



Exploring the effect of external shame on body appreciation among Portuguese young adults: The role of self-compassion



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ABSTRACT

Studies on body image-related disturbances have recently embraced a fresh and innovative construct: body appreciation. Body appreciation, an aspect of positive body image, defines as the detention of a balanced, affectionate and health-conscious relationship with one's own body's features. Its exploration is considered to be essential to the success of upcoming prevention and intervention programs in the area of body image and eating disorders. The role of shame, although widely studied in negative body image and eating psychopathology, is yet unknown regarding body appreciation. In this line, a main goal of this study was to explore the effect of external shame on body appreciation in a sample of Portuguese young adults. Also, taking into account the similarities between body appreciation and self-compassion, and since self-compassion is known as a powerful tool against the impact of shame on body image-related disturbances, this study also intended to test the role of self-compassion in the relationship between external shame and body appreciation.

Results revealed body mass index and external shame as negative correlates, and self-compassion as a positive correlate of body appreciation. Also, path analysis showed that external shame holds a significant effect on body appreciation, both directly and indirectly. Specifically, this analysis revealed that self-compassion acts as a mediator between shame and body appreciation.

Present findings seem to support the pertinence of programs to promote an affectionate and healthy relationship with one's own body image, which may benefit from the target of shame and the inclusion of self-compassion practices.

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1. Introduction

It is unquestionable that research on body image has a rich history, of almost one hundred years (e.g., Cash, 2004). Over time, scientific research has gathered valuable knowledge on body image correlates, predictors and consequences, being almost entirely focused on pathology, i.e., mostly designed to understand negative body image (Smolak & Cash, 2011; Tylka, 2012). This approach to body image, although allowing the creation of successful therapeutic methods to alleviate symptoms of negative body image (Smolak & Cash, 2011), may have led to the neglect of the study of ways to promote positive body image, and thus have compromised the development of more effective body image-related prevention and treatment programs (Tylka & Wood-Barcalow, 2015b). In this line, current approaches recommend a greater investment on adaptive and healthy body image, as being vital to upcoming research on the field (Smolak & Cash, 2011). This investment may be crucial to the prevention and therapeutics of body image disturbances, helping healthy individuals and patients to respect,

enjoy, and honor their bodies, which may largely contribute to the effectiveness and maintenance of therapeutic gains (Smolak & Cash, 2011; Tylka & Wood-Barcalow, 2015b).

The emergent and innovative construct of positive body image is indeed distinct from negative body image (Tylka & Wood-Barcalow, 2015b). Body appreciation, an aspect of positive body image, does not correspond to the contrary of body image dissatisfaction (Tylka & Wood-Barcalow, 2015b). Instead, body appreciation implicates an attitude of acceptance, love, and protection toward all body's features, functionality, and health (Avalos, Tylka, & Wood-Barcalow, 2005), regardless of the experience of a certain and normative degree of body dissatisfaction (Tylka & Wood-Barcalow, 2015b). Moreover, encouraging body appreciation implicates an adaptive investment in appearance, that is the systematic engagement in self-care behaviors, which enriches one's natural features, without being moved by the need to comply with external standards of beauty, or threatening one's balance and health (Cook-Cottone, 2015; Tylka & Wood-Barcalow, 2015b). This adaptive and holistic relationship with the body also includes the rejection of societally prescribed malign ideals of beauty, and thus the capacity of filtering information in a body protective manner (Tylka & Augustus Horvath, 2010; Tylka & Wood-Barcalow, 2015b).

