



## Understanding self-compassion in adolescents: Validation study of the Self-Compassion Scale



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### ARTICLE INFO

#### Article history:

Received 23 March 2015

Received in revised form 1 September 2015

Accepted 10 September 2015

Available online 26 September 2015

#### Keywords:

Self-compassion

SCS

Adolescence

Confirmatory factor analysis

Measurement invariance

### ABSTRACT

Self-compassion is an adaptive self-attitude when considering personal inadequacies or difficult life situations and seems to be crucial to adolescent's experience. However, self-compassion remains less investigated in adolescence. This paper aims to analyse the psychometric properties of Self-Compassion Scale (SCS; Neff, 2003) and test its six-factor structure through a Confirmatory Factor Analysis in a representative sample of adolescents. The sample consists of 3165 adolescents, aged between 12 and 19 years old ( $M_{age} = 15.49$ ) from Portuguese schools. Results confirm the six-factor and second-order structures of the SCS and the measurement invariance across gender. The SCS and subscales also revealed good internal reliability and convergent validity with measures of positive emotional memories, depressive, anxiety and stress symptoms. Overall, our findings suggest that the SCS is a valid and reliable measure to assess self-compassion among adolescents.

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### 1. Introduction

In the last years, there has been an increasing interest and a growing body of research about the nature and implications of self-compassion in various fields from health and education to business and sociological domains. Self-compassion is rooted in Asian philosophy and according to Neff (2003) entails three main interacting components: Self-Kindness (i.e., the tendency to be kind and understanding towards oneself in instances of pain or failure rather than being harshly critical); Common Humanity (i.e., the ability to perceive one's experiences as part of the larger humanity experience rather than seeing them as separating and isolating); and Mindfulness (i.e., being aware of present moment experience in a balanced manner rather than over-identifying with one's negative emotions).

In face of negative external events (e.g., experiences of failure, shame, bullying), painful or distressing feelings are not avoided, suppressed or perpetuated by self-critical evaluations but instead are seen as part of a shared human experience through an attitude of acceptance, kindness, compassionate and non-judgmental, allowing proactive and effective behaviours (Neff, 2003). Indeed, several studies have shown that self-compassion is negatively associated with anxiety, stress, depression, rumination (Castilho, Pinto-Gouveia, & Duarte, 2015; Neff, Rude, & Kirkpatrick, 2007; Raes, 2010), shame (Gilbert & Procter, 2006), and academic failure (Neff, Hseih, & Dejithirath, 2005). On the

contrary, self-compassion is strongly and positively linked to psychological well-being, happiness, life satisfaction, optimism, emotional intelligence, and interpersonal connectedness (Neff et al., 2007).

Although research on self-compassion in adolescent samples is scarce, some studies have recently emerged. Overall, these findings point out that self-compassion is associated with positive psychological indicators (e.g., early memories of warmth and safeness, secure attachment, mindfulness, mental health, life satisfaction, emotional well-being; Cunha, Martinho, Xavier, & Espírito-Santo, 2013; Bluth & Blanton, 2014; Marshall et al., 2015; Neff & McGehee, 2010). Inversely association patterns between self-compassion and maladaptive outcomes were found (e.g., negative affect, aggression, trauma-related symptoms, depression, anxiety; Barry, Loflin, & Doucette, 2015; Bluth & Blanton, 2015; Tanaka, Wekerle, Schmuck, & Paglia-Boak, 2011; Vettese, Dyer, Li, & Wekerle, 2011; Zeller, Yuval, Nitzan-Assayag, & Bernstein, 2014).

The major developmental tasks during the transition from childhood to adulthood, including identity formation, playing different social roles, autonomy from parents, necessity of belonging and acceptance of peer group, make adolescence a time of heightened vulnerability to suffering (Steinberg & Morris, 2001). Thus, self-compassion could be beneficial for this age group by providing a way for adolescents to perceive their failures or mistakes proportionally and in a balanced perspective, to experience supportive and warmth feelings towards themselves without engaging in the problematic process of self-criticism, evaluation and social unfavourable comparisons (Neff & McGehee, 2010). Therefore, the cultivation of self-compassion may function as a protective strategy and may be a preventive and intervention target for adolescents in

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order to foster their resilience and well-being in various contexts of their lives (e.g., family, school, friendships and community).

