Exploring drive for thinness as a perfectionistic strategy to escape from

shame experiences

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Abstract

The current study aimed at examining the role of perfectionistic self-presentation of body image to explain the drive to be thin, in a sample of 174 male and 289 female students. The correlations showed that, for both genders, perfectionistic self-presentation through body image is positively associated with internal and external shame, and with body image and eating-related symptoms.

Our study confirmed that perfectionistic self-presentation of body image mediates (partially in the male and totally in female sample) the relationship between internal shame and drive for thinness. This finding suggests that the impact of shame on drive to be thin depends on the need to express to others one's supposed perfection through the specific domain of physical appearance.

These results seem to support that the need to control one´s body image may emerge as a strategy to deal with a sense of inferiority and inadequacy, in face of the need to present a perfect body image and to be accepted by others.

Key-words: Shame; perfectionistic self-presentation; body dissatisfaction; drive for thinness; mediational study.

1. Introduction

In line with the evolutionary perspective, social acceptance is an essential human need since one's survival and development depend on belonging to a group (Gilbert, 2000). Indeed, living in group is inherent to human evolution and so is the improbability of surviving while isolated (Baumeister & Leary, 1995). In this way, social rank theory suggests that being socially attractive and able to promote the interest and approval of others is a primary need (Gilbert, Price, & Allan, 1995). Therefore, humans tend to desire being valued, esteemed, wanted, accepted and chosen by others for certain roles (e.g., ally, sexual partner or leader; Gilbert, 2005). As a result, feelings of social undesirability, associated with criticism and exclusion from the group, are a main threat that leads to defensive responses such as shame (Gilbert, 2002).

The female body shape has always been a central domain in self and social evaluations, as it is an indicator of health, reproductive potential and social rank (Gatward, 2007). Furthermore, modern Western societies continue to value this aspect, highlighting the link between female attractiveness and thinness (Buote, Wilson, Strahan, Gazzola, & Papps, 2011). In fact, a thin body shape is, nowadays, strongly associated with positive traits of personality, power, success and happiness (e.g., Strahan, Wilson, Cressman, & Buote, 2006). In this way, body shape became a dimension particularly used to obtain social attention and acceptance by others (Gilbert et al., 1995; Troop, Allan, Treasure, & Katzman, 2003). For that reason, body shape is currently overvalued in women's social comparisons and in the establishment of their rank within the group (Buote et al., 2011; Ferreira, Pinto-Gouveia, & Duarte, 2013). Moreover, unfavourable comparisons based on physical appearance tend to trigger

feelings of inferiority and unattractiveness, and consequently high levels of shame (Goss & Gilbert, 2002).

Shame is a painful affect that derives from the perception that certain characteristics, behaviours or personal attributes can be seen by others as unfavourable and unattractive (Gilbert, 2000). This affect is specifically conceptualized as external shame and relates to how one thinks to exist in the mind of others (i.e., how others evaluate oneself). According to Gilbert (2002), these shame experiences can be internalized through negative perceptions and judgments of our own attributes or behaviours. Indeed, internal shame refers to negative self-evaluations and self-directed affects (e.g., perceptions of an unvalued and defective self; Gilbert, 1998; Tangney & Fischer, 1995).

According to the evolutionary model, shame is an adaptive, powerful, self-conscious and socially-focused emotion that plays an important function on quality of life, by allowing the identification and correction of behaviours or personal characteristics that may be evaluated by others as negative (e.g., Gilbert, 2002; Tangney & Fischer, 1995). However, high levels of shame are intimately linked to serious social difficulties (e.g., isolation or alienation) and to distinct psychopathological conditions (e.g., Gilbert, 2000, 2002).

The perceived need to appear perfect to others (perfectionistic self-presentation) can be considered a compensatory mechanism that one uses to deal with feelings of inferiority, inadequacy and fear of rejection (Hewitt et al., 2003). In this line, Peterson (2003) suggests that the need to present a perfect image and to conceal perceived flaws and defects aims to avoid shame experiences and may emerge as strategies to achieve

acceptance and to fit in the group. However, the association between shame and perfectionistic self-presentation has been scarcely studied.