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Shame is a very powerful self-conscious emotion which emerges from the experience of being seen by others as flawed, inferior, inadequate, or powerless (e.g., Tangney & Dearing, 2002). This socially contextualized emotion is defined as external shame, that is the unsafe perception that others view one's own inner self and outer body's features as negative, which may lead to being ignored, criticized or rejected by others (e.g., Goss, Gilbert, & Allan, 1994). According to Gilbert (2002), these negative evaluations about how one thinks others see the self can be internalized. In this line, internal shame refers to when feelings and negative judgments become self-directed, i.e., when one starts to view him/herself in a devaluing manner. Although shame is a universal experience which holds a relevant defensive function due to its capacity of signaling interpersonal danger (e.g., the possibility that others perceive one's own unattractiveness, powerlessness and undesirableness; Gilbert, 2003), experiencing high levels of shame has been associated with different mental health conditions, namely eating disorders (Goss & Gilbert, 2002; Pinto-Gouveia, Ferreira, & Duarte, 2014; Troop & Redshaw, 2012). Indeed, although shame experiences are not necessarily related to body image, this emotion has been regarded as central in eating psychopathology (Gee & Troop, 2003; Mustapic, Marcinko, & Vargek, 2015). Regarding the association of shame with positive body image variables, namely body appreciation, a recent study showed that feelings of inferiority in social comparisons and low appearance-related self-worth are associated with lower body appreciation (Homan & Tylka, 2015). In fact, these feelings of inferiority and low self-worth can be conceptualized as internal shame domains (i.e., the translation of a negative self-evaluative style, and of the presence of feelings of inferiority and devaluation; Gilbert, 2002). Nevertheless, external shame is yet unexplored in association with body appreciation.

The association between self-compassion and positive body image dates back to one of the roots of positive body image: Buddhism (Tylka & Wood-Barcalow, 2015b). This Asian philosophy highlights the role of mindfulness abilities when dealing with internal experiences, and is thought to be related with an appreciative and balanced relationship with one's own body via psychological flexibility (Hayes, Strosahl, & Wilson, 1999) and self-compassion (Neff, 2003). Specifically, the cultivation of self-compassion not only includes the practice of mindful attitudes toward internal experiences, but also the capability of being kind to oneself in times of suffering, and perceiving pain as a common experience shared among the human condition (Neff, 2003). Thus, as positive body image and its body appreciation aspect can be regarded as the detention of a compassionate attitude toward one's own body image (i.e., the ability to be kind and understanding to perceived flaws in appearance, and to recognize them as shared by all) and the association between body appreciation and self-compassion has indeed been covered by recent research (Homan & Tylka, 2015; Kelly & Stephen, 2016; Marta-Simões, Mendes, Oliveira, Trindade, & Ferreira, 2016; Wasylkiw, MacKinnon, & MacLellan, 2012). Specifically, a recent study by Homan and Tylka (2015) highlighted the emotion regulation role of self-compassion, by reporting that self-compassion acts as an enhancer of body appreciation in the presence of body image-related threats. In addition, Kelly, Vimalakanthan, and Miller (2014) have reported that higher levels of self-compassion are associated with a lower impact of body mass index on the levels of body image flexibility (Tylka & Wood-Barcalow, 2015b). Although self-compassion is not yet widely studied in relation to positive body image variables, its positive effects on negative body image-related disturbances are widely explored, namely the relationship between higher self-compassion and a lower impact of body image dissatisfaction on the overall well-being and health (Duarte, Ferreira, Trindade, & Pinto-Gouveia, 2015), and also a lower likelihood of being driven by the pursuit of thinness and engaging in disordered eating attitudes and behaviors (Pinto-Gouveia, Ferreira, & Duarte, 2013). Self-compassion has also been referred by several studies as an efficient tool against shame (Ferreira, Matos, Duarte, & Pinto-Gouveia, 2014; Gilbert & Procter, 2006; Neff, 2011). Specifically,

a study by Daye, Webb, and Jafari (2014) found that self-compassion can attenuate both body shame and body surveillance.

Taking together previous data on the valuable role of cultivating a more appreciative, compassionate and protective relationship with one's own body image (e.g., Wood-Barcalow et al., 2010) and inner self (e.g., Neff, 2003), and also the relevance of investing in the study of mechanisms to promote positive body image, this study intended to reach a greater clarification of this emerging construct by exploring the relationship between body appreciation and central variables in the study of eating psychopathology, namely body mass index, shame, and self-compassion. Furthermore, the major aim of this study was to examine the role of self-compassion in the association between external shame and body appreciation. Specifically, we aimed at testing the adequacy of a model which hypothesizes that the tendency to treat oneself kindly, with care, and in a more understanding manner, acts as a mediator of the aforementioned relationship, on a sample of young male and female adults. Although some emotion regulation mechanisms are already explored in relation to body appreciation, specifically self-compassion (Homan & Tylka, 2015; Kelly & Stephen, 2016) and body image flexibility (Webb, Butler-Ajibade, & Robinson, 2014; Webb, 2015), the hypothetical linking role of self-compassion in the association between external shame and body appreciation was yet unexplored. Additionally, the present study aimed at analyzing sex differences on the associations established between the variables in study. For a long time, body image appeared to be more important to women, i.e., women tended to use it more as a preferable dimension to evaluate themselves and others (Goss & Gilbert, 2002). However, recent literature has been showing that body image may be either important to men (e.g., Griffiths et al., 2016) and that the prevalence of body image-related disturbances in males is significantly growing (e.g., Strother, Lemberg, Stanford, & Turberville, 2012), which may justify an investment on the study of the correlates of body appreciation among men.

