

# The Adaptation of the State Self-Compassion Scale Long and Short Form to Turkish Culture: Validity and Reliability Study

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Study 1. This study aimed to examine the psychometric properties of the Turkish version of the State Self-Compassion Scale-Long Form (SSCS-L). The research was conducted on 536 individuals. As a result of the linguistic equivalence study, a positive significant correlation ranging from  $r=.384$  to  $.909$  was found between the original and Turkish items of the study. As a result of CFA, fit index values were found as ( $\chi^2/sd=386.886/120=3.224$ ,  $p=.00$ ),  $RMSEA=.064$ ,  $NFI=.915$ ,  $CFI=.939$ ,  $IFI=.940$ ,  $RFI=.892$ ,  $GFI=.923$  and  $SRMR=.046$ . The Self-Compassion Scale was used to test the criterion-related validity. Spearman's rank correlation coefficient was found to be  $.841$ . The internal consistency coefficient of the factors of the scale was calculated between  $.742$  and  $.923$ . The item-total correlations ranged from  $.39$  to  $.80$ , while the item discrimination index values of the upper-lower group ranged between  $8.22$  and  $22.3$ . The research findings demonstrated that the State Self-Compassion Scale-Long Form is a valid and reliable instrument in Turkish culture. Study 2. This study aimed to examine the psychometric properties of the Turkish version of the State Self-Compassion Scale-Short Form (SSCS-S). The research was conducted on 536 individuals. As a result of the linguistic equivalence study, a positive significant correlation ranging from  $r=.505$  to  $.797$  was found between the original and Turkish items of the study. As a result of CFA, fit index values were found as ( $\chi^2/sd=31.660/9=3.518$ ,  $p=.00$ ),  $RMSEA=.075$ ,  $NFI=.954$ ,  $CFI=.967$ ,  $IFI=.967$ ,  $RFI=.924$ ,  $GFI=.979$  and  $SRMR=.033$ . The Self-Compassion Scale was used to test the criterion-related validity. Spearman's rank correlation coefficient was found to be  $.873$ . Cronbach's alpha coefficient was calculated  $.782$  for the scale. The item-total correlations ranged from  $.36$  to  $.64$ , while the item discrimination index values ( $t$ ) of the upper-lower group ranged between  $12.69$  and  $21.65$ . The research findings demonstrated the State Self-Compassion Scale-Short Form is a valid and reliable instrument in Turkish culture.

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**Keywords:** Self-compassion, self-compassion scale, state self-compassion scale short form, state self-compassion scale long form

## INTRODUCTION

The term self-compassion, which is based on the Buddhist philosophy that seeks ways to live wisely (Deniz et al., 2008; Yıldırım & Sarı, 2018), refers to act in a way of kind, open and gentle to her own pain after having negative life experiences. To put it another way, self-compassion can be expressed as being kind and aware of negative emotions in such situations where she feels pain, unsuccessful or inadequate, as well as accepting that the difficulties she experiences might be encountered by many people. Instead of trying to replace negative emotions with positive ones, self-compassion emphasizes revealing positive emotions by accepting and embracing them (Germer & Neff, 2013).

The model of self-compassion defined by Neff conceptualizes the act of self-responding about the situations of stress and general life difficulties that an individual experience. According to this model, self-compassion composes six components that interact with each other. These components are as follows: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification (Deniz et al., 2012; Finlay et al., 2016; Marsh et al., 2018; Neff, 2003a, 2003b; Yıldırım & Sarı, 2018). These components are related to individuals' emotions, thoughts, and attention. While emotionally it is given one of the reactions of self-kindness or self-judgment to the pain and failure, the situation that the one experience can cognitively be interpreted as a part of human experience or isolation, thus, a kind of awareness is revealed by directing attention to the pain experienced. Although these components are separable from each other, they interact with each other. In other words, self-compassion can be expressed as a dynamic system in which various elements affect with each other (Neff et al., 2017; Neff, 2016).