Perfectionistic self-presentation, i.e. the need to display a perfect image, is a maladaptive interpersonal tendency that involves three dimensions: perfectionistic self-promotion (active promotion of perfect abilities), nondisplay of imperfection (avoidance of perceived flaws demonstration) and nondisclosure of imperfection (reluctance of verbally expressing personal imperfections; Hewitt et al., 2003).

Research suggests that, as the perfectionism trait, perfectionistic self-presentation is associated to a wide range of psychopathological conditions (e.g., Hewitt & Flett, 2002), namely to eating disorders (e.g., Steele, O'Shea, Murdock, & Wade, 2011). More specifically, studies have highlighted the positive relation between striving to display an image of perfection, body dissatisfaction and disordered eating (e.g., Hewitt, Flett, & Ediger, 1995; McGee, Hewitt, Sherry, Parkin, & Flett, 2005).

Furthermore, recent research demonstrated that perfectionistic self-presentation specifically related to body image is particularly present in women and is linked to increased body dissatisfaction and drive for thinness (Ferreira, Duarte, Pinto-Gouveia, & Lopes, 2013). However, although promising, the studies in this particular domain are yet scarce. For that reason, the aim of the present paper is to better understand the role of perfectionistic self-presentation of body image in the engagement in pathological eating attitudes. Therefore, the associations between external and internal shame, perfectionistic self-presentation related to body image and eating psychopathology symptoms were examined. The impact of the shame variables and perfectionistic self-presentation of body image on drive for thinness was also explored. Finally, the

mediator effect of perfectionistic self-presentation was tested in the relationship between internal shame and drive for thinness.

2. Materials and methods

2.1 Participants

The study's sample was comprised by 463 students, 174 males and 289 females, with ages ranging from 13 to 30 years old. The male group presented a mean age of 17.83 (SD = 3.71) and of 10.83 (SD = 3.21) years of education. In turn, the female group presented a mean age of 17.53 (SD = 3.07) and of 10.76 (SD = 3.03) years of education. The two groups did not show significant differences in these variables (age: $t_{(313.178)}$ = .892; p = .373; years of education: $t_{(461)}$ = .231; p = .818).

2.2 Measures

Eating Disorders Inventory (EDI; Garner, Olmsted, & Polivy, 1983; Machado, Gonçalves, Martins, & Soares, 2001). The EDI comprises 64 items in 8 subscales and assesses behavioural and psychological dimensions of eating disorders. In this study, it were only analysed the drive for thinness (DFT), bulimia (B) and body dissatisfaction (BD) subscales, which are validated and present adequate internal consistencies both in the original and Portuguese versions. In the present study, the Cronbach's alphas obtained are .75, .72 and .87, respectively.

The Other as Shamer Scale (OAS; Goss, Gilbert, & Allan, 1994; Matos, Pinto-Gouveia, & Duarte, 2011). The OAS is a 18-item self-report measure of external shame, i.e., the respondent's perception that others evaluate him or her negatively. This scale has shown good reliabilities in the original version (α = .92) and in the Portuguese validation study (α = .91). In the current sample the Cronbach's alpha was .92.

Internal Shame Scale (ISS; Cook, 1994, 2001; Matos, Pinto-Gouveia, & Duarte, 2012). This questionnaire assesses internalized shame (how one evaluates oneself) and is composed by two dimensions (internal shame and self-esteem subscales). In the current study only the internal shame subscale was used, having had a Cronbach's alpha of .95, similarly to the original study (α = .95) and Portuguese version (α = .95).

