., 2013). These findings show that self-compassion is an important concept that is related to affect, anxiety, depression, stress, and life satisfaction, and is implicated in both psychological and physical well-being.

Self-compassion has been consistently associated with positive mental health as seen with increased positive well-being and decreased psychopathology in adults and adolescents (Bluth & Neff, 2018). As a promising avenue, it has also been shown to improve with training and interventions. Self-compassion, which was negatively correlated with anxiety, depression, and perceived stress at baseline, significantly improved at the end of an academic seminar intervention on compassion compared to the control group (Ko et al., 2018). Another self-compassion program resulted in significantly higher self-compassion and life satisfaction, and lower depression compared to the group that did not receive the program (Bluth et al., 2016). Recently, the improvements in self-compassion resulting from interventions delivered via smartphone apps have been investigated and the initial findings look promising for smartphone apps to provide easily accessible and cheap interventions to increase self-compassion (Linardon, 2020).

In a study with older adults, in individuals with low self-compassion, high stress and low health predicted lower happiness and higher depression levels, and high self-compassion emerged as a protective factor, where the psychological well-being of individuals with higher self-compassion was better despite high stress or poor health (Smith, 2015). Additionally, an investigation of multicomponent positive psychology interventions with adults in the Netherlands found this intervention to increase self-compassion, which then decreased anxiety and depressive symptoms (Schotanus-Dijkstra et al., 2019). One explanation for the underlying mechanism for the



protective effects of self-compassion against negative mental health outcomes comes from Trompetter et al. (2017). Upon finding that self-compassion significantly mediated the negative relationship between positive mental health and psychopathology, and that higher self-compassion levels diminished the relationship between state negative affect and psychopathology, the authors suggest that self-compassion skills may serve as an adaptive emotion regulation strategy and this way create a buffer against activating schemas about psychopathology upon negative affective experiences, and suggest improving self-compassion as hopeful avenue for clinical interventions to reduce psychopathology risk (Trompetter et al., 2017). As self-compassion emerges as a protective factor in conditions of high stress and poor health, and that it can be increased via interventions, resulting in decreased anxiety and depression, effective interventions aimed at increasing self-compassion can be used with populations at risk for psychopathology to increase their chances of obtaining better mental health outcomes.

Neff et al., (2021) pointed out the majority of self-compassion research in adolescence to be on older adolescents, and suggested one reason for this to be the lack of a validated self-compassion scale for youth. Considering the identity formation and self-concept development during younger adolescence and therefore believing self-compassion to play a role in the well-being of younger adolescents, they developed and validated a self-compassion scale for youth. Neff et al., (2021) set out to create a more age-appropriate scale than the adult version that includes statements that the authors say may be too abstract for this age, which suits early adolescents in middle school. They started with a pool of 36 possible items that included more understandable phrasings of the items in the adult scale. After testing this on American middle schoolers and according to the fit indices, they finalized a 17-item version of the scale where fit indices and factor loadings supported six specific factors and one general factor. They showed that self-compassion was negatively correlated with depression, and positively correlated with happiness, life satisfaction, mindfulness, and resilience (Neff et al., 2021).

# 1.1 The Present Study

The self-compassion scale has been translated to 16 languages (Bluth & Neff, 2018) and used with different populations such as parents of children with autism spectrum disorder (Neff & Faso, 2015) and adults with spina bifida (Hayter & Dorstyn, 2014). This scale was adapted into Turkish and its language equivalence, validity, and reliability were confirmed (Deniz et al., 2008). Though this scale has been used with Turkish and other university students (Deniz et al., 2012; Iskender, 2009), the Turkish adaptation of a well-validated self-compassion scale for youth is important to yield a reliable tool to investigate this concept and its correlates in younger adolescents.

The Turkish adaptation of the Self-Compassion Scale for Youth (Neff et al., 2021) will contribute to understanding the role of self-compassion in the mental well-being of younger adolescents and to finding ways to boost this skill that can be enhanced with training. To better explore such possibilities and understand its correlates in youth in Turkey, adapting the SCS-Youth into Turkish is a valuable endeavor.