2. Method

2.1. Participants

The present study comprised 155 participants, 44 males and 111 females. Participants' ages ranged between 18 and 35, with males and females' mean ages presenting significant differences, but of small size effect, as indicated by Cohen's d value ($t_{(153)} = 2.20$; $p = 0.03$; $d = 0.36$). Specifically, males' mean age ($M = 22.36$; $SD = 3.14$) was slightly higher than women's mean age ($M = 21.30$; $SD = 2.54$). The sample presented a mean of years of schooling of 13.69 ($SD = 1.63$), which did not differ significantly between males and females ($t_{(153)} = -0.81$; $p = 0.42$). Concerning body mass index (BMI), participants reported a mean of 22.63 ($SD = 3.57$), which corresponds to a normal-weighted sample (WHO, 1995). Participants' BMI means were different between men ($M = 23.54$; $SD = 3.14$) and women ($M = 22.28$; $SD = 2.99$). Nevertheless, this difference was of small magnitude ($t_{(153)} = 2.30$; $p = 0.02$; $d = 0.37$), and reflects the BMI distribution by sex of the Portuguese population (Poínhos et al., 2009).

2.2. Procedure

This study is part of a wider research about body image and mental health in the Portuguese population. In order to achieve a heterogeneous sample in relation to characteristics such as socioeconomic status, sex, and level of education, participants were recruited from distinct institutions, namely one private company, one retail service, and one higher education institutions. These institutions' review boards provided their approval and were assured that all ethical requirements would be respected by the research team. Participants were fully informed about the study's nature and purposes, namely the voluntary character of their participation and data's confidentiality. After obtaining written

informed consent from individuals who agreed to participate, self-report questionnaires were administered in the presence of one of the researchers, during a break authorized by the institutions' boards. Taking into account this study's purpose, i.e., of exploring a theoretical model in a sample of young adults, data was then cleaned to exclude participants older than 35 years old. Also, the cases in which >15% of the responses were missing from a questionnaire were excluded from the final sample.

2.3. Measures

2.3.1. Body mass index (BMI)

Participants' body mass indexes were calculated by dividing self-reported current weight, in kilograms, by self-reported height squared, in meters (Quetelet Index; kg/m^2).

2.3.2. Other as Shamer Scale (OAS; Goss et al., 1994; Matos, Pinto-Gouveia, & Duarte, 2011)

The OAS is a self-report measure designed to assess levels of external shame, that is, the way one perceives that others evaluate the self negatively. The scale is composed of 18 items such as "Other people see me as not measuring up to them", rated in a 5-point scale, which ranges from 0 ("never") to 4 ("almost always"). In both the original and the Portuguese studies, the scale showed good reliabilities, with $\alpha = 0.92$ and $\alpha = 0.91$, respectively. In the present study, the OAS showed a Cronbach's alpha of 0.94.

2.3.3. Self-Compassion Scale (SCS; Neff, 2003; Costa, Marôco, Pinto-Gouveia, Ferreira, & Castilho, 2015)

The SCS evaluates self-compassion through a positive and a negative component. The positive component gathers self-kindness, common humanity and mindfulness subscales, while the negative component comprises self-judgment, isolation, and over-identification subscales. The 26-item self-report scale is rated in a 5-point scale, which ranges from 0 ("Almost never") to 5 ("Almost always"). SCS has shown good internal reliability, with Cronbach's alphas of 0.92 and 0.89, for the original and the Portuguese versions, respectively. Taking into account the aims of the present study, and empirical support by Phillipps and Ferguson (2012) and by Costa et al. (2015), the three positive subscales were gathered into a composite measure defined as self-compassion (SCS_SC), while the negative subscales were not used. The SCS_SC revealed a Cronbach's alpha value of 0.91.

