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Dear Professor P. M. Miller

We have followed your suggestion to revise and resubmit the paper as a Short Communication: the manuscript was reduced to 1998 words with only two tables. We hope that with these modifications the manuscript meets the requirements for acceptance for publication in your Journal.

Sincerely,

Cláudia Ferreira, José Pinto-Gouveia & Cristiana Duarte
Highlights

- Eating disorders’ patients show lower self-compassion than nonclinic subjects.
- Self-compassion may be an antidote of shame in disordered eating.
- Self-compassion mediates the effect of external shame on drive for thinness.
- Self-compassion explains body dissatisfaction and drive for thinness’ association.
- Self-compassion’s role increases along with the degree of disordered eating.
Self-compassion in the face of shame and body image dissatisfaction: Implications for eating disorders

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Abstract

The current study examines the role of self-compassion in face of shame and body image dissatisfaction, in 102 female eating disorders’ patients, and 123 women from general population.

Self-compassion was negatively associated with external shame, general psychopathology, and eating disorders’ symptomatology. In women from the general population increased external shame predicted drive for thinness partially through lower self-compassion; also, body image dissatisfaction directly predicted drive for thinness. However, in the patients’ sample increased shame and body image dissatisfaction predicted increased drive for thinness through decreased self-compassion.

These results highlight the importance of the affiliative emotion dimensions of self-compassion in face of external shame, body image dissatisfaction and drive for thinness, emphasising the relevance of cultivating a self-compassionate relationship eating disorders’ patients.

**Key-words:** Self-compassion; shame; body image dissatisfaction; eating disorders.
Self-compassion in the face of shame and body image dissatisfaction: Implications for eating disorders.

1. Introduction

Western societies emphasize and value a thin physical appearance linking thinness to desirable personality characteristics, power and happiness (Strahan, Wilson, Cressman, & Buote, 2006), and judging those that do not fit accordingly (e.g., overweight or obese women; Puhl & Brownell, 2003). Thus, for women, body image often becomes a central self-evaluative dimension (e.g., Gilbert, Price, & Allan, 1995; Balcetis, Cole, Chelberg, & Alicke, 2012) and controlling it (e.g., by dieting) may emerge as a strategy to compete for social advantages (e.g., being accepted and valued by others; Pinto-Gouveia, Ferreira, & Duarte, 2011).

According to Goss and Gilbert (2002) disordered eating serve the functional purpose of regulating threat and feeling safe in the social group (e.g., avoid being ostracized or rejected due to one’s body shape or weight), in women that present high levels of shame, that are highly sensitive to criticism and that perceive themselves as being in a low social rank. Theoretical and empirical accounts support the relationship between body image, eating difficulties and shame in both community and clinical samples (e.g., Gee & Troop, 2003; Goss & Allan, 2009; Grabhorn, Stenner, Stangier, & Kaufhold, 2006).

Self-compassion is an alternative way to regulate threat and negative affect (Gilbert, 2005, 2009). Self-compassion allows the clear observation of one’s thoughts and emotions, with kindness, understanding, and with a sense of shared humanity (Neff, 2003a, 2003b), fostering feelings of safeness, and promoting a gentle encouragement to change when necessary and the adoption of proactive actions towards well-being (Neff, 2004). A compassionate attitude towards one’s body seems to enhance feelings of connectedness, allowing women to recognize that some of their body-related negative experiences are shared and, therefore, that they do not need to conceal or control their body to protect their self-worth and social acceptance (Berry, Kowalsky, Ferguson, & McHugh, 2010).

Recent research shed light on the importance of nurturing a self-compassionate relationship as an antidote to shame and self-judgement in women struggling with eating psychopathology and body image dissatisfaction (Pinto-Gouveia et al., 2012). Nevertheless, research on this
matter is still scant. The current study aims at testing whether self-compassion emerges as a mediator on the relationship between external shame and body image dissatisfaction, and drive for thinness.

2. Material and methods

2.1. Participants

This study comprised two samples: patients with eating disorders (ED) and general population. Were included 102 female ED patients, with a mean age of 23.62 (SD = 7.42) and of 12.49 (SD = 3.01) years of education. Their BMI values ranged from 13.32 to 47.33 kg/m² (M = 21.15; SD = 6.93); 32.4% patients presented Anorexia Nervosa, 30.4% Bulimia Nervosa, and 37.2% EDNOS (DSM– IV-TR; 2000). The general population sample involved 123 women with an age mean of 23.54 (SD = 6.89), of 12.63 (SD = 2.55) years of education, and of 21.95 (SD = 3.19) regarding BMI. The two samples did not present significant differences in age (t_{(223)} = -.09; p = .932), years of education (t_{(198.534)} = .36; p = .719), and BMI (t_{(136.200)} = 1.06; p = .289).