The present study translated the Self-Compassion Scale for Youth into Turkish and tested its validity on a Turkish sample of youth. Then, it explored the relations of the scores on this scale with depression, resilience, and well-being, and investigated them in a mediational path model. It has been previously shown that self-compassion is positively and significantly related to resilience (Bluth et al., 2018; Kemper et al., 2015; McArthur et al., 2017) and well-being (Baer et al., 2012; Durkin et al., 2016; McKay & Walker, 2021) and negatively related with depression (Bluth et al., 2017; Ehret et al., 2015; Neff, 2003b). Given such findings in other samples, the directional relationships between self-compassion, resilience, depression, and well-being were also explored in this Turkish youth sample.

### 2 Method

# 2.1 Participants and Procedure

The present sample consisted of 450 youth. Their average age was M=13.09 years (range=11-15 years; SD=1.59), and 61.8% were female. The questionnaires were distributed using Google Form. Informed consent was obtained in anonymous questionnaires and data were collected only from volunteer students. The research was designed in accordance with the Helsinki declaration.

### 2.2 Measures

### 2.2.1 Self-Compassion Scale for Youth (SCS-Y)

The SCS-Y is used to evaluate the self-compassion of adolescents and was developed by Neff et al., (2021). Comprising 17 items (e.g., "I get really angry when I notice things about myself that I don't like"), the scale is rated on a 5-point Likert scale (almost always to almost never). The SCS-Y has acceptable internal consistency reliability, as well as good structure validity (Neff et al., 2021).

# 2.2.2 The Child and Youth Resilience Measure (CYRM)

The CYRM is used to evaluate the resilience of adolescents and was developed by Liebenberg et al., (2013). Comprising 12 items (e.g., "My family is with me in difficult times"), the scale is rated on a 5-point Likert scale (defines me completely and does not describe me at all). Turkish adaptation study for the scale were completed by Arslan (2015). The results of exploratory factor analysis found that the 12 items had single dimension structure and explained 52% of the total variance. The Turkish form of the CYRM was stated to have sufficient construct validity. The reliability coefficient for the scale was 0.91 (Arslan, 2015).



### 2.2.3 The Short Form of the Kutcher Adolescent Depression Scale (s-KADS)

The s-KADS is used to evaluate the depression of adolescents and was developed by LeBlanc et al., (2002). Comprising 6 items (e.g., "Unworthiness, hopelessness, disappointing people, not being a good person"), the scale is rated on a 4-point Likert scale (almost never to always). Turkish adaptation study for the scale was completed by Tatar & Bekiroğlu (2019). According to the results of confirmatory factor analysis, the s-KADS showed good fit for the one-dimensional factor structure. The reliability coefficient for the scale was 0.82 (Tatar & Bekiroğlu, 2019).

# 2.2.4 Subjective Happiness Scale (SHS)

The SHS is used to evaluate the well-being of youth and was developed by Lyubomirsky & Lepper (1999). Comprising 4 items, the scale is rated on a 7-point Likert scale (not at all happy to very happy). Turkish adaptation study for the scale was completed by Akın & Satıcı (2011). According to the results of confirmatory factor analysis, the SHS showed good fit for the one-dimensional factor structure. The reliability coefficient for the scale was 0.73 (Akın & Satıcı, 2011).

# 2.2.5 The Adolescent Happiness Scale (AHS)

The AHS is used to evaluate the well-being of youth and was developed by Işık & Üzbe Atalay (2019). Comprising 15 items, the scale is rated on a 5-point Likert scale (completely disagree to completely agree). The SCS-Y has acceptable internal consistency reliability ( $\alpha$ =0.91), as well as good structure validity (Işık & Üzbe Atalay, 2019).

# 2.3 Data Analysis

To test the measurement model of the scale, we applied a 6-factor CFA (confirmatory factor analysis), bifactor CFA, and two-bifactor CFA. Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Tucker Lewis Index (TLI), and Incremental Fit Index (IFI) values greater than 0.90 were interpreted to reflect an acceptable fit. Root Mean Square Error of Approximation (RMSEA) values lower than 0.08 were interpreted to reflect a close or a reasonable fit (Hu & Bentler, 1999). In addition, the correlation coefficients between the subscales were examined.

We assessed different reliability coefficients. We calculated the Cronbach alpha  $(\alpha)$ , McDonald's omega  $(\omega)$ , and Guttmann's lambda  $(\lambda 6)$  reliability coefficients.

Network analysis was performed to understand the relationship between global self-compassion and well-being (as computed by the composite score of subjective happiness and adolescent happiness), resilience, and depression. The serial mediation analysis was conducted to establish a mediating model for these four variables. Lastly, serial mediation analyses were performed with bootstrapping procedures (N=5,000) using the PROCESS macro for SPSS (Model 6; Hayes, 2018). Analyses were carried out via IBM SPSS 22, AMOS Graphics, and JASP 0.11.1.