The majority of research conducted on self-compassion has widely used the Self-Compassion Scale (SCS; Neff, 2003). Neff (2003) conducted several confirmatory factor analyses (CFA) and results determined that a single higher-order factor of self-compassion could explain the inter-correlations between the six subscales (NNFI = .90; CFI = .91), indicating that this scale may be analysed through its six subscales separately or as an overall score. Neff (2003) also found good internal reliability for the total score and for their subscales and good convergent and divergent validities. The SCS has been adapted and validated in other countries. The Portuguese version in non-clinical and clinical adult samples (Castilho et al., 2015) confirmed the six-factor and higher-order structures of the SCS and found good psychometric properties, high internal consistency for the total score ( $\alpha = .94$  for non-clinical and  $\alpha = .92$  for clinical samples) and subscales (ranging between .70 and .88).

An exploratory study was conducted to adapt the Portuguese version of the SCS for adults to adolescents. This adaptation took into account the cultural and linguistic issues, but did not alter the items' content of the original version, by maintaining the semantic equivalence across languages. For instance, in some items an example was added in order to make them more comprehensible for adolescents (e.g., item 5 "I try to be loving towards myself when I'm feeling emotional pain (e.g., do or say something kind towards myself)"; item 6 "When I fail at something important to me I become consumed by feelings of inadequacy (e.g., feelings of failure)"; item 22 "When I'm feeling down I try to approach my feelings with curiosity and openness (e.g., without judgments or trying to avoid them)". Overall, these results showed promising psychometric properties for the SCS, despite its construct validity was not analysed (Cunha, Xavier, & Vitória, 2013). Therefore, this study aims to examine the factorial structure of the SCS in a large sample of adolescents from community and test the measurement invariance across gender. Finally, convergent validity is also explored with other related measures.

## 2. Method

### 2.1. Participants

The sample consists of 3165 adolescents, 1461 males (46.2%) and 1704 females (53.8%), with a mean age of 15.49 ( $SD = 1.59$ ) ranging between 12 and 19 years old. This sample is from 7th to 12th grade ( $M = 9.70$ ,  $SD = 1.43$ ). No gender differences were found for age,  $t_{(3007,314)} = 0.572$ ,  $p = .567$ , and years of education,  $t_{(3053,235)} = -1.648$ ,  $p = .099$ .

### 2.2. Measures

Self-Compassion Scale (SCS; Neff, 2003; Portuguese version for adolescents: Cunha, Xavier, et al., 2013) comprises 26 items and six subscales: Self-Kindness; Self-Judgement; Common Humanity; Isolation; Mindfulness; Over-Identification. Respondents were instructed with the sentence "how I typically act towards myself in difficult times" and were asked to answer each item according to a 5-point scale (1 = Almost Never; 5 = Almost Always). Subscale scores are computed by calculating the mean of subscale item responses. To compute the total score of SCS, the Self-Kindness, Common Humanity, and Mindfulness are summed with reverse scores of the Self-Judgement, Isolation, and Over-identification subscales. Higher scores indicate greater self-compassion. In the original version, the total score showed an excellent internal consistency ( $\alpha = .92$ ) and the six subscales revealed adequate coefficients of internal consistency, ranging between .75 and .81.

Early Memories of Warmth and Safeness Scale (EMWSS; Richter, Gilbert, & McEwan, 2009; Portuguese version for adolescents: Cunha, Xavier, Martinho, & Matos, 2014) measures recall of feeling warm,

safe and cared for in childhood (e.g., "I felt that I was a cherished member of my family."). This is a 21-item scale rated on a 5-point scale (0 = No, never; 4 = Yes, most of the time). Richter et al. (2009) found a high Cronbach's alpha of .97. The Portuguese version for adolescents also revealed an excellent internal reliability ( $\alpha = .95$ ). In the current study, EMWSS Cronbach's alpha was .95.

Depression, Anxiety and Stress Scales (DASS-21; Lovibond & Lovibond, 1995; Portuguese version: Pais-Ribeiro, Honrado, & Leal, 2004) depression, anxiety and stress symptoms. The 21-items indicate negative emotional symptoms rated on a 4-point scale (0–3). Lovibond and Lovibond (1995) found high internal consistency ( $\alpha = .91$  for depression,  $\alpha = .84$  for anxiety and  $\alpha = .90$  for stress). In the Portuguese version, the internal consistency was good ( $\alpha = .85$ , .74 and .81, respectively). In the present study, the Cronbach's alpha for subscales were .88, .83 and .86 respectively.