2.3.4. Body Appreciation Scale (BAS-2; Tylka & Wood-Barcalow, 2015a; Marta-Simões et al., 2016)

The BAS-2 is an improved version of the BAS, a self-report scale intended to assess positive body image, i.e., the detention of favourable, accepting and respectful attitudes toward one's own body's features. This scale comprises 10 items, such as "I respect my body" and "I am attentive to my body's needs", and the respondents are asked to indicate whether the question is true about them, using a 5-point scale which ranges from 1 ("never") to 5 ("always"). The BAS-2 has shown to be a psychometrically sound positive body image measure, with reported Cronbach's alpha values of 0.97 and 0.95, in the original version and the Portuguese validation studies, respectively. BAS-2's Cronbach's alpha value was of 0.95 in the present study.

2.4. Analytic strategy

Data analyses were conducted using the software IBM SPSS 22.0, and the software Amos 22.0.

The sample's characteristics regarding the studied variables were explored through descriptive statistics (means and standard deviations). In order to explore positive body image's correlates, product-moment Pearson correlation analyses were conducted to study BAS-2's

associations with body mass index (BMI), external shame (OAS), and self-compassion (SCS_SC).

In order to explore assumed structural relations (direct and indirect effects) among variables, a theoretical model was explored through path analysis. Specifically, this model explored whether SCS_SC acted as a mediator of the relationship between BMI and OAS, and BAS-2, while controlling for the effect of age (Fig. 1). Taking into account significant differences found between males and females' mean ages, the variable "age" was included in the path analysis model in order to control its effect. In this line, age, external shame (OAS) and body mass index (BMI) were entered as exogenous variables, self-compassion (SCS_SC) was hypothesized as an endogenous mediator variable, and positive body image (BAS-2) as an endogenous variable.

The model's path coefficients' significances were tested, and fit statistics were computed, using the Maximum Likelihood estimation method, with 95% confidence interval. The significance of the direct, indirect, and total effects was assessed by Chi-Square tests. In order to test the significance of the mediational paths, the Bootstrap resampling method was used, with 5000 bootstrap samples and 95% confidence intervals (Kline, 2005). Moreover, several goodness-of-fit measures (Chi-Square (χ^2), Normed Chi-Square (χ^2/df), Tucker Lewis Index (TLI), Comparative Fit Index (CFI), and the Root-Mean Square Error of Approximation (RMSEA)) assessed the credibility of the overall model, with a 95% confidence interval. Finally, using a multigroup invariance analysis, the existence of differences in the final model regarding two groups (male participants and female participants) was tested. Important to note is that, although the sample of the present study may be considered of small size, and literature advises caution when conducting studies in relatively small samples (Kline, 2005), the model complexity and the data used followed required assumptions to conduct the analysis. Also, previous simulation studies with samples with comparable sizes (Hair, Black, Babin, & Anderson, 2010) have proved the estimation technique applied by the authors in the present analyses to present valid and stable results. Furthermore, as the present path analysis model consisted of 18 parameters, and the sample comprised 155 participants, the sample size seems to be adequate, according to recommendations from Bentler and Chou (1987), which suggest the use of a ratio of sample size to the number of free parameters of, at least, 5 to 1, when conducting structural equation modeling analyses.