Perfectionistic Self Presentation Scale – Body Image (PSPS-BI; Ferreira, Duarte, et al., 2013). The PSPS-BI is a 19-item scale that was developed to assess the need to present a perfect physical appearance to others through the exhibition of a flawless image and the concealment of perceived body defects. It is composed by two dimensions: display of body perfection (DBP; the need to promote perfect physical appearance to others) and concealment of body imperfections (CBI; the need to hide or conceal perceived body flaws). This scale presented good psychometric characteristics in the original study and in the present sample (α global score = .88; DBP = .79; CBI = .91).

2.3 Procedures

The collection of the data respected ethic and deontological issues. Previously to the fulfilment of the scales, the project was approved by the ethic committees of the involved educational institutions and the students or their parents (in underage cases) gave their informed written consent.

2.3.1. Analytic Strategy

Data analyses were performed using SPSS v.20.0.

In order to explore differences between genders, a t test for independent samples was performed. Descriptive statistics (means and standard deviations) were used to explore the differences between genders in the study variables.

Pearson correlation coefficients were performed to explore the association between the variables (Cohen, Cohen, West & Aiken, 2003).

Two hierarchical multiple regressions were performed to explore the impact of external and internal shame and perfectionistic self-presentation on drive for thinness.

Mediation analyses were conducted using linear regression models to examine the effect of the mediator on the relationship between the predictor and the dependent variable, following the recommendations by Baron and Kenny (1986). In addition, a Sobel test was performed to confirm the significance of the mediations.

3.   Results

3.1. Preliminary Analysis

Analyses of Skewness and Kolmogorov-Smirnov values and visual inspection of the graphic distributions confirmed the assumption of normality (Kline, 1998; Tabachnick & Fidell, 2007). Preliminary data analyses corroborated that the data present assumptions of linearity, homoscedasticity, independence of errors and multicolinearity (Kline, 1998).

3.2. Differences between genders

The female participants presented significantly higher scores on the PSPS-BI's subscales (concealment of body imperfections and display of body perfection) and global score. Moreover, the female students also shoed higher values of internal shame

(ISS), drive for thinness (DFT) and body dissatisfaction (BD). However, in what concerns external shame (OAS) and the subscale "bulimia" (B) of the EDI there were no significant differences found between genders (see Table 1).

Table 1 – insert around here

3.3. Correlations

PSPS-BI's subscales and global score were not positively associated, with moderated and high correlations, in both genders (Table 2).

Regarding the male group, PSPS-BI's dimensions were positively correlated with the shame measures (ISS and OAS) and with disordered eating symptoms (BD and DFT). However, the association with B did not achieve significant values. In turn, ISS and OAS held positive correlations with DFT, B and BD. Nevertheless, the correlation between OAS and B was not significant.

In the female group, positive and moderate correlations were found between PSPS-BI's dimensions and ISS, OAS, DFT and BD. PSPS-BI's subscales and total scale presented non-significant associations with B. ISS showed positive and high correlations with OAS, a moderated magnitude correlation with BD and low associations with DFT and B. Finally, OAS held positive, yet low, associations with all of the eating psychopathology's indicators (DFT, B and BD).

Table 2- insert around here

3.4. Regression analysis

To explore the impact of the shame variables (OAS and ISS) and perfectionistic self-presentation related with body image (PSPS-BI) to explain drive for thinness (DFT) a hierarchical multiple regression was conducted for both genders.

In the male group, first, when OAS was entered as the independent variable and DFT as the dependent variable, a significant model was produced [$F_{(1,168)}$ = 19.64; $p <$ .001; β = .32], accounting for 10% of the independent variable variance. On the second step, after the introduction of ISS, another significant model was obtained [$F_{(2,168)}$ = 11.13; $p <$ .001] which explained 10.8% of the variance. This model revealed OAS (β = .19) as the best predictor, followed by ISS (β = .18).   In the last step, with the introduction of PSPS-BI, the model was significant [$F_{(3,168)}$ = 9.833; $p <$ .001], accounting for 13.6% of the independent variable. Results indicated that when PSPS-BI is added in, it emerges as the only significant predictor with a β of .22.