### 3 Results

We began measurement model testing by measuring the known 6-factor correlated structure of self-compassion. The 6-factor model's fit indexes yielded satisfactory results and suggested that the factor structure was acceptable:  $\chi^2$  /df=1.63, CFI=0.966, TLI=0.955, GFI=0.957, IFI=0.966, RMSEA=0.038 90%CI=0.027–0.048. All factor loadings were above 0.48 and were significant. Afterwards, the bifactor CFA was tested. All fit indices indicated that the bifactor model fitted well:  $\chi^2$  /df=1.52, CFI=0.976, TLI=0.963, GFI=0.967, IFI=0.977, RMSEA=0.034 90%CI=0.022–0.045. Lastly, the two-bifactor CFA of the SCS-Y was tested. The fit indices of this model were also acceptable:  $\chi^2$  /df=1.38, CFI=0.983, TLI=0.973, GFI=0.970, IFI=0.83, RMSEA=0.029 90%CI=0.015–0.041. Although all fit indices in the tested models was acceptable, we made comparisons between models. For this, we examined Chen's proposed CFI changes (CFI≤0.01) and found that there was invariance in the 6-factor, bifactor, and two-bifactor models.

We also examined the associations between the 6 subscales and reported their descriptive statistics. All sub-dimensions were normally distributed. Self-kindness was negatively correlated with self-judgment (r=-.34, p<.01) and isolation (r=-.21, p<.01). Moreover, self-kindness was positively associated with common humanity (r=.46, p<.01) and mindfulness (r=.53, p<.01). Otherwise, self-kindness was not significantly associated with overidentification (r=-.09, p>.05). Self-judgement was negatively correlated with mindfulness (r=-.13, p<.05) and positively correlated with isolation (r=.54, p<.01) and over identification (r=.47, p<.01). Self-judgement and common humanity did not correlate significantly (r=-.01, p>.05).

Table 1 Goodness-of-fit indices for the Turkish Self-Compassion Scale—Youth version

Models	$\chi^2$	df	CFI	⊿CFI	TLI	⊿TLI	GFI	IFI	RMSEA	90% CI RMSEA
- C C	1.60.05**	101	0.066	-	0.055		0.055	0.066	0.020	
6-factor corr. CFA	169.87	104	0.966	-	0.955	-	0.957	0.966	0.038	0.027– 0.048
Bifactor CFA	132.17**	87	0.976	0.01	0.963	0.008	0.967	0.977	0.034	0.022- 0.045
Two-bifactor corr. CFA	119.13**	86	0.983	0.007	0.973	0.01	0.970	0.983	0.029	0.015- 0.041

Note. \*\*p < .001

 Table 2
 Inter correlation and reliability coefficients

Item	SK	SJ	CH	IS	MI	M	SD	Skewness	Kurtosis
SK	-					8.61	3.24	0.136	-0.734
SJ	-0.34**	-				8.84	3.27	0.173	-0.844
CH	0.46**	-0.01	-			8.97	3.15	-0.009	-0.693
IS	-0.21**	0.54**	0.01	-		8.82	3.15	0.022	-0.750
MI	0.53**	$-0.13^{*}$	0.46**	-0.08	-	9.07	2.89	-0.029	-0.480
OI	-0.09	0.47**	0.11**	0.49**	0.04	6.89	2.27	-0.333	-0.749

Note. \*\*p<.001; SK: Self-kindness; SJ: Self-judgement; CH: Common humanity; IS: Isolation; MI: Mindfulness; OI: Over-identification

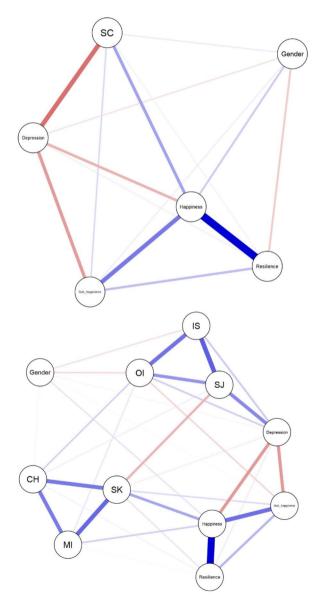


Common humanity was positively associated with mindfulness (r=.46, p<.01) and overidentification (r=.11, p<.05) and was not significantly associated with isolation (r=-.08, p>.05). Isolation was positively associated with overidentification (r=.49, p<.05) and was not significantly associated with mindfulness (r=-.08, p>.05).