2.2. Measures

Self-Compassion Scale (SCS; Neff, 2003a; Portuguese version by Castilho & Pinto-Gouveia, 2011). SCS was used to assess self-compassion (gathering the subscales self-kindness, common humanity, and mindfulness) and self-critical judgement (comprising the subscales self-judgment, isolation, and over-identification). The SCS presents good internal reliability in the original (.92; Neff, 2003) and in the Portuguese (.89; Castilho & Pinto-Gouveia, 2011) versions. In the current study, the Cronbach´s alpha values were .86 and .89 for self-compassion, and of .89 and .87, for self-critical judgement, in the general population and in the ED sample, respectively.

Other as Shamer Scale (OAS; Goss, Gilbert, & Allan, 1994; Portuguese version by Matos, Pinto-Gouveia, & Duarte, 2011). OAS measures external shame, that is, evaluating that others look down on, and negatively judge the self (Goss et al., 1994). In the original study, and in its Portuguese version, the scale showed good reliability with α = .92 (Goss et al., 1994) and .91 (Matos et al., 2011). The values in the present study were also high: .92 in the general population and .94 in the ED sample.
Depression, Anxiety and Stress Scales (DASS42; Lovibond & Lovibond, 1995; Portuguese version by Pais-Ribeiro, Honrado, & Leal, 2004). DASS42 assesses depression, anxiety, and stress. The Cronbach’s alpha values for the present study were .91, .87 and .91, in the general population sample, and .96, .94, and .95 in the ED sample, respectively, resembling the obtained values in the original and Portuguese versions of the scale.

Eating Disorder Inventory (EDI; Garner, Olmsted, & Polivy, 1983; Portuguese version by Machado, Gonçalves, Martins, & Soares, 2001). EDI assesses weight, shape and eating related attitudes and behaviours, and psychological characteristics common in eating disorders’ patients. The current study used drive for thinness, bulimia, and body dissatisfaction subscales, which present adequate internal consistency and are well-validated in the EDI original (Garner et al., 1983) and Portuguese versions (Machado et al., 2001). The Cronbach’ coefficient alphas for this study were .76, .56, and .92 in the general population, and .79, .91, and .91 in the ED samples, respectively.

Eating Disorder Examination 16.0D (EDE 16.0D; Fairburn, Cooper, & O’Connor, 2008; Psychometric properties of the Portuguese Population by Ferreira, Pinto-Gouveia, & Duarte, 2010). This standardized interview was used to assess patients’ diagnoses. EDE is a precise evaluation method of the behavioural and psychological aspects of eating disorders, with high values of internal consistency, test-retest reliability, and discriminative and concurrent validity (see Fairburn (2008) for a review).

2.3. Procedure
The general population participants’ voluntarily completed the self-report measures in educational and corporative settings, with the institutions board’s approval. The ED patients were recruited in Portuguese hospitals after giving their informed consent and after the ethics’ committee approval.

2.3.1. Analytic Strategy
T-tests for two independent samples tested for differences in the study variables between the samples. Product-moment Pearson correlation analyses were conducted. Two mediation models were tested, in which linear regression models were used to test the effect of the mediator
(self-compassion) on the relationship between the independent (external shame in the first mediator model, and body image dissatisfaction in the second mediator model) and the dependent variable (drive for thinness), following the four-step analysis recommended by Baron and Kenny (1986).

3. Results

3.1. Preliminary data analyses

Analysis of Skewness and Kurtosis’ values, and the visual inspection of the distributions confirmed the assumption of normality (Kline, 1998; Tabachnick & Fidell, 2007).

Preliminary data analyses indicated that these data were suitable for regression analyses following the assumptions of normality, linearity, homoscedasticity, independence of errors and multicolinearity (Field, 2004).

3.2. Descriptives and correlations in the nonclinical and in the ED sample

The ED patients presented significantly lower scores on self-compassion, and higher scores on self-critical judgement, external shame, depressive, anxiety and stress symptoms, drive for thinness, bulimia and body dissatisfaction, in relation to the nonclinical sample.