Self-kindness is having a moderate, understanding, supportive, kind, and forgiving attitude rather than harshly criticizing or judging oneself regarding her inadequacies, failures, and mistakes. It involves

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exhibiting a sensitive, patient, and empathetic approach to her own feelings, thoughts, and actions. Whether the painful events that the individual encounter are under her control or not, she can still balance her emotions instead of getting angry by having self-kindness and soothe herself and show the same compassion and understanding that she would show a friend who experiences difficulty. The inner talk of self-kind people, on the one hand, involves having a gentle and encouraging manner rather than being harsh and insulting. These people can openly accept their problems and shortcomings without judging themselves, so they can do whatever it needs to support themselves. Self-judgment, on the other hand, involves having an overly critical or judgmental approach towards their themselves (Deniz et al., 2012; Germer & Neff, 2013; Germer & Neff, 2019; Gilbert & Procter, 2006; Kurtoğlu & Başgöl, 2020; Neff, 2003b).

Common humanity involves knowing that others experience similar difficulties, and people can make mistakes, and experience failures. Moreover, common humanity is having the understanding that imperfection is a part of being human, and people are not alone in their pain (Germer & Neff, 2013; Germer & Neff, 2019; Neff et al., 2020; Nunez, 2019). Individuals who are conscious of common humanity are aware of the fact that their painful experiences and emotions are a part of being human instead of feeling lonely and isolated (Neff et al., 2007; Neff, 2016; Yang & Mak, 2017). Therefore, instead of avoiding these negative emotions, they try to organize them positively and constructively (Özyeşil, 2011). Isolation occurs when individuals think that they are the only one who has failed and has been experiencing difficulties. In addition, isolation also refers to feeling alone in an experience of suffering (Kurtoğlu & Başgöl, 2020; Neff et al., 2020).

Mindfulness is about being fully aware of everything that is happening at the present, without evaluating it through the lenses of judgment (Stahl & Goldstein, 2010). In other words, Mindfulness can be defined as focusing on the present moment by directing attention consciously, and accepting the resulting experience without judgment. It refers to accept painful feelings and thoughts without suppressing or exaggerating them in a stable manner (Baer, 2003; Crane, 2009; López et al., 2017; Neff, 2003a, 2003b; Neff et al., 2019). According to Germer and Neff (2013), one cannot show compassion for painful emotions without being aware of them.

Over-identification is defining herself with her feelings as well as identifying herself excessively with the painful situation experienced (eg, I am incompetent, I am helpless) and thinking that these experiences are permanent (Clear et al., 2017; Keçe et al., 2020; Yıldırım & Sarı, 2018). Over-identification occurs as a consequence when individual get into fuse with his pain enough to cause loss of balance (Neff, 2016; Neff et al., 2020).

Mindfulness requires gaining with regard to the nature of the mind and adopting a decentralized perspective on emotions and thoughts rather than overly identifying herself with negative thoughts or emotions (Bishop et al., 2004). Self-compassion is not to think that the problems experienced by the individual are more important than the problems of others, but rather to think that her own problems are important and worth attention, too (Neff, 2021). Self-compassion is not about arrogance or selfishness, or to be self-pity or having passive attitude. On the contrary, it is the most natural thing exists in menkind and includes to have a wish of health and well-being for the individual herself. (Germer, 2020; Neff, 2021).

Self-compassion is a healthy way for an individual to relate to herself when painful situations, failures or general life difficulties are experienced, and it works as a protective for the individual against psychosocial risk factors and negative situations (Kurtoğlu & Başgöl, 2020; Neff, 2003a; Rose & Kocovski, 2020).

Studies have shown that having high level of self-compassion is in a positive correlation with having coping skills (Allen & Leary, 2010; Deniz & Sümer, 2010; Muris et al., 2018) expressing and regulating emotions (Ekşi et al., 2019; Gün et al., 2020), psychological well-being (Bluth et al., 2018, Rose & Kocovski, 2020; Stutts et al., 2018) and life satisfaction on the one hand, (Neff, 2003a; Neff et al., 2005), in a negative correlation with anxiety, social anxiety, and depression on the other (Deniz & Sümer, 2010; Ehret et al., 2015; Gill et al., 2018; Krieger et al., 2013; Muris et al., 2018). In addition, it can be stated that individuals with a high level of self-compassion are less likely to use coping strategies of escape and avoidance (Allen & Leary, 2010). Moreover, these individuals possess more positive thoughts, but more likely to be influenced by their negative thoughts when facing any difficult life experience (Deniz et al., 2008; Deniz et al., 2012).