3. Results

3.1. Preliminary data analyses

First of all, the suitability of the data for further statistical analyses was tested. The normality of data distribution was confirmed through

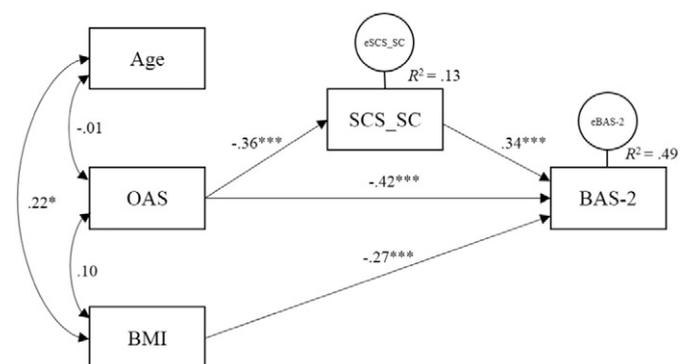


Fig. 1. Final path model. Standardized path coefficients among variables are presented. Note. BMI = body mass index; OAS = Other as Shamer Scale; SCS_SC = Self-compassion positive composite of the Self-Compassion Scale; BAS-2 = Body Appreciation Scale - 2. * $p < 0.050$, *** $p < 0.001$.

the analysis of coefficients of Skewness and Kurtosis. Values of Skewness ranged from -0.16 (BAS-2) to 1.84 (Age), and Kurtosis values between -0.40 (BAS-2) and 4.52 (Age), which do not suggest the presence of serious violation of normal distribution, according to Kline (2005). Furthermore, Variance Inflation Factor (VIF) values ranged between 0.05 (Age) and 1.16 (OAS), which indicates a low probability of multicollinearity issues (Kline, 2005).

3.2. Descriptive statistics

Means and standard deviations are presented in Table 1. Results for this analysis indicate that, while age ($t_{(153)} = 2.20, p = 0.03; d = 0.36$) and body mass index ($t_{(153)} = 2.30, p = 0.02; d = 0.37$) presented moderate differences between men and women, both sexes did not differ significantly regarding the variables in study, specifically external shame, self-compassion and body appreciation.

3.3. Correlations

Intercorrelation scores for males and females are presented in Table 2. For male participants, results indicated the presence of a positive and moderate correlation between age and self-compassion. Body appreciation revealed a negative and strong association with external shame, and a positive and strong association with self-compassion.

Regarding female participants, age presented significant associations with body mass index (a positive, yet weak, correlation) and with body appreciation (a negative and weak correlation). Body mass index revealed to be significantly and negatively correlated to body appreciation, with a correlation of moderate magnitude. In relation to body appreciation, a strong and negative association was found with external shame, and a positive association of strong magnitude was revealed with self-compassion.

3.4. Path analysis

The theoretical model was firstly tested through a fully saturated initial model consisting of 18 parameters. This model explained 13% of the variance of self-compassion (SCS_SC) and 49% of the variance of body appreciation (BAS-2). Due to the non-significance of one of the paths, that is the direct effect of BMI on SCS_SC ($b_{BMI} = -0.27; SE_b = 0.04; Z = -6.76; p = 0.99$), this path was eliminated and the model was readjusted.

Fig. 1 represents the readjusted model, which also explained 13% and 49% of SCS_SC and BAS-2's variances, respectively. All path coefficients showed to be statistically significant ($p < 0.05$), and model fit indices revealed an excellent fit to the empirical data [$\chi^2_{(3)} = 0.04, p = 1.00, CMIN/df = 0.01; TLI = 1.08; CFI = 1.00; NFI = 1.00; RMSEA = 0.00, p = 1.00, 95\% CI = 0.000$ to 0.000].

Firstly, external shame (OAS) showed direct negative effects on SCS_SC, of -0.36 ($b_{OAS} = -0.021, SE_b = 0.00; Z = -4.74;$

Table 1
Means (M) and standard deviations (SD) using t-test for equality of means, on self-report measures (N = 155).

	Men (n = 44)		Women (n = 111)		t-Test	d
	M	SD	M	SD		
Age	22.36	3.14	21.30	2.54	2.20*	0.36
BMI	23.54	3.29	22.28	2.99	2.30*	0.37
OAS	16.64	12.50	19.01	11.90	n.s.	-
SCS_SC	3.28	0.69	3.06	0.69	n.s.	-
BAS-2	3.71	0.78	3.58	0.79	n.s.	-

Note. BMI = body mass index; OAS = Other as Shamer Scale; SCS_SC = Self-compassion positive component of the Self-Compassion Scale; BAS-2 = Body Appreciation Scale - 2.
* $p < 0.050$.

Table 2
Intercorrelation scores on self-report measures (N = 155).