Regarding the female group, the same procedure was conducted. Results revealed that the first model, having OAS as the independent variable, was significant [$F_{(1,286)}$ = 13.92; $p <$ .001; β = .22] and accounted for 4.3% of DFT's variance. After the inclusion of ISS, the second model explains 10.7% of the variance [$F_{(2,286)}$ = 18.15; $p <$ .001], in which ISS was the only predictor (β = .47). In the third step, with the inclusion of PSPS-BI, it was obtained a model that was also significant [$F_{(3,286)}$ = 29.27; $p <$ .001] and that accounted for 22.9% of the variance of DFT. This final model revealed that, for the female group, PSPS-BI (β = .41) and ISS (β = .22) emerge as significant predictors of DFT.

3.5. Mediation Analysis

For the understanding of the role of perfectionistic self-presentation of body image on the relation between internal shame and drive for thinness, a mediation analysis was conducted. According to Baron and Kenny (1986), the proposed variable (perfectionistic self-presentation of body image) performs as a mediator when it meets the following conditions: i) there is a significant association between the predictor variable (internal shame) and the outcome variable (drive for thinness); ii) there is a significant relationship between the predictor variable and the mediator (perfectionistic self-presentation of body image); iii) there is a significant relation between the mediator and the outcome variable when the predictor variable and mediator are added into the same equation. Therefore, the final step of the mediation should show a significant decrease of the direct effects of the predictor on drive for thinness, after accounting for the variance attributed to perfectionistic self-presentation of body image, when it is added to the model. In the present study, these three conditions were examined through sequential regression analyses. Finally, to confirm the significance of the indirect effect of the predictor variable on the outcome through its effect on the mediator, it was performed the Sobel Test.

Figure 1 - insert around here

Concerning the male group, the first model (which included ISS as the independent variable) was significant, contributing to 9.6% of DFT's variance. In a second analysis that was performed to examine if ISS predicted PSPS-BI, the model was also significant and explained 29% of PSPS-BI's variance. Lastly, when ISS and

PSPS-BI were introduced as independent variables, the final model was shown to explain 12.7% of DFT. These results verified a reduction of ISS' indirect effect on DFT when PSPS-BI is add in (from β = .32 to β = .20; p = .023). The Sobel test corroborated the statistically significance of the mediational effect (Z = 4.18; p < .001), demonstrating that, in this group, PSPS-BI partially mediated the relation between ISS and DFT.

The same steps were performed to analyse the effect of PSPS-BI on DFT in the female group. The first model, with ISS acting as the independent variable, was significant and contributed to 10.1% of DFT's variance. In the second step, the model was likewise significant and showed that ISS explains 25.4% of PSPS-BI. Finally, the last obtained model revealed significance and accounted for 22.6% of DFT's total variance. Moreover, when PSPS-BI's is added in this final model, ISS' β loses its significance (p = .065). The Sobel test confirmed that PSPS-BI totally mediated the effect of ISS on DFT (Z = 6.71; p < .001).

Table 3 - insert around here

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4. Discussion

Perfectionistic self-presentation defines the social expression of perfectionism. That is, the attempt at presenting the self as perfect through the disclosure of public exposure of personal defects and/or by the promotion of the attributes perceived as capable to gather positive attention and respect by others (Hewitt et al., 2003). Although perfectionism as long been considered as a central aspect of eating disordered attitudes

and behaviours, mediational studies between this construct and these conditions are scarce (Bardone-Cone et al., 2007).

The current study was designed to overcome this gap and to contribute to literature in the eating psychopathology field by using a specific measure of perfectionistic self-presentation regarding body image. Thereby, the main goal was to test, in both genders, the mediator effect of the interpersonal maladaptive style of perfectionism related to body image in the relationship between internal shame and drive for thinness (a central feature and main risk factor for eating disorders; Fairburn, 2008).