In the nonclinical sample, self-compassion negatively correlated with external shame, psychopathological symptoms, drive for thinness, bulimia and body dissatisfaction. Stronger correlations were found in the ED sample. Also, self-critical judgment was significantly and positively correlated with the study variables, in both samples (Table 1).

(Table 1 around here)

3.3. Mediator analyses

3.3.1. The mediator effect of self-compassion on the relationship between external shame and drive for thinness
In the nonclinical sample, external shame predicted drive for thinness and self-compassion. When the mediator was added in the model, the association between external shame and drive for thinness was reduced. The obtained model accounted for 19.8% of drive for thinness’ variance. The indirect effect of external shame on drive for thinness (through its effects on self-compassion) was tested using the Sobel Test, which indicated that the positive association between external shame and drive for thinness is partially mediated by decreases in self-compassion ($z = 2.03; p = .043$).

In the ED sample, external shame significantly predicted drive for thinness, as well as self-compassion. The association between external shame and drive for thinness reduced, to the point of non-significance, when self-compassion was entered in the model. The obtained model accounted for 21.2% of drive for thinness. The Sobel Test supported that the relationship between external shame and drive for thinness was fully mediated by self-compassion ($z = 3.34; p = .001$; Table 2).

3.3.2. The mediator effect of self-compassion on the relationship between body image dissatisfaction and drive for thinness

In the nonclinical sample, body image dissatisfaction positively predicted greater drive for thinness and lower self-compassion. In addition, when the mediator is added the effect of body dissatisfaction on drive for thinness is reduced, with the model accounting for 38.4% of the variance. However, Sobel Test was nonsignificant ($z = -1.66; p = .099$) indicating that self-compassion did not mediate the association between body dissatisfaction and drive for thinness.

In the ED sample the same set of regressions were examined (Table 2) and it was found that body dissatisfaction predicted higher levels of drive for thinness partially through decreased self-compassion. The obtained model accounted for 31.2% of the variance of drive for thinness. Sobel Test confirmed this partial mediation in this specific sample ($z = -2.63; p = .009$).

(Table 2 about here)
4. Discussion and conclusion

Growing empirical evidence demonstrate the important role of self-compassion as an emotional regulation strategy (McBeth & Gumley, 2012). The current study explored the relationships between self-compassion and central aspects of eating psychopathology, such as shame, body image dissatisfaction, and drive for thinness, in women with and without an eating disorder.

Our results revealed that higher levels of a compassionate self-to-self relationship were linked to lower levels of body image dissatisfaction, and lower engagement in disordered eating patterns. On the contrary, a harsh critical attitude towards the self positively associated with those eating and body image dysfunctional behaviours. To note was the fact that the associations were stronger in the patients’ sample in relation to the general population sample. These findings allow us to confirm that having a lower ability to be compassionate towards one life’s experiences and suffering is linked to a stronger experience of the self as living negatively in the mind of others, with increased general psychopathology and disordered eating symptomatology. This seems to be particularly true when someone is suffering from eating disorders’ symptoms. These findings add to the existent knowledge (e.g., Adams & Leary, 2007; Berry et al., 2010) suggesting that decreases in the affiliative emotional dimension of self-compassion is linked with poor psychological functioning, particularly in women with clinical levels of body image dissatisfaction and pathological eating attitudes and behaviours.

The regression analyses’ findings revealed that self-compassion partially mediated the effect of external shame on drive for thinness on the nonclinical sample. In the ED sample, this relationship was fully mediated by self-compassion. This suggests that feeling that others look down on oneself is linked to higher drive for thinness, through how one directs a kind and balanced attitude towards one’s own inadequacies or flaws. These results show that external shame does not necessarily leads to the engagement in dieting, and that self-compassion may be an antidote for such feelings of inferiority.

Additionally, results indicated that body dissatisfaction has a direct effect on drive for thinness when these scores are normative (where they do not generate invalidation or clinically significant suffering, i.e., in the nonclinical sample). However, in eating disorders’ patients, the
lack of contentment and kindness partially explains the link between feelings of dissatisfaction with one’s body and the tendency to control it via dieting.

A major limitation in this investigation is its cross-sectional design, which constraints the establishment of causal directions. Longitudinal research should be conducted to confirm the directionality and predictability of these findings. Nevertheless, these data seem to be a particularly relevant avenue for posterior experimental studies examining the efficacy of psychological intervention programmes for eating disorders addressing the development of self-compassion (e.g., Goss & Allan, 2010).