Researchers state that self compassion is a skill which can be developed even if it is found at a lower level in some individuals and can effectively be used in reducing psychological disorders (Allen & Leary, 2010; Raab, 2014; Vatan, 2019). Therefore, it may be beneficial for professionals to consider self-compassion as a basic skill in education and guidance studies offered to individuals (Deniz et al., 2008; Deniz et al., 2012).

Various scales have been developed to measure self-compassion. On the one hand, Gilbert developed a two-dimensional scale. On the other hand, Gu developed a scale that comprises 5 dimensions. Neff, moreover, developed the Self-Compassion Scale, which consists of 6 dimensions. These dimensions are: "self-kindness", "self-judgment", "common humanity", "isolation", "mindfulness", and "overidentification". Besides having these 6 dimensions, this scale includes 26 items and gives also the total self-compassion score (Neff, 2021, 2003b).

Researchers need a reliable measurement which can be used to determine the observed change in self-compassion after the experimental studies carried out. In that sense, the State Self-Compassion Scale was developed specifically for using in experimental studies. The long form of the scale, which consists of 18 items, aims to evaluate the six dimensions of self-compassion, as well as determines whether these dimensions change at the same time. In addition, the sum of the mean scores of the subscales provides information about the individual's total self-compassion level. The short form of the scale which consisting of 6 items, however, aims to obtain a total self-compassion score in cases where it is not necessary to examine all six components of self-compassion (Neff, 2021).

## METHOD

### The Research Model

The survey model based on quantitative research is used in this study. This model is carried out by collecting information from a large group of people through using forms that include answer options determined by the researcher. In this research model, it is important to examine how a trait is distributed among the individuals in the sample (Büyüköztürk et al., 2010; Fraenkel & Wallen, 2012). This research aims to adapt the Long and Short Form of Self-Compassion Scale developed by Neff (2021) into the Turkish context and to examine its psychometric properties. For this purpose, both scales were examined in terms of language equivalence, construct validity (CFA), criterion-related validity, and item analysis.

#### Study 1. (State Self-Compassion Scale Long Form) Study Group

For the linguistic equivalence study, data were collected from 33 individuals, 16 (48.5%) females and 17 (51.5%) males, between the ages of 21-54. The average age of the participants is 31.12. For criterion-related validity, data were collected from 107 individuals, 64 (59.8%) women and 43 (40.2%) men, between the ages of 21-63. The average age of the participants is 38.23. Data were collected from 546 individuals for confirmatory factor analysis. By removing the erroneous data and extreme values from the data set, the data obtained from 536 individuals, 318 (59%) women and 218 (41%) men, between the ages of 18 and 63 were processed. The average age of the participants is 32.88.

#### Study 2. (Short Form of the Stateful Self-Compassion Scale) Study Group

For the linguistic equivalence study, data were collected from 34 individuals, 17 (50%) female and 17 (50%) male, between the ages of 21-54. For criterion-related validity, data were collected from 106 individuals, 63 (59.4%) women and 43 (40.6%) men, between the ages of 21-63. For confirmatory factor analysis, data were collected from 453 individuals, 274 (60.5%) females and 179 (39.5%) males, between the ages of 18 and 63.

### Data Collection Tools

**State Self-Compassion Scale Long Form (SSCS-L):** The State Self-Compassion Scale Long Form, which was adapted to Turkish culture in this study, was developed by Neff (2021) to be used in experimental studies. The scale consists of 18 items scored between 1 and 5, and has a six-factor structure: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. In addition, the total self-compassion score is obtained by summing the mean scores of the subscales. According to the results of the Confirmatory Factor Analysis of the scale, the fit index values of the scale were  $\chi^2 = 490.653$  (df = 120,  $p < .01$ ), ( $\chi^2 / df$ ) = 4.08, RMSEA = .072, CFI = .981, TLI = .975 and SRMR = .027. Cronbach Alpha internal consistency reliability coefficients of the scale; .898 for the self-kindness sub-dimension, .852 for the self-judgment sub-dimension, .839 for the common humanity sub-dimension, .830 for the isolation sub-dimension, .841 for the mindfulness sub-dimension, .733 for the over-identification sub-dimension, and .733 for the entire scale. It was calculated as .944 (Neff, 2021).