The analyses of gender differences allowed us to verify that the female students scored significantly higher in concealment of body imperfections and display of body perfection dimensions, as well as in the global score of the PSPS-BI. These data corroborate recent research which revealed that women report a higher need to present their physical appearance as perfect (Ferreira, Duarte, et al., 2013) and seem to highlight physical appearance as an important domain for women's self-evaluation (Buote et al., 2011; Ferreira, Pinto-Gouveia, et al., 2013). Female participants also presented increased levels of internal shame. However, no differences between genders were found regarding external shame.

As expected, it is also the female group that presents a more severe level of body dissatisfaction and a greater concern with dieting, weight, body shape and fear of weight gain. Even though no significant differences in the bulimia subscale were found between the genders, this result should be interpreted with caution due to the specific nature of this subscale and considering that this study was conducted on a sample from the general population.

Regarding both genders, the correlation study reveals a positive association between the PSPS-BI's scores, which in turn are also linked to the shame measures. These results seem to strengthen the notion that perfectionistic self-presentation acts as a compensatory mechanism to deal with feelings of inadequacy or shame and as a strategy to promote social acceptance (Hewitt et al., 2003; Peterson, 2003). This is a relevant finding whereas the link between these variables has been scarcely explored.

Additionally, a positive relation between shame (external and internal), body image dissatisfaction and drive for thinness was found. This is also in line with previous studies that emphasize the link between body image dissatisfaction and weight control behaviours which, in a context characterized by perceptions of inferiority and inadequacy, aim to achieve a thinner appearance and promote social acceptance (Pinto-Gouveia, Ferreira, & Duarte, 2012).

Furthermore, it was verified that a greater need to present a perfect body image is positively related to main features of eating psychopathology (e.g., body image dissatisfaction and drive for thinness). This corroborates previous studies (e.g., McGee et al., 2005), pointing that the interpersonal perfectionism acts as an important risk factor to eating disorders, and adds to literature by underlying that this relation, although stronger in the female group, is valid for both men and women.

The mediational studies, in both genders, highlight the perfectionistic self-presentation related to body image as a pertinent variable for the comprehension of drive for thinness. Specifically in the male group, it was revealed that the impact of internal shame on drive for thinness is partially mediated by perfectionistic self-presentation of body image. A similar analysis in the female group showed a total mediation, which suggests that the experience of internal shame predicts the

engagement in maladaptive eating behaviours through its effect on the perception of need to socially present a perfect body image. In other words, the internalization of negative self-evaluations does not necessarily lead to eating psychopathology behaviours but perfectionistic self-presentation related to body image is involved in this association.

These results should not be interpreted without considering some limitations. Indeed, its cross-sectional nature restricts the causality between variables. Moreover, the mediator effect of perfectionistic self-presentation related to body image ought to be retested due to the novel character of the current investigation. However, the presented data seems to represent an important contribution to the study of the relationship between shame and perfectionism in domain of body image and eating disordered conditions.

5. Conclusions

In summary, the current findings seem to support that excessive control over eating may emerge as a maladaptive strategy to deal with internalization of shame when mediated by an endorsement in the belief that presenting a perfect body image is crucial to be accepted and valued by others.

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Table 1

Comparison between genders

	Males (*n* = 174)		Females (*n* = 289)			
	M	*DP*	*M*	*DP*	*t*	*p*
PSPS-BI_concealment body imperfections	39.85	14.58	46.88	15.90	-4.706	.000
PSPS-BI_display body perfection	38.65	15.20	46.01	15.99	-4.838	.000
PSPS-BI_global score	78.51	25.82	92.89	27.93	-5.469	.000
ISS	29.94	18.24	34.33	18.62	-2.456	.014
OAS	20.04	11.57	21.59	11.70	-1.376	171
EDI_drive for thiness	1.48	2.26	2.75	3.77	-4.524	.000
EDI_bulimia	1.15	2.29	1.10	2.42	0.224	.823
EDI_body dissatisfaction	2.92	4.14	5.96	6.01	-6.392	.000

Note. PSPS-BI = Perfectionistic Self Presentation Scale – Body Image, subscales and global score. ISS = Internalized Shame Scale. OAS = The Other as Shamer Scale. EDI = Eating Disorders Inventory subscales.