### 2.3. Procedures

This adolescents' sample was collected from public schools in the north and centre regions of Portugal. Ethical approvals were obtained by the Portuguese Ministry of Education and the National Commission for Data Protection. The head teacher of the school and parents were informed about the goals of the research and gave their written consent. Adolescents assented to participate and were informed about the purpose of the study and aspects of confidentiality. They voluntarily participated and filled out the instruments in the classroom. The teacher and research assistant were present to provide clarification if necessary and to ensure confidential and independent responding.

### 2.4. Data analysis

Statistical software IBM SPSS (v.20) and AMOS (v. 18) was used. Descriptive statistics, independent sample t tests, Cohen's d and the effect size correlation were calculated. Pearson correlations were computed to assess the convergent and divergent validities.

A CFA using a maximum likelihood estimator (ML) was performed for factor validity and model invariance across gender. The chi-square and simultaneously the following goodness-of-fit indices were analysed: GFI, CFI, TLI  $\geq .90$ , acceptable,  $\geq .95$ , good; RMSEA  $\leq .06$ , good,  $\leq .08$ , acceptable. The improvement of model fit was based on Modification Indexes (MI > 11;  $p \leq .001$ ) by adding sequentially correlational measurement errors for the residuals with higher MI values. The best fitting model as determined by chi-square difference test and comparison indices, such as AIC and ECVI, with smaller values indicating superior models and more stable model for population under study (Kline, 2005).

Regarding local adjustment of the model, all standardized factor loadings should be significant ( $p < .05$ ) and equal or greater than .50. The average variance extracted (AVE) was analysed to assess the discriminant validity of the measure (Hair, Anderson, Tatham, & Black, 1998).

### 2.5. Preliminary data analyses

The assumptions of multivariate normality and linearity were examined and all items showed acceptable values of asymmetry and kurtosis ( $Sk < |3|$  and  $Ku < |8| - |10|$ ; Kline, 2005), ranging between  $-.003$  (item 17) and  $.241$  (item 11) for skewness and between  $-.208$  (item 22) and  $-.979$  (item 13) for kurtosis. The presence of multivariate outliers was screened by using Mahalanobis Distance statistic ( $D^2$ ). Although some cases presented  $D^2$  values indicating possible outliers, these were retained since their elimination did not alter the results and excluding those cases would decrease factor's variability.

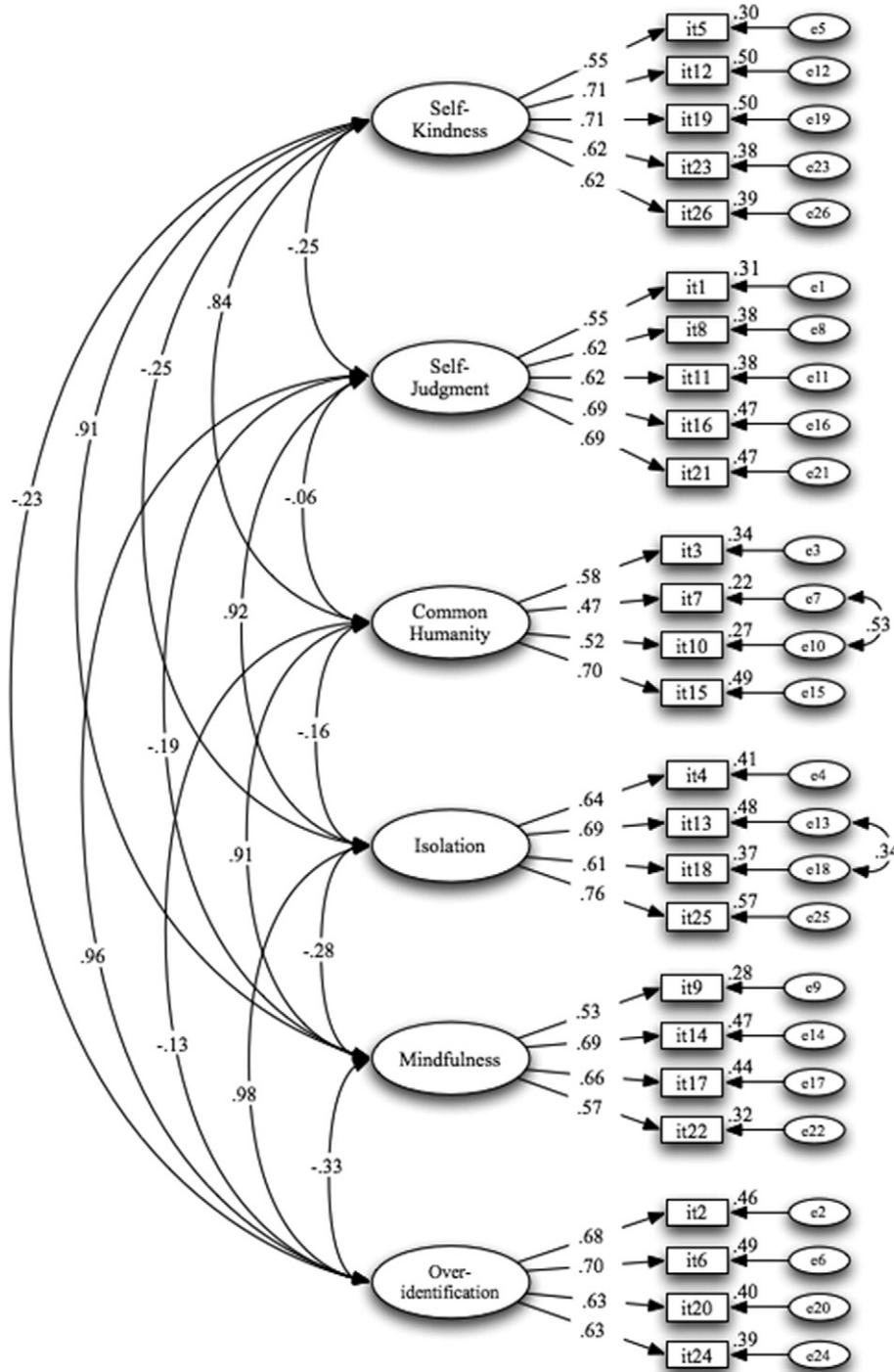
**Table 1**  
Means, standard deviation, minimum, maximum and percentiles for the overall Self-Compassion Scale (SCS) and six subscales in adolescents' sample (N = 3165).