**State Self-Compassion Scale Short Form (SSCS-S):** The State Self-Compassion Scale Short Form, adapted to Turkish culture in this study, was developed by Neff (2021) to be used in experimental studies. The scale consists of 6 items scored between 1 and 5 and gives a total self-compassion score. In the original study

of the scale, the fit index was calculated as  $\chi^2 = 23.936$ ,  $df = 9$ ,  $CFI = .955$ ,  $TLI = .925$ ,  $RMSEA = .109$ ,  $SRMR = .038$  in the pre-test study. In the post-test study, it was calculated as  $\chi^2 = 46.256$ ,  $df = 9$ ,  $CFI = 0.927$ ,  $TLI = .878$ ,  $RMSEA = .173$ ,  $SRMR = .051$ . In reliability studies, Cronbach's alpha coefficients were calculated as .759 in the pre-test and 0.789 in the post-test (Neff, 2021).

**Self-Compassion Scale (SCS):** It was developed by Neff (2003b) to measure individuals' self-compassion levels. The original scale consists of 26 items and each item is scored between 1 and 5 as "never (1) to always (5)". The scale consists of 6 factors: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. The scale was adapted to Turkish culture by Deniz, Kesici, and Sümer (2008). According to the results of Confirmatory Factor Analysis, the fit index values of the scale were found as  $\chi^2 = 1523.02$  ( $df = 299$ ,  $p < .01$ ),  $(\chi^2 / df) = 5.09$ ,  $RMSEA = .123$ ,  $GFI = .692$  and  $AGFI = .638$ . In construct validity studies, two items with a total item correlation below .30 were removed from the scale and a single factor structure consisting of 24 items was found. The internal consistency coefficient was found to be .89 and the test-retest reliability coefficient to be .83 (Deniz et al., 2008).

### Research Process

In order to adapt the Long and Short Forms of the State Self-Compassion Scale into Turkish, permission was obtained from Neff, who developed the scale, via e-mail. The scales were translated into Turkish by 5 experts with good command of English and Turkish. The forms translated by the experts were evaluated by 3 Psychological Counselors and Turkish forms of the scales were prepared. Then, expert opinion was obtained from an academician from the Psychological Counseling and Guidance Department. The Turkish forms of the scales were translated back into English by two English language teachers. When the back-translated forms were compared to the original form of the scale, it was seen that they were quite close to each other. In the next stage, the scales were evaluated by an academician from the Department of Turkish Language Teaching in terms of their suitability for the Turkish language. A pilot study was carried out with the finalized scales in line with the feedback received. Then, the scales were applied to the whole study group online via Google forms.

SPSS 26.0 package program was used for testing the normality of the collected data and for correlation analysis. AMOS 26.0 software was used for confirmatory factor analysis. To examine the normality of the data; extreme values, Kolmogorov-Smirnov values, skewness and kurtosis coefficients, and histogram graphs were examined. Outliers were removed from the data set, but it was seen that the data did not provide a normal distribution.

Linguistic equivalence, criterion-related validity, construct validity (CFA), Cronbach's Alpha internal consistency reliability coefficients, item-total correlations, and lower-upper group item discrimination indices were examined to determine the psychometric properties of the Long and Short Forms of the State Self-Compassion Scale.

## RESULTS

### Study 1. (State Self-Compassion Scale Long Form)

#### Linguistic equivalence

To examine the linguistic equivalence of the scale, the Turkish form of the scale and then the English form were administered to 33 people, one week apart. Then, the correlation coefficients at the item level between the Turkish and English applications were examined. Since the data were not normally distributed, the Spearman-Brown correlation test was applied (Baykul & Güzeller, 2020). As a result of the correlation analysis, it was observed that there was a moderate ( $p < .05$ ) positive and significant correlation for certain items and a high ( $p < .01$ ) level for some other items between the English and Turkish forms of the scale. The correlation coefficients between the original items of the scale and their Turkish translations are reported in Table 1.