Table 2

Correlations between variables for males (inferior diagonal; n = 174) and females (superior diagonal, bold; n = 289)

	1	2	3	4	5	6	7	8
1. PSPS-BI_concealment body imperfections	-	**.37****	**.53****	**.55****	**.42****	**.48****	**.20****	**.56****
2. PSPS-BI_display body perfection	.50**	-	**.88****	**34****	**.25****	**.34****	**.05**	**.37****
3. PSPS-BI_global score	.86**	.87**	-	**51****	**.39****	**.47****	**.14***	**.53****
4. ISS	.63**	.31**	.54**	-	**.84****	**.32****	**.28****	**.47****
5. OAS	.55**	.21**	.43**	.77**	-	**.22****	**.26****	**.39****
6. EDI_drive for thinness	.37**	.21**	.33**	.32**	.32**	-	**.23****	**.60****
7. EDI_bulimia	.18**	.11	.17*	.26**	.19	.10	-	**.33****
8. EDI_body dissatisfaction	.31**	.20**	.29**	.34**	.45**	.45**	.26**	-

Note. PSPS-BI = Perfectionistic Self Presentation Scale – Body Image, subscales and global score.

ISS = Internalized Shame Scale. OAS = The Other as Shamer Scale. EDI = Eating Disorders

Inventory subscales.

* $p < .05$; ** $p < .01$

Table 3

Mediation effect of perfectionistic self-presentation of body image on the relationship between internal shame and drive for thinness, in the male (n = 170) and female groups (n = 289)

	D.V.	I.V.	β	*t*	*p*	*F*	*Ajusted* R^2	*p*
Males	DFT	ISS	.32	4.361	.000	19.01	.10	.000
	PSPS-BI	ISS	.54	8.376	.000	70.16	.29	.000
	DFT	ISS	.20	2.298	.023			
		PSPS-BI	.23	2.632	.009	13.31	.13	.000
Females	DFT	ISS	.32	5.745	.000	33.00	.10	.000
	PSPS-BI	ISS	.51	9.926	.000	98.53	.25	.000
	DFT	ISS	.11	1.852	.065			
		PSPS-BI	.42	6.881	.000	42.86	.23	.000

Note. PSPS-BI = Perfectionistic Self-presentation. ISS = Internalized Shame Scale. DFT = Drive for Thinness
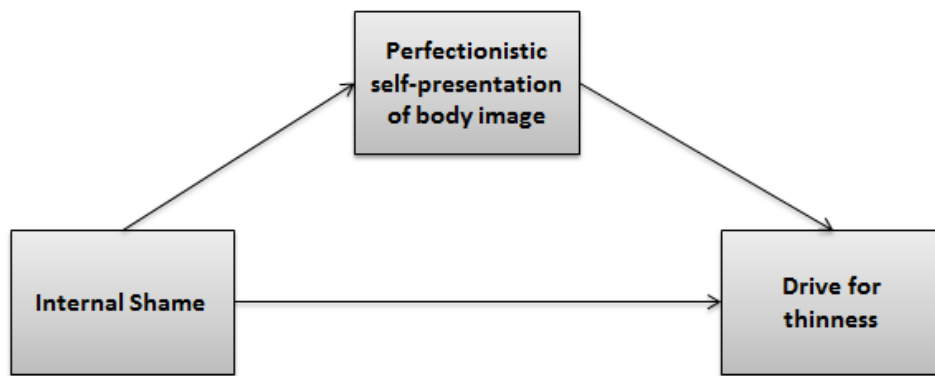
Fig 1. The mediation effect of perfectionistic self-presentation of body image on the relation between internal shame and drive for thinness.