	M	SD	Minimum	Maximum	Percentiles		
					25	50	75
SCS total	3.04	0.56	1	5	2.73	3.04	3.38
Self-Kindness	2.86	0.77	1	5	2.40	2.80	3.40
Self-Judgment	2.88	0.83	1	5	2.40	2.80	3.40
Common Humanity	3.02	0.82	1	5	2.50	3.00	3.50
Isolation	2.94	0.94	1	5	2.25	3.00	3.75
Mindfulness	3.05	0.77	1	5	2.50	3.00	3.50
Over-Identification	2.85	0.91	1	5	2.25	2.75	3.50

**3. Results**

*3.1. Descriptive statistics*

As shown in Table 1, mindfulness subscale showed the higher mean score and over-identification subscale demonstrated the lowest mean score.



**Fig. 1.** Confirmatory Factor Analysis of the six-factor model of the SCS for adolescents (N = 3165). Standardized coefficients and measurement errors are shown; all paths are statistically significant ( $p < .001$ ).

3.2. Confirmatory factor analysis

A CFA was performed as a confirmatory method of the underlying factorial structure of the SCS in a large community sample of adolescents. Previous studies demonstrated a six-factor model and a higher-order model for SCS (Castilho et al., 2015; Neff, 2003; Raes, Pommier, Neff, & Van Gucht, 2011). Therefore, we tested two models: Model 1 – six inter-correlated latent factors (Self-Kindness, Self-Judgement, Common Humanity, Isolation, Mindfulness, Over-identification); and Model 2 – second-order factorial structure for self-compassion.

3.2.1. Model 1: six-factor model of SCS

The six-factor model of the SCS showed that a Chi-square value for the overall model fit was significant,  $\chi^2(284) = 3564.38, p < .001$ , suggesting a lack of fit between the hypothesized model and the data. However, due to the sensitivity of  $\chi^2$  in large samples, other fit indices were assessed (Kline, 2005). The six-factor model of the SCS had a

marginal fit to the data: CFI = .89, TLI = .88, GFI = .91, RMSEA = .06,  $p < .001$ , AIC = 3698.38, ECVI = 1.16.

We further examine the MIs and the higher values suggest some adjustments, namely add a covariance between item 13 and item 18 and between item 7 and item 10. This step of correlational measurement errors is also theoretically justified, based on items' content. The respecified model 1 showed a better fit to data. Although the Chi-square showed a value of  $\chi^2(282) = 2443.23, p < .001$ , the overall fit indices indicated a good fit to the data: CFI = .93, TLI = .92, GFI = .94, RMSEA = .05,  $p = .760$ . This modified model was statistically superior to the original model ( $\chi^2_{dif} = 1121.15 > \chi^2_{0.95; (2)} = 5.99$ ) and presented lower values of comparison indices (AIC = 2581.23, ECVI = 0.82) than the original model. Given the significant improvement in overall fit the model allowing the two error covariances was considered the better model.