**Table 1.** Correlations between the English and Turkish Items of the State Self-Compassion Scale Long Form

Item Number	Application	r
1	Turkish – English	.792**
2	Turkish – English	.635**
3	Turkish – English	.384*
4	Turkish – English	.658**
5	Turkish – English	.429*
6	Turkish – English	.756**
7	Turkish – English	.909**
8	Turkish – English	.446*
9	Turkish – English	.729**
10	Turkish – English	.650**
11	Turkish – English	.504**
12	Turkish – English	.552**
13	Turkish – English	.821**
14	Turkish – English	.552**
15	Turkish – English	.552**
16	Turkish – English	.498**
17	Turkish – English	.466**
18	Turkish – English	.612**

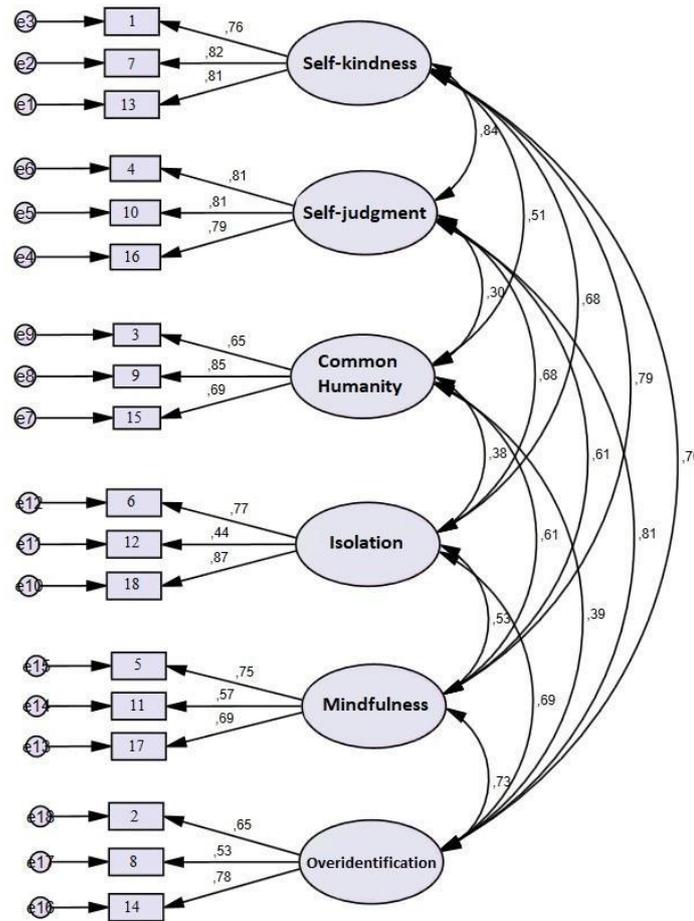
\*\*  $p < .01$ , \*  $p < .05$

#### Confirmatory factor analysis

The main purpose of the Confirmatory Factor Analysis (CFA), which is frequently used in scale development studies, is to determine to what extent a previously defined and limited model is compatible with the obtained data and whether it is verified or not. CFA reveals the levels of representation of the various groups that make up the factors determined by Explanatory Factor Analysis (EFA) with these factors (Aytaç & Öngen, 2012; Çokluk et al., 2010; Gürbüz, 2021; Sümbüloğlu & Akdağ, 2009).

In this study, to test the construct validity of the Turkish form of the scale, a CFA study was carried out by using data collected from 536 people in order to verify the 6-factor structure in the original form of the scale. When CFA fit indices were examined, it was seen that the ratio of chi-square value to degrees of freedom ( $386,886/120=3.224$ ,  $p=.00$ ) was sufficiently significant below 5. When other fit indices were examined, it was found that RMSEA= .064, NFI= .915, CFI= .939, IFI= .940, RFI= .892, GFI= .923 and SRMR = .046. According to these fit index values, it can be stated that the model fits adequately (Gürbüz, 2021; Marsh et al., 2004; Morin et al., 2016, cited in Neff, 2021; Telef, 2013). Information on the CFA model of the scale and the standardized factor loadings of the items are demonstrated in Figure 1.

**Figure 1:** Confirmatory factor analysis model and standardized item factor loads of the SSCS-L.



**Criterion-related validity**

In order to examine the criterion-related validity, the Self-Compassion Scale and the State Self-Compassion Scale Long Form were administered to 107 participants and the correlation between the total mean scores of the scales was examined.