The reliabilities of the SCS-Y indicated that the Cronbach's alpha ( $\alpha$ =0.793), McDonald's omega ( $\omega$ =0.797), and Guttmann's lambda ( $\lambda$ 6=0.831) were acceptable.

The network estimated on the global self-compassion and 6-factor self-compassion are shown in Fig. 1a and b. First (see Fig. 1a), global self-compassion was highly

Fig. 1 a Network analysis for global self-compassion b Network analysis for 6-factor self-compassion. (Blue lines represent positive correlations and red lines represent negative correlations. Note. SC: total self-compassion score; SK: Self-kindness; SJ: Self-judgement; CH: Common humanity; IS: Isolation; MI: Mindfulness; OI: Over-identification)





connected with depression followed by adolescent happiness and subjective happiness. The positive (SK, CH, and MI) and negative (SJ, IS, and OI) subscales of 6-factor self-compassion grouped among themselves (see Fig. 1b). The positive subscale was strongly connected to happiness, and the negative subscale to depression.

The results from serial multiple mediation analysis using the bootstrapping method are presented in Fig. 2; Table 3. The total effect of global self-compassion on well-being was significant (B=0.899, 95%C.I.=0.771–1.028) after adjusting for the gender covariate. The findings of the mediation analysis confirmed the mediating role of resilience in the relationship between self-compassion and well-being (B=0.399, 95%C.I.=0.294–0.501). Also, depression was a significant mediator of the relationship between self-compassion and well-being (B=0.156, 95%C.I.=0.094–0.234). Resilience and depression serially mediated the relationship between self-compassion and well-being (B=0.045, 95%C.I.=0.022–0.075).

### 4 Discussion

Self-compassion, which is being kind, understanding, and accepting toward oneself during failures, when noticing something one does not like about self, or when experiencing negative emotions, is related to better mental health and increased life satisfaction, and to lower levels of anxiety and stress (Neff, 2003b). Given its importance for mental well-being and life satisfaction outcomes and considering that it is a skill that can be trained, understanding self-compassion in different populations emerges as a valuable aim in psychology. The original scale developed by Neff was

Fig. 2 The result of serial multiple mediational model, \*\*p<.01, Values shown are unstandardized coefficients

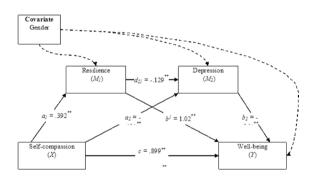


Table 3 Indirect effect of self-compassion on well-being via resilience and depression

		95% confidence interval		
	Coefficient	Lower limit	Upper limit	
$Self\text{-}compassion \rightarrow Resilience \rightarrow Well\text{-}being$	0.399	0.294	0.501	
Self-compassion $\rightarrow$ Depression $\rightarrow$ Well-being	0.156	0.094	0.234	
$Self\text{-}compassion \rightarrow Resilience \rightarrow Depression \rightarrow Well\text{-}being$	0.045	0.022	0.075	
Total indirect effect	0.599	0.488	0.711	



translated to 16 languages (Bluth & Neff, 2018) and used in different cultures. However, since this scale was intended for adults, the accurate comprehension of some of the more abstract and complex items in this scale by youth is not guaranteed, and considering the unique challenges this developmental period brings, the necessity of a scale appropriate for this age group becomes evident. Neff et al., (2021) recently created and validated such a scale, and the Turkish adaptation and validation of this Self-Compassion Scale for Youth was the aim of the present study. In line with the original validation in an American sample of youth, this validation with a Turkish youth sample found this scale to be reliable, have meaningful correlations between the subscales, and follow the same factor structure that emerged in the American sample. Furthermore, self-compassion scores in this Turkish youth sample was found to be related to lower levels of depression, higher levels of subjective happiness and youth happiness scores, and higher resilience. Finally, serial mediation analysis revealed direct effects of self-compassion on resilience, of resilience on depression, and depression on well-being (happiness scores), in addition to the indirect effect of self-compassion on well-being that was mediated by resilience and depression.