Regarding local adjustment (Fig. 1), all factor loadings were statistically significant ( $p \leq .001$ ) and ranged from .47 (item 7) to .76 (item 25).

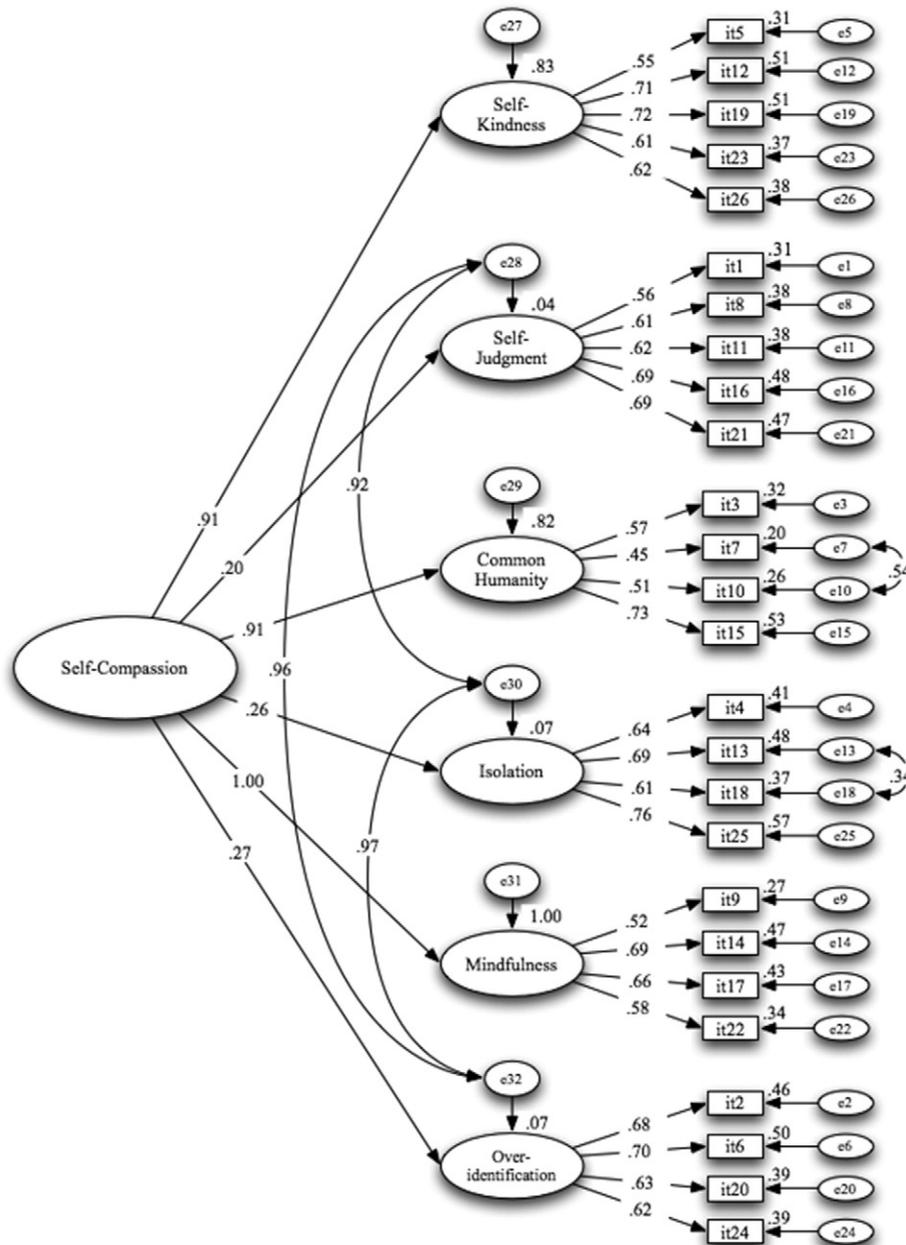


Fig. 2. Confirmatory Factor Analysis of the higher-order model of the SCS for adolescents (N = 3165). Standardized coefficients and measurement errors are shown; all paths are statistically significant ( $p < .001$ ).