Measures	Age	BMI	OAS	SCS_SC	BAS-2
Age	-	0.23*	0.13	-0.18	-0.19*
BMI	0.13	-	0.10	-0.16	-0.39***
OAS	-0.24	0.16	-	-0.43***	-0.55***
SCS_SC	0.33*	0.16	-0.16	-	0.57***
BAS-2	0.22	-0.24	-0.60***	0.50***	-

Note. Lower triangle comprises correlations among men (n = 44) and upper triangle (in bold) comprises correlations among women (n = 111).
BMI = body mass index; OAS = Other as Shamer Scale; SCS_SC = Self-compassion positive component of the Self-Compassion Scale; BAS-2 = Body Appreciation Scale.
* $p < 0.050$.
*** $p < 0.001$.

$p < 0.001$); and of -0.42 on body appreciation (BAS-2; $b_{OAS} = -0.27, SE_b = 0.04; Z = -6.76; p < 0.001$). Regarding the relationship between OAS and BAS-2, OAS also showed a negative indirect effect of -0.12 on BAS-2, mediated by SCS_SC (95% CI = -0.21 to -0.06). Moreover, self-compassion showed to be directly and positively associated to BAS-2 ($b_{SCS_SC} = 3.87; SE_b = 0.69; Z = 5.57; p < 0.001; \beta = 34$), and body mass index revealed a direct negative effect on BAS-2 ($b_{SC} = -0.68; SE_b = 0.15; Z = -4.77; p < 0.001; \beta = -0.27$). Taking into consideration the high significance of the presented effects, path analysis' results seem to suggest that, although there is a powerful direct effect of external shame on body appreciation, this effect also seems to be mediated by self-compassion, i.e., self-compassion seems to appear as a mediator between external shame and body appreciation.

Finally, a multigroup analysis of the final model was performed in order to test the model's invariance across two different groups, sample's males and females. This analysis' results did not show any differences regarding factor weights ($\Delta\chi^2_{(6)} = 8.56; p = 0.20$), which revealed the model's invariance between the two compared groups.

4. Discussion

Building a bridge between external shame and positive body image, this study aimed at exploring body appreciation's positive and negative correlates, and the hypothetical self-compassion's mediational role in the relationship between external shame and body appreciation, used as a measure of positive body image, in a sample of young male and female adults. Moreover, sex differences regarding the relationships between variables and the suitability of a theoretical path analyses model were also explored.

Correlation analyses were computed with the intent of exploring body appreciation's correlates. Firstly, since body appreciation presents similarities with and is likely related to the self-compassion construct (Homan & Tylka, 2015; Kelly & Stephen, 2016; Marta-Simões et al., 2016; Tylka & Wood-Barcalow, 2015b; Wasylkiw et al., 2012), we expected that these variables would be significantly and positively correlated. Regarding external shame and body mass index, due to their association with variables such as body image dissatisfaction, drive for thinness and disordered eating behavior (e.g., Duarte et al., 2015; Ferreira, Pinto-Gouveia, & Duarte, 2013; Ferreira et al., 2014; Pinto-Gouveia et al., 2014), which are somehow antagonistic to the idea of relating positively and healthfully with one's own body image (Avalos et al., 2005; Tylka & Wood-Barcalow, 2015a, 2015b), we expected that body appreciation would correlate significantly and negatively with shame and body mass index. For men participants, correlation results did not follow our expectations, i.e., body appreciation did not associate significantly with self-compassion, as well as with body mass index, although the direction of these associations was the expected. For both men and women, results showed a positive and strong association of body-appreciation with self-compassion, and a negative and strong association between body appreciation and external shame.

These results accord closely with background data and with this study's predictions, by highlighting the connection between body appreciation and self-compassion (Homan & Tylka, 2015; Kelly & Stephen, 2016; Marta-Simões et al., 2016; Tylka & Wood-Barcalow, 2015b; Wasyliw et al., 2012), and extend previous literature by exposing the relationship between body appreciation and external shame (Homan & Tylka, 2015).