The reliability of the scale was confirmed with three analyses. Cronbach's alpha, McDonald's omega, and Guttman's lambda revealed a reliability over 0.70, which indicated the reliability of the Turkish translation of this scale in a sample of Turkish youth. In terms of the structure of the scale, the CFA revealed a bifactor structure that supports the utilization of a general self-compassion score and six subscale scores, and a two-bifactor structure where one factor includes self-kindness, common humanity, and mindfulness, and the other self-judgment, isolation, and over-identification, which correspond to the structure reported in Neff et al., (2021). Then, the intercorrelations between the subscales of self-compassion were investigated. These correlations were overall meaningful. The positive correlations between the positive aspects (self-kindness, common humanity, and mindfulness) and their negative correlations with the negative aspects (self-judgment, isolation, overidentification) are expected and the majority of significant correlations follow this pattern. Interestingly, common humanity is positively associated with overidentification both in this study and the original one (Neff et al., 2021). This may be because both common humanity and overidentification may be underlain by increased sensitivity, which may be the shared factor explaining the positive correlation between one positive and one negative aspect of self-compassion.

After analyzing the reliability, factor structure, and intercorrelations of the scale, the relationship of the scores on this scale and other variables of interest was explored. Network analysis found global self-compassion, resilience, depression, and well-being (as measured by subjective happiness and youth happiness scale) to be correlated. Self-compassion has a strong relationship with depression, and the two indices of well-being used in this study. The positive subscales (self-kindness, common humanity, and mindfulness) that correspond to one factor in the two-bifactor structure correlated with happiness, and the negative subscales (self-judgment, isolation, and over-identification) that correspond to the other factor in the two-bifactor structure correlated with depression.

Finally, serial mediation analysis investigated the direct and indirect effects of these variables. Self-compassion had a direct and positive effect on resilience, resil-



ience had a direct and negative effect on depression, and depression had a direct and negative effect on well-being. In addition to these direct effects, self-compassion was observed to have an indirect effect on well-being that was mediated by resilience and depression. In other words, self-compassion predicted well-being via resilience and depression. Individuals with higher self-compassion have higher well-being, and this connection is explained by their having higher resilience and lower levels of depression. This is in line with previous findings in the literature. Other studies found self-compassion to be significantly and positively related to resilience (Bluth et al., 2018; Kemper et al., 2015; McArthur et al., 2017), similar to the positive relationship between self-compassion and resilience found in Turkish youth in this study. Selfcompassion was found to negatively relate to depression (Bluth et al., 2017; Ehret et al., 2015; Neff, 2003b), and in the present study, there was a negative relationship between self-compassion and depression. Self-compassion is reported to positively relate to well-being (Baer et al., 2012; Durkin et al., 2016; McKay & Walker, 2021), and this positive relationship was observed in the present sample as well. Another recent study that was conducted on the Spanish general population found a direct and negative effect of self-compassion on depression, and an indirect effect of self-compassion on depression mediated by resilience (self-compassion positively affecting resilience, which negatively affects depression) (Pérez-Aranda et al., 2021). Another recent study with counselors in Malaysia found self-compassion to positively relate to resilience and psychological well-being, and resilience to positively relate to psychological well-being. Additionally, resilience was found to significantly mediate the connection between self-compassion and psychological well-being (Voon et al., 2021). Our study contributes valuable information to these findings from international adult samples about a similar mediational role of resilience in the relationship between self-compassion and well-being from a sample of Turkish youth.

In addition to creating and testing such youth-targeted self-compassion interventions, future studies can also address certain limitations that were present in this study. Firstly, the variables in this study (self-compassion, resilience, happiness, and depression) were all measured via self-report scales that were filled in an online data collection platform. Future studies can supplement these with in-person clinical evaluations. Secondly, this study was cross-sectional in design, which prevents causal inferences in serial mediation and does not enable the evaluation of test-retest reliability. Thirdly, some subscales were not correlated with each other in this sample, which may be a characteristics of the specific Turkish youth sample we chose or of the Turkish youth in general, which can be confirmed with future replications of this study and utilization of this scale with other Turkish youth samples, as well as other international youth samples. Finally, when considering the generalizability of the present findings, it should be noted that though the multi-city nature of the study is an advantage, data was collected from Turkish youth during a time period when the effects of the Covid-19 pandemic continued, from a sample consisting of individuals aged between 11 and 15 paralleling the age range of the sample tested with the original scale. Therefore, future studies are needed to confirm if the findings about the reported relationship between self-compassion, resilience, well-being, and depression holds for older Turkish adolescents above 15, for youth in other countries, and for Turkish and other youth from non-pandemic periods.