**Table 2**  
Means (M), standard deviations (SD), corrected item-total correlations (r) and Cronbach's alpha for Self-compassion Scale and subscales in adolescents' sample (N = 3165).

Items	M	SD	Corrected item-total r	Cronbach's alpha if item deleted
Self-Kindness ( $\alpha = .77$ )	14.30	3.85		
5.	2.87	1.16	.492	.75
12.	2.83	1.08	.605	.71
19.	2.77	1.01	.632	.70
23.	2.81	1.01	.497	.75
26.	3.02	1.06	.510	.74
Self-Judgement ( $\alpha = .77$ )	14.39	4.17		
1.	3.09	1.04	.471	.75
8.	3.00	1.19	.549	.73
11.	2.69	1.15	.564	.72
16.	2.78	1.18	.547	.73
21.	2.83	1.21	.587	.72
Common Humanity ( $\alpha = .72$ )	12.07	3.28		
3.	3.25	1.06	.430	.71
7.	2.86	1.18	.565	.63
10.	2.70	1.09	.603	.61
15.	3.26	1.11	.453	.70
Isolation ( $\alpha = .79$ )	11.76	3.77		
4.	3.00	1.17	.534	.78
13.	2.97	1.26	.667	.71
18.	2.85	1.15	.614	.74
25.	2.94	1.22	.600	.74
Mindfulness ( $\alpha = .70$ )	12.18	3.06		
9.	3.34	1.12	.454	.66
14.	3.07	1.01	.554	.60
17.	3.01	1.08	.535	.61
22.	2.76	1.00	.409	.68
Over-Identification ( $\alpha = .75$ )	11.41	3.64		
2.	2.75	1.22	.577	.68
6.	2.74	1.28	.550	.70
20.	3.08	1.15	.542	.70
24.	2.84	1.15	.534	.71
Self-Compassion Total Score (26 items; $\alpha = .88$ )	78.99	14.62		

Overall, the modified model showed a good global adjustment and an adequate local adjustment.

The convergent validity analysis through the AVE was also good ( $\geq .50$ ; Hair et al., 1998) for all subscales, suggesting that the latent factors are well explained by its observed variables:  $AVE_{\text{self-kindness}} = .54$ ,  $AVE_{\text{self-judgement}} = .52$ ,  $AVE_{\text{common.humanity}} = .43$ ,  $AVE_{\text{isolation}} = .58$ ,  $AVE_{\text{mindfulness}} = .49$ ,  $AVE_{\text{over-identification}} = .56$ . Regarding discriminant validity, the results demonstrated that the factors of positive valence of the SCS are clearly distinguished from the factors of the negative valence.

### 3.2.2. Model 2: second-order model of SCS

The higher-order model with a single first-order self-compassion factor and six second-order factors (six subscales of the SCS) was tested. This hypothesized higher-order model had poor fit: CFI = .76, TLI = .73,

GFI = .83, RMSEA = .09,  $p < .001$ , AIC = 7823.21, ECVI = 2.47. The analysis of MLs suggested the correlation of error measurements of the negative subscales of SCS (Fig. 2). This improvement was also in accordance with Neff's (2003). The respecified model 2 showed a better fit to data: CFI = .92; TLI = .91; GFI = .93; RMSEA = .05,  $p = .199$ , AIC = 2774.89, ECVI = 0.88.

### 3.3. Multiple-group analysis for gender invariance

A multiple-group CFA for gender invariance of the second-order model of SCS was assessed through the comparison between the unconstrained model and the constrained model, which it was constraining various parameters across both groups (Meredith, 1993). The factorial model presented an acceptable fit to the data for both male and female adolescents: CFI = .92, TLI = .91, GFI = .93, RMSEA = .04,  $p = 1.000$ , 90% CI [0.35, 0.38]. Moreover, the results confirm the invariance of measurement across gender ( $\chi^2_{\text{dif}(20)} = 23.05$ ,  $p = .287 < \chi^2_{0.95;(20)} = 31.41$ ).

### 3.4. Reliability analysis

As shown in Table 2, the corrected item-total correlations showed good values that confirm the adequacy of these items to the construct of the measure. The Cronbach's alpha for the SCS was very good ( $\alpha = .88$ ) and for subscales was adequate, ranging between .70 and .79.