Since the data were not normally distributed, the correlation between the variables was analyzed using the Spearman-Brown Correlation Analysis method. It has been determined that there is a high level ( $r=.841$ ,  $p<.01$ ) (Baykul & Güzeller, 2020) positive significant relationship between the State Self-Compassion Scale Long Form mean scores and the Self-Compassion Scale mean scores. The results of the correlation analysis between the mean scores of the scales are reported in Table 2.

**Table 2.** Results of Spearman-Brown Correlation Analysis between State Self-Compassion Scale Long Form (SSCS-L) and Self-Compassion Scale (SCS) mean scores.

		SSCS-L	SCS
Spearman's rho	SSCS-L	Correlation Coefficient	1.000
		Sig. (2-tailed)	.841*
		N	107
SCS	SSCS-L	Correlation Coefficient	.841*
		Sig. (2-tailed)	1.000
		N	107

\*  $p<.01$

## Reliability

In order to determine its reliability, Cronbach's alpha internal consistency reliability coefficients for the six sub-dimensions of the scale and the whole scale were examined. Cronbach alpha coefficient is especially used for estimating the reliability of multi-factor scale scores. It is calculated by proportioning total variances of scale items to total scores' variances, and is valued between 0 and 1 (Büyüköztürk et al., 2010; Cronbach, 1951). It is generally accepted that Cronbach's alpha value, which is accepted as an indicator of the homogeneity of the test, should be at least .70 (Nunnally, 1978, cited in Tavşancıl, 2014). Cronbach alpha internal consistency reliability coefficients of the SSCS-L were .863 for the self-kindness sub-dimension, .824 for the self-judgment sub-dimension, .818 for the common humanity sub-dimension, and isolation. It was calculated as .742 for the sub-dimension, .81 for the mindfulness sub-dimension, .749 for the overidentification sub-dimension, and .923 for the whole scale.

## Item analysis

The item analyzes of the Long Form of the State Self-Compassion Scale were carried out by looking at the item-total correlations of the scale and the differences between the upper-subgroup items of 27%. Item-total correlation examines the relationship between the scores from each item and the total score of the test. A high item-total correlation value indicates that the scale items exemplify similar behaviors and the internal consistency of the test is high. It can be inferred that the item-total correlation should be .30 and above (Büyüköztürk, 2010). Item-total correlation values of the SSCS-L ranged between .39 ( $p < .05$ ) and .80 ( $p < .01$ ). For each of the scale items, 27% item discrimination index values in the lower-upper group were examined and t values were found to be between 8.22 and 22.03 ( $p < .01$ ). The t-test results regarding the item-total correlations and the comparison of the item scores of the lower and upper 27% groups are shown in Table 3.

**Table 3.** Item Total Correlations and Item Discrimination Index Values of the SSCS-L.

Item Number	Item Total Correlations	t (Lower 27%-Upper 27%)
M1	.72**	18.55**
M2	.60**	16.83**
M3	.39*	10.48**
M4	.62**	20.06**
M5	.65**	19.30**
M6	.57**	18.01**
M7	.66**	19.32**
M8	.47**	10.80**
M9	.56**	12.66**
M10	.65**	19.64**
M11	.55**	10.76**
M12	.52**	8.22**
M13	.73**	22.03**
M14	.68**	18.59**
M15	.47**	11.52**
M16	.80**	19.56**
M17	.61**	14.22**
M18	.61**	21.64**

\* $p < .05$ , \*\* $p < .01$

## Study 2. (Short Form of the Stateful Self-Compassion Scale)

### Linguistic equivalence

In order to examine the linguistic equivalence of the scale, first the Turkish and then the English forms of the scale were administered to 34 people, one week apart. The correlation coefficients at the item level between the Turkish and English applications were examined. Since the data were not normally distributed, the Spearman-Brown correlation test was used (Baykul & Güzeller, 2020). As a result of the correlation analysis, it was seen that there was a high level of positive and significant ( $p < .01$ ) relationship between the

English and Turkish forms of the scale. The correlation coefficients between the original items of the scale and their Turkish translations are reported in Table 4.