This study explores an important area of research by demonstrating the role that affiliative emotions may play on breaking the negative cycle of shame and body image dissatisfaction and drive for thinness.

References


Authors Disclosure

Statement 1: Role of Funding Sources
This study had the financial support of the Portuguese Foundation for Science and Technology which sponsors CINEICC’s research unit.

Statement 2: Contributors
Authors Cláudia Ferreira and José Pinto-Gouveia designed the study and wrote the protocol. Authors Cláudia Ferreira and Cristiana Duarte conducted literature research and provided summaries of previous research studies, conducted the statistical analysis and wrote the manuscript. José Pinto-Gouveia supervised and contributed for these tasks and approved the final manuscript.

Statement 3: Conflict of Interest
The authors declare no conflicts of interest.

Statement 4: Acknowledgements (optional)
The authors wish to thank Margarida Robalo for technical assistance in the clinical sample collection.
Table 1
Correlations (2-tailed Pearson r) between SCS, OAS, DASS42 subscales and EDI subscales in the nonclinical (NC; n = 123) and in the ED sample (n = 102; in bold)

|       | NC | ED | t       | SC | SJ | OAS | DEP | ANX | STR | DFT | BUL | BD |
|-------|----|----|---------|----|----|-----|-----|-----|-----|-----|-----|-----|----|
| SC    | 40.51 (7.46) | 30.31 (8.78) | 9.28** | -60** | -54** | -57* | -39* | -56* | -47* | -34* | -37* | -42* |
| SJ    | 36.20 (8.48) | 48.83 (8.71) | -10.10** | -36** | -55** | .56* | .44* | .57* | .42* | .31* | .37* | -   |
| OAS   | 22.46 (9.36) | 37.25 (14.01) | -9.10** | -36** | .58* | -61** | -    | -59* | -63* | -63* | -63* | -63* |
| DEP   | 6.54 (6.33)  | 20.83 (12.66) | -10.01** | -51** | .41** | .60** | -    | .76* | .79* | .47* | .36* | .53* |
| ANX   | 5.69 (5.41)  | 13.75 (11.04) | -6.51** | -55** | .22* | .37** | .61** | -    | .78* | .40* | .32* | .48* |
| STR   | 7.56 (12.46) | 23.36 (10.89) | -8.09** | -58** | .41** | .43** | .71** | .68** | -    | .46* | .31* | .51* |
| DFT   | 2.34 (3.30)  | 12.03 (5.74)  | -15.10** | -32** | .35** | .42** | .46** | .36** | .33** | -    | .38* | .49* |
| BUL   | 1.07 (1.69)  | 4.47 (5.66)   | -5.86** | -21* | .26** | .26** | .40** | .31** | .42** | .32* | -    | .50* |
| BD    | 5.50 (6.30)  | 15.59 (7.95)  | -10.40** | -34** | .30** | .39** | .45** | .42** | .34** | .62** | .37** | -   |

Note:

In bold are the correlations of the ED sample.

NC = nonclinical sample; ED = eating disorders sample; SC: Self-Compassion; SJ: Self-Critical Judgment; OAS: Other as Shamer; DEP: Depression; ANX: Anxiety; STR: Stress; DFT: Drive for Thinness; BUL: Bulimia; BD: Body Dissatisfaction.

** Significance at the level of p < .001.

* Significance at the level of p < .05.
Table 2
Mediation effect of Self-Compassion (mediator) in the relationship between External Shame and Drive for Thinness (Model 1), and in the relationship between Body Image Dissatisfaction and Drive for Thinness (Model 2) in the nonclinical (n = 123) and in the ED sample (n = 102, in bold).

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In bold are the regression coefficients of the ED sample.

OAS: Other as Shamer; BD: Body Dissatisfaction; DFT: Drive for Thinness; SC: Self-Compassion.
Friday, December 21th, 2012

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AUTHORS: Cláudia Ferreira, José Pinto-Gouveia & Cristiana Duarte

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Dear Professor P. M. Miller

We have followed your suggestion to revise and resubmit the paper as a Short Communication: the manuscript was reduced to 1998 words with only two tables. We hope that with these modifications the manuscript meets the requirements for acceptance for publication in your Journal.

Sincerely,

Cláudia Ferreira, José Pinto-Gouveia & Cristiana Duarte