### 3.5. Descriptive data concerning gender, age and grade in school

To evaluate the influence of demographic variables in SCS and subscales, we performed Pearson correlations for age and years of education and non-significant correlations were found. Results given in Table 3 showed that males had significantly higher overall self-compassion scores than females. Furthermore, males endorsed significantly higher levels of Self-Kindness and mindfulness than females. Inversely, females reported significantly higher levels of Self-Judgement, Isolation and Over-Identification than males. The common humanity subscale revealed a marginal value of statistical significance. The effect size ranged between very small and large effects.

### 3.6. Convergent and divergent validity

To evaluate convergent and divergent validities, Pearson correlations were calculated between the SCS and positive emotional memories (EMWSS) and psychopathology symptoms (DASS-21). Given the nature of self-compassion construct and the state-of-the-art (Barnard & Curry, 2011; Castilho et al., 2015; Cunha et al., 2014; Neff et al., 2007; Neff & McGehee, 2010; Richter et al., 2009), we expect that self-compassion presents a positive association with early memories of warmth and safeness and a negative association with emotional states. Results given in Table 4 showed that SCS was positively correlated with EMWSS and negatively associated with depression, anxiety and stress. The positive valence of self-compassion was found to have positive

**Table 3**  
Means (M), standard deviations (SD), t-test differences by sex and effect size for Self-Compassion Scale and subscales in adolescents' sample (N = 3165).

	Males (n = 1461)		Females (n = 1704)		t	df	p	Cohen's d	Effect size r
	M	SD	M	SD					
Self-Compassion total	3.15	0.51	2.95	0.59	10.306	3162.113	<.001	0.36	0.18
Self-Kindness	2.89	0.77	2.83	0.77	2.106	3163	.035	0.08	0.04
Self-Judgement	2.70	0.81	3.03	0.83	-11.076	3163	<.001	-0.40	-0.20
Common Humanity	2.99	0.84	3.04	0.81	-2.002	3163	.045	-	-
Isolation	2.76	0.92	3.10	0.93	-10.187	3163	<.001	-0.37	-0.18
Mindfulness	3.12	0.77	2.98	0.76	4.875	3163	<.001	0.18	0.09
Over-Identification	2.63	0.88	3.05	0.89	-13.312	3163	<.001	-0.47	-0.23

Bold values indicate statistical significance ( $p \leq .05$ ).

**Table 4**

Correlation matrix (Pearson Product-moment) between self-compassion subscales and total score (SCS; N = 3165), early memories of warmth and safeness scale (EMWSS; n = 747), depression (DASS-21; n = 1960), anxiety (DASS-21; n = 1959) and stress symptoms (DASS-21; n = 1962).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1)Self-Kindness											
(2)Self-Judgement	-.18***										
(3)Common Humanity	.57***	.04*									
(4)Isolation	-.18***	.69***	-.04*								
(5)Mindfulness	.67***	-.12***	.56***	-.19***							
(6)Over-Identification	-.16***	.73***	ns	.73***	-.24***						
(7)SCS Total	.67***	-.71***	.50***	-.73***	.65***	-.74***					
(8)EMWSS	.34***	-.23***	.25***	-.31***	.29***	-.23***	.41***				
(9)Depression	-.21***	.44***	-.08***	.52***	-.23***	.48***	-.50***	-.37***			
(10)Anxiety	-.11***	.39***	ns	.39***	-.16***	.42***	-.38***	-.26***	.71***		
(11)Stress	-.16***	.47***	-.05*	.48***	-.20***	.52***	-.48***	-.29***	.74***	.77***	

Note. ns = non-significant.

\*  $p < .05$ .

\*\*\*  $p < .001$ .

correlations with EMWSS. Self-Kindness and Mindfulness subscales had negative and low correlations with depression, anxiety and stress. These very low correlation coefficients should be interpreted with caution. There are no significant correlations between Common Humanity and these symptoms. As expected, the negative valence of self-compassion was significantly and negatively associated to EMWSS. Self-Judgement, Isolation and Over-Identification were moderately and positively associated with depression, anxiety and stress. Such associations are similar in magnitude and directions to the ones found for the SCS in other studies (e.g., Castilho et al., 2015; Cunha, Martinho, et al., 2013; Cunha, Xavier, et al., 2013; Neff et al., 2007; Neff & McGehee, 2010).

#### 4. Discussion

Self-compassion seems to be crucial to adolescent's experience (Neff & McGehee, 2010). However, the majority of research on self-compassion has been conducted in adult populations and remains scarce in adolescence. The current study aimed to analyse the construct of self-compassion, specifically the psychometric properties of the SCS, its dimensional structure, gender-based measurement invariance and normative data in a large sample of adolescents.