The main aim of the present study was to evaluate if self-compassion could be considered as mediator in the relationship between shame and body appreciation. This hypothesis was made due to the harmful association between the experience of shame and the engagement in body image and eating-related disordered behaviors (Goss & Gilbert, 2002; Pinto-Gouveia et al., 2014; Troop & Redshaw, 2012), and also the formerly reported efficacy of self-compassion in the reduction of the malign levels of shame (Daye et al., 2014; Ferreira et al., 2013; Gilbert & Procter, 2006; Neff, 2011). In order to evaluate the applicability of such hypothesis, a model in which shame and body mass index were entered as exogenous variables, self-compassion as an endogenous mediator, and positive body image as an endogenous variable, was explored through path analysis. The only path revealed as non-significant was the direct effect of body mass index on self-compassion; nevertheless, this was an expected result, given that, to the extent of our knowledge, there is no stated relationship between body mass index and self-compassion in studies using community samples. Regarding the readjusted model, results revealed both significant direct and indirect effects of shame on body appreciation. Specifically, although external shame holds a significant direct effect on body appreciation, its impact is almost equally powerful at an indirect level, i.e., when mediated by self-compassion. In this line, self-compassion may be seen as an adaptive strategy when facing high levels of shame, i.e., it may be used to successfully prevent negative consequences on the relationship with one's own body image that could emerge from the perception that others see the self as inferior and inadequate. This particular finding is in line with previous research which highlighted self-compassion as an effective mechanism against shame and body image dissatisfaction (e.g., Ferreira et al., 2013; Ferreira et al., 2014), and as an enhancer of body appreciation (Homan & Tylka, 2015; Kelly & Stephen, 2016). Finally, results indicated that the tested model seems to be adequate for both men and women, i.e., for both sexes higher levels of self-compassion seem to attenuate the impact of high external shame on body appreciation. This finding also appears to underline the relevance of the body image dimension not only for women, but also for men, and that the mechanisms which underlie body appreciation might be alike between both sexes.

Although promising, present results should be interpreted while considering some methodological limitations. Firstly, the cross-sectional design limits causal inferences, which makes prospective studies necessary in order to validate the nature and direction of the tested model. Moreover, the sample used in this study can be considered to be of small size, which can compromise the generalization of the obtained data. Nevertheless, although the present data followed required assumptions to conduct the analysis, and similar studies with similar sample sizes have proven to provide valid and stable results (Hair et al., 2010), future studies should use a broader sample. Furthermore, it would be interesting to test clinical samples, namely eating disorder samples. The explored model was designed and limited with the specific purpose of exploring the role of self-compassion on the impact of external shame on body appreciation, nevertheless, body image is a multi-determined complex phenomenon, and other variables may be involved and, therefore, explored in upcoming studies. For instance, the authors consider that it would be important to explore the role of internal shame in this model, therefore future studies could analyze the role of shame in this perspective. Finally, it should be taken into account that a counterbalanced research design was not employed, and that the use of self-report measures may compromise the generalization of the data, which leads to the suggestion of using other research methods in upcoming studies, namely structured interviews.

5. Conclusions

The present study was the first to explore the relationship between external shame and body appreciation, and extended previous literature (Homan & Tylka, 2015; Kelly & Stephen, 2016) by exploring whether holding a kind and understanding relationship with one's own self holds an impact on the tendency to appreciate, care for and protect one's own body image. The effect of external shame on body appreciation was found to be significant at an indirect level, i.e., carried by the mechanisms of self-compassion. Therefore, present findings seem to suggest that self-compassion may act as mediator of the aforementioned relationship, which not only highlights the power of self-compassion against shame, but mostly underlines the potential connection between self-compassion and body appreciation. The present findings appear to offer important research and intervention implications. Firstly, findings seem to emphasize the pertinence of exploring self-compassion in a positive perspective in future investigations (i.e., as a health-promoting tool) and not only as a mechanism to deal with adversity, and also appear to support the relevancy of targeting shame and self-compassion when developing prevention programs of body image-related disorders, and community programs to promote a compassionate and positive relationship with one's body image and self.

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Contributors

Authors 1 and 2 designed the study, conducted the statistical analysis and wrote the protocol. Authors 1 and 3 conducted literature searches and provided summaries of previous research. Author 1 wrote the first draft of the manuscript and all authors contributed to and have approved the final manuscript.

Conflict of interest

All authors declare that they have no conflicts of interest.

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