**Table 4.** Correlations between the English and Turkish items of the State Self-Compassion Scale Short Form.

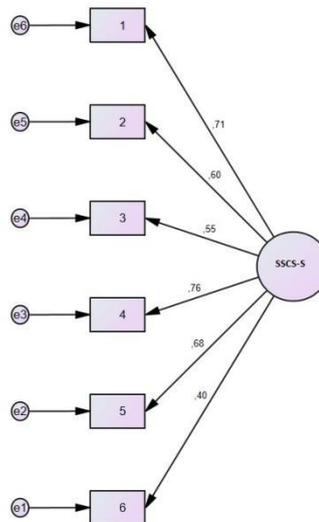
Item Number	Application	r
1	<b>Turkish – English</b>	<b>.797*</b>
2	<b>Turkish – English</b>	<b>.640*</b>
3	<b>Turkish – English</b>	<b>.710*</b>
4	<b>Turkish – English</b>	<b>.558*</b>
5	<b>Turkish – English</b>	<b>.520*</b>
6	<b>Turkish – English</b>	<b>.505*</b>

\* $p < .01$

### Confirmatory factor analysis

In order to test the construct validity of the State Self-Compassion Scale Short Form, a CFA study was conducted with data collected from 453 individuals. When the fit indices for CFA were examined, it was seen that the ratio of chi-square value to degrees of freedom ( $31.660/9 = 3.518$ ,  $p = .00$ ) was sufficiently significant below 5. When other fit indices were examined, it was found that  $RMSEA = .075$ ,  $NFI = .954$ ,  $CFI = .967$ ,  $IFI = .967$ ,  $RFI = .924$ ,  $GFI = .979$ , and  $SRMR = .033$ . When these fit index values are examined, it can be suggested that the model fits well (Gürbüz, 2021; Marsh et al., 2004; Morin et al., 2016, cited in Neff, 2021; Telef, 2013). Information on the CFA model of the scale and standardized factor loadings of the items are demonstrated in Figure 2.

**Figure 2:** Confirmatory factor analysis model and standardized item factor loads of the SSCS-S.



### Criterion-related validity

In order to examine the criterion-related validity, the Self-Compassion Scale and the State Self-Compassion Scale Short Form were administered to 106 participants and the correlation between the total mean scores of the scales was examined.

Since the data were not normally distributed, the correlation between the variables was analyzed using the Spearman-Brown Correlation Analysis method (Baykul & Güzeller, 2020). It has been observed that there is a high level ( $r = .873$ ,  $p < .01$ ) positive significant relationship between the mean scores of the State Self-Compassion Scale Short Form and the Self-Compassion Scale mean scores. The Spearman-Brown Correlation Analysis Results between the State Self-Compassion Scale Short Form (SSCS-S) and Self-Compassion Scale (SCS) mean scores are reported in Table 5.

**Table 5.** Spearman-Brown Correlation Analysis Results between the State Self-Compassion Scale Short Form (SSCS-S) and Self-Compassion Scale (SCS) mean scores.

		SSCS-S	SCS
Spearman's rho	SSCS-S	Correlation Coefficient	1.000
		Sig. (2-tailed)	.873*
		N	106
SCS	SSCS-S	Correlation Coefficient	.873*
		Sig. (2-tailed)	1.000
		N	106

\*  $p < .01$ ,

### Reliability

In order to determine the reliability of the scale, the Cronbach alpha internal consistency reliability coefficient was examined. The Cronbach alpha internal consistency reliability coefficient of the Short form of the State Self-Compassion Scale was calculated as .782. This value shows that the scale is reliable enough.

### Item analysis

The item analysis of the SSCS-S was carried out by examining the item-total correlations and item discrimination indexes. When the item-total correlations of the scale are examined, it is seen that it varies between .60 ( $p < .01$ ) and .36 ( $p < .05$ ).

For each of the scale items, 27% of item discrimination index values in the lower-upper group were examined and t-values were found to be between 12.69 ( $p < .01$ ) to 21.65 ( $p < .01$ ). The t-test results regarding the item-total correlations and the comparison of the item scores of the lower and upper 27% groups are reported in Table 6.