Regarding descriptive data, the mean for total score of self-compassion was very similar to that found by Neff and McGehee (2010). Overall, in our study adolescents presented the highest mean score on Mindfulness subscale and the lowest mean score on Over-Identification subscale. These results are expected because this is a community sample.

Results from CFA support that both of the six-factor and the second-order models present a good fit to the data. Thus, self-compassion may be assessed by its six components and total score of the scale, which are in line with the theoretical conceptualisation (Neff, 2003). Furthermore, the discriminant validity analysis corroborate that the factors of positive valence (i.e., Self-Kindness, Common Humanity and Mindfulness) of the SCS are clearly distinguished from the factors of the negative valence (i.e., Self-Judgement, Isolation and Over-identification). Nevertheless, the factors of the positive valence were not orthogonal of one another and neither were the factors of negative valence (Neff, 2003). A multiple-group CFA supported the model invariance of the SCS across gender. Results from reliability analysis showed that both the SCS total score and subscales have very good internal consistency.

Concerning the influence of age and grade in self-compassion, results show a non-significant association. This result may be due to the homogeneity of age in our sample ranging between 12 and 19 years old and further studies should explore the contribution of age in self-compassion. Since the high correlation between age and grade in this age group, it is also expected no association between grade and self-compassion. In contrast, a recent study

conducted by Bluth and Blanton (2015) among adolescents aged 11 to 18 years showed that older female adolescents reported lower levels of self-compassion (specifically higher scores on negative valence dimensions) than either older male adolescents or early adolescents of either gender.

In regard to gender differences, males tend to be more able to hold their feelings of suffering with a sense of warmth, connection and a mindful awareness than females. On the contrary, females tend to be more self-critical, feel more isolated in their own experience and more entangled with negative emotional reactions and thoughts. These findings are in accordance with previous studies in non-clinical and clinical adult populations (Castilho et al., 2015; Yarnell et al., 2015).

Correlation analyses show that adolescents who recall feelings of warmth, safeness and connectedness with their caregivers tend to be more self-compassionate. Previous research has also emphasized the importance of positive emotional memories in well-being, social connectedness and mental health (Cunha, Martinho, et al., 2013; Cunha, Xavier, et al., 2013; Cunha et al., 2014; Neff & McGehee, 2010; Richter et al., 2009). As expected, adolescents who have higher levels of self-compassion tend to endorse lower levels of depressive, anxiety and stress symptoms. Indeed, several studies consistently show the same pattern (Barry et al., 2015; Bluth & Blanton, 2014, 2015; Marshall et al., 2015; Neff & McGehee, 2010; Zeller et al., 2014).

To summarize, the positive valence of self-compassion is positively associated with positive emotional memories and negatively associated with psychopathology symptoms. Interestingly, Self-Kindness is significantly and negatively associated with psychopathological symptoms, with a low magnitude, which may be due to the large sample size. Moreover, in previous studies the positive valence components have shown weaker correlations with psychopathological symptoms than the negative valence components (e.g., Bluth & Blanton, 2015; Castilho et al., 2015). Surprisingly, Common Humanity was not correlated with Isolation, Over-Identification and psychopathological symptoms. These results may be due to egocentrism characteristic of adolescence, which generally translates into a difficulty to take the perspectives of others. That is, adolescents tend to believe that their experiences are unique and not common for other people. This egocentric attitude may lead to difficulties in recognizing suffering, inadequacies and mistakes as being a normal part of human experience.

In turn, the negative valence subscales show the opposite pattern. Adolescents who are more self-critical, feel more isolated from others and over-identified with painful thoughts and feelings tend to recall parents' behaviours as less supportive and warmth and to endorse higher levels of psychopathological symptoms.

Some limitations of this study should be considered. Firstly, the cross-sectional design impairs the establishment of the direction of causality in correlation analysis. Secondly, even though our findings confirm the six-factor and second-order structures of the SCS and

demonstrate the adequacy and gender invariance of the proposed models, future studies should seek to ensure the plausibility and parsimony of the model by testing its invariance in clinical samples of adolescents.

Overall, this study confirms that the Self-Compassion Scale in its Portuguese version is a useful, reliable and robust tool for research and clinical practice with adolescents.

## Acknowledgements

This research has been partially supported by the second author, A. X., Ph.D. Grant (grant number: SFRH/BD/77375/2011), sponsored by the Portuguese Foundation for Science and Technology (FCT) and the European Social Fund (POPH/FSE).

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