In conclusion, this study presents the Turkish validation of the recently developed Self-Compassion Scale for Youth. It found that the scale showed a similar structure to the original scale with a bifactor model of using a general self-compassion score and six subscale scores, and a two-bifactor models where negative and positive aspects are grouped together. In addition, it reveals that self-compassion in this Turkish youth sample is positively related with well-being as measured by happiness scales and resilience, and negatively related with depression. Finally, it shows that the relationship between self-compassion and well-being is mediated by resilience and depression, suggesting that self-compassion may serve as a buffer that boosts resilience and protects against depression, thereby affecting positive mental well-being outcomes in youth.

### **Pre-registration Statement.**

This study was not pre-registered.

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Data Availability Statement Data will be made available to researchers upon request.

### **Declarations**

Conflict of Interest No conflict of interest exists for this manuscript for any of the authors.

**Ethical Statement** All procedures performed in studies involving human participants were in accordance with the ethical standards and with the Helsinki Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

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## References

Akın, A., & Satıcı, S. A. (2011). Subjective Happiness Scale: A study of validity and reliability. The Journal of SAU Education Faculty, 21, 65–77



Arslan, G. (2015). Psychometric properties of Child and Youth Resilience Measure (CYRM-12): The study of reliability and validity. *Ege Eğitim Dergisi*, 16(1), 1–12

- Baer, R. A., Lykins, E. L., & Peters, J. R. (2012). Mindfulness and self-compassion as predictors of psychological wellbeing in long-term meditators and matched nonmeditators. *The Journal of Positive Psychology*, 7(3), 230–238
- Bluth, K., & Neff, K. D. (2018). New frontiers in understanding the benefits of self-compassion. *Self and Identity*, 17(6), 605–608
- Bluth, K., Campo, R. A., Futch, W. S., & Gaylord, S. A. (2017). Age and gender differences in the associations of self-compassion and emotional well-being in a large adolescent sample. *Journal of Youth and Adolescence*, 46(4), 840–853
- Bluth, K., Gaylord, S. A., Campo, R. A., Mullarkey, M. C., & Hobbs, L. (2016). Making friends with yourself: A mixed methods pilot study of a mindful self-compassion program for adolescents. *Mind-fulness*, 7(2), 479–492
- Bluth, K., Mullarkey, M., & Lathren, C. (2018). Self-compassion: A potential path to adolescent resilience and positive exploration. *Journal of Child and Family Studies*, 27(9), 3037–3047
- Deniz, M. E., Arslan, C., Özyeşil, Z., & İzmirli, M. (2012). Öz-anlayış, yaşam doyumu, negatif ve pozitif duygu: türk ve diğer ülke üniversite öğrencileri arasında bir karşılaştırma. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 1(23), 428–446
- Deniz, M., Kesici, Ş., & Sümer, A. S. (2008). The validity and reliability of the Turkish version of the Self-Compassion Scale. *Social Behavior and Personality: an international journal*, 36(9), 1151–1160
- Durkin, M., Beaumont, E., Martin, C. J. H., & Carson, J. (2016). A pilot study exploring the relationship between self-compassion, self-judgement, self-kindness, compassion, professional quality of life and wellbeing among UK community nurses. *Nurse Education Today*, 46, 109–114
- Ehret, A. M., Joormann, J., & Berking, M. (2015). Examining risk and resilience factors for depression: The role of self-criticism and self-compassion. *Cognition and Emotion*, 29(8), 1496–1504
- Hall, C. W., Row, K. A., Wuensch, K. L., & Godley, K. R. (2013). The role of self-compassion in physical and psychological well-being. *The Journal of Psychology*, 147(4), 311–323
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: a regressionbased approach. New York: Guilford Publications
- Hayter, M. R., & Dorstyn, D. S. (2014). Resilience, self-esteem and self-compassion in adults with spina bifida. Spinal Cord. 52(2), 167–171
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural equation modeling: a multidisciplinary journal, 6(1), 1–55.
- Iskender, M. (2009). The relationship between self-compassion, self-efficacy, and control belief about learning in Turkish university students. *Social Behavior and Personality: An International Journal*, 37(5), 711–720
- Işık, Ş., & Üzbe Atalay, N. (2019). Developing the Adolescent Happiness Scale: Validity and reliability study. *Pegem Eğitim ve Öğretim Dergisi*, 9(3), 673–696
- Kemper, K. J., Mo, X., & Khayat, R. (2015). Are mindfulness and self-compassion associated with sleep and resilience in health professionals? *The Journal of Alternative and Complementary Medicine*, 21(8), 496–503
- Ko, C. M., Grace, F., Chavez, G. N., Grimley, S. J., Dalrymple, E. R., & Olson, L. E. (2018). Effect of seminar on compassion on student self-compassion, mindfulness and well-being: A randomized controlled trial. *Journal of American College Health*, 66(7), 537–545
- LeBlanc, J. C., Almudevar, A., Brooks, S. J., & Kutcher, S. (2002). Screening for adolescent depression: comparison of the Kutcher Adolescent Depression Scale with the Beck Depression Inventory. *Journal of Child and Adolescent Psychopharmacology*, 12(2), 113–126
- Liebenberg, L., Ungar, M., & LeBlanc, J. C. (2013). The CYRM-12: A brief measure of resilience. *Canadian Journal of Public Health*, 104(2), 131–135
- Linardon, J. (2020). Can acceptance, mindfulness, and self-compassion be learned by smartphone apps? A systematic and meta-analytic review of randomized controlled trials. *Behavior Therapy*, 51(4), 646–658
- López, A., Sanderman, R., Ranchor, A. V., & Schroevers, M. J. (2018). Compassion for others and self-compassion: Levels, correlates, and relationship with psychological well-being. *Mindfulness*, 9(1), 325–331
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. Social Indicators Research, 46(2), 137–155