**Table 6.** Item Total Correlations and Item Discrimination Index Values of the SSCS-S.

Item Number	Item Total Correlations	t (Lower 27%-Upper 27%)
1	.60**	19.57**
2	.52**	18.76**
3	.49**	14.16**
4	.64**	21.65**
5	.57**	16.08**
6	.36*	12.69**

\* $p < .05$ , \*\* $p < .01$

### CONCLUSION, DISCUSSION and RECOMMENDATIONS

The aim of this study is to examine the psychometric properties of the Long and Short Forms of the State Self-Compassion Scale developed by Neff (2021). For this purpose, linguistic equivalence, construct validity (CFA), criterion-related validity, reliability, and item analysis of both scales were examined. When the linguistic equivalence study results of the Long and Short Forms of the State Self-Compassion Scale between the English and Turkish forms are examined, it is seen that there is a moderate and high level of association for a number of items (Baykul & Güzeller, 2020; Büyüköztürk, 2010). According to these results, it is possible to suggest that both the Long and Short Forms of the State Self-Compassion Scale form of the scale are sufficient in terms of linguistic equivalence.

CFA was applied to determine whether the structure of the long and short forms of the State Self-Compassion scale in the original form worked accordance to Turkish culture, and the fit indexes of both forms of the scale were found as verifiable at an acceptable level (Gürbüz, 2021; Telef, 2013). According to these values, it can be stated that both the long and short forms of the scale provide construct validity.

In the criterion-related validity study, the correlation between the State Self-Compassion Scale Long and the Self-Compassion Scale mean scores were examined. It was observed that there was a high level of a positive and significant relationship. When the correlation between the mean score of the State Self-Compassion Scale Short Form and the mean score of the Self-Compassion Scale Long Form was examined, it was seen that there was a highly positive and significant relationship between the two scales. According to these results, it can be interpreted that the Long and Short Forms of the State Self-Compassion Scale provide criterion-related validity (Tavşancıl, 2014).

The Cronbach alpha internal consistency reliability coefficients obtained in the reliability study of the Long Form of the State Self-Compassion Scale were examined for each sub-dimension of the scale and the whole scale. According to this data, it can be said that the reliability of the scale is sufficient (Büyüköztürk, 2010; Tavşancıl, 2014). In the reliability study of the Short Form of the State Self-Compassion Scale, the Cronbach alpha internal consistency reliability coefficient obtained from the whole scale was examined and it was found that the scale was reliable at a sufficient level (Büyüköztürk, 2010; Tavşancıl, 2014).

When the item analyzes are examined, it is observed that the item-total correlations for both scales are higher than .30. This value indicates that each item provides sufficient consistency with the whole scale (Kline, 2000, cited in Sarıçam & Adam Karduz, 2018). The upper and lower 27% item discrimination index values (t) were examined for each item in both the short and long forms of the scale, and it was found that the discrimination level of the items in both forms was high (Brennan, 1972, cited in Sarıçam & Adam Karduz, 2018).

In this light, according to the results of linguistic equivalence, criterion-related validity, construct validity, and reliability analyses, it can be suggested that the Long and Short Form of the State Self-Compassion Scale is a valid and reliable measurement tool to measure and evaluate self-compassion in adults and can be used in experimental studies.

In future studies, validity and reliability studies can be conducted with larger and different sample groups in order to contribute to the validity and reliability studies of the scale, and test-retest reliability coefficients can be calculated.

#### **Declarations**

#### **Conflict of Interest**

No potential conflicts of interest were disclosed by the author(s) with respect to the research, authorship, or publication of this article.

#### **Ethics Approval**

The formal ethics approval was granted by the Educational Sciences Research and Publication Ethics Committee of Marmara University. We conducted the study in accordance with the Helsinki Declaration in 1975.

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#### **Research and Publication Ethics Statement**

The study was approved by the research team's university ethics committee of the Marmara University (Approval Number/ID: 142099-04.11.2021. Hereby, we as the authors consciously assure that for the manuscript " The Adaptation of the State Self-Compassion Scale Long and Short Form to Turkish Culture: Validity and Reliability Study" the following is fulfilled:

- This material is the authors' own original work, which has not been previously published elsewhere.
- The paper reflects the authors' own research and analysis in a truthful and complete manner.
- The results are appropriately placed in the context of prior and existing research.
- All sources used are properly disclosed.

#### **Contribution Rates of Authors to the Article**

The authors provide equal contribution to this work.

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