- McArthur, M., Mansfield, C., Matthew, S., Zaki, S., Brand, C., Andrews, J., & Hazel, S. (2017). Resilience in veterinary students and the predictive role of mindfulness and self-compassion. *Journal of Veterinary Medical Education*, 44(1), 106–115
- McKay, T., & Walker, B. R. (2021). Mindfulness, self-compassion and wellbeing. Personality and Individual Differences, 168, 110412
- Neff, K. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. Self and identity, 2(2), 85–101
- Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and identity*, 2(3), 223–250
- Neff, K. D., & Faso, D. J. (2015). Self-compassion and well-being in parents of children with autism. Mindfulness, 6(4), 938–947
- Neff, K. D., Bluth, K., Tóth-Király, I., Davidson, O., Knox, M. C., Williamson, Z., & Costigan, A. (2021). Development and validation of the Self-Compassion Scale for Youth. *Journal of Personality Assessment*, 103(1), 92–105
- Pérez-Aranda, A., García-Campayo, J., Gude, F., Luciano, J. V., Feliu-Soler, A., González-Quintela, A. ... Montero-Marin, J. (2021). Impact of mindfulness and self-compassion on anxiety and depression: The mediating role of resilience. *International Journal of Clinical and Health Psychology*, 21(2), 100229
- Schotanus-Dijkstra, M., Pieterse, M. E., Drossaert, C. H., Walburg, J. A., & Bohlmeijer, E. T. (2019). Possible mechanisms in a multicomponent email guided positive psychology intervention to improve mental well-being, anxiety and depression: A multiple mediation model. *The Journal of Positive Psychology*, 14(2), 141–155
- Smith, J. L. (2015). Self-compassion and resilience in senior living residents. Seniors Housing and Care Journal, 23(1), 17–31
- Soysa, C. K., & Wilcomb, C. J. (2015). Mindfulness, self-compassion, self-efficacy, and gender as predictors of depression, anxiety, stress, and well-being. *Mindfulness*, 6(2), 217–226
- Tatar, A., & Bekiroğlu, B. (2019). Translation of the short Form Kutcher Adolescent Depression Scale (KADS-6-Tr) into Turkish and examination of its psychometric properties. *International Social Mentality And Researcher Thinkers Journal*, 5(22), 1200–1209
- Trompetter, H. R., de Kleine, E., & Bohlmeijer, E. T. (2017). Why does positive mental health buffer against psychopathology? An exploratory study on self-compassion as a resilience mechanism and adaptive emotion regulation strategy. *Cognitive Therapy and Research*, 41(3), 459–468
- Voon, S. P., Lau, P. L., Leong, K. E., & Jaafar, J. L. S. (2021). Self-compassion and psychological well-being among Malaysian counselors: The mediating role of resilience. *The Asia-Pacific Education Researcher*, 1–14

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