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Escaping from body image shame and harsh self-criticism: Exploration of underlying mechanisms of binge eating

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ABSTRACT

Shame has been highlighted as a key component of eating psychopathology. However, the specific impact of body image shame on binge eating and the mechanisms through which it operates remained unexplored.
The current study tests a model examining the role that body image shame plays in binge eating and the mediator effect of self-criticism on this association, while controlling for the effect of depressive symptoms, in 329 women from the general population and college students.
Correlation analyses showed that binge eating is positively associated with depressive symptoms, body image shame, and self-criticism, namely with a more severe form of self-criticism characterized by self-disgust, hating and wanting to hurt the self – hated self. Furthermore, results indicated that the path model explained 32% of binge eating behaviours and confirmed that body image shame has a significant direct effect on binge eating, and that this effect is partially mediated by increased hated self.
These findings suggest that binge eating may emerge as a maladaptive way to cope with the threat of being negatively viewed by others because of one's physical appearance and the consequent engagement in a severe critical self-relating style marked by hatred, disgust and contempt towards the self. This study contributes therefore for the understanding of the processes underlying binge eating. Also, these findings have important research and clinical implications, supporting the relevance of developing eating disorder treatments that specifically target shame and self-criticism, through the development of self-compassionate skills.

1. Introduction

There is increased recognition that binge eating is a serious condition with significant implications for physical and mental health, being linked to the development and maintenance of overweight/obesity and psychiatric comorbidities (e.g., Kessler et al., 2013). Binge eating behaviours are a key feature of Binge Eating Disorder (BED) and also of the other eating disorders diagnoses, but evidence shows that they are also significantly prevalent among individuals without eating disorders (Johnson, Rohan, & Kirk, 2002; Kinzl, Trawegger, Trefalt, Mangweth, & Biebl, 1999). Binge eating involves the occurrence of episodes of overly excessive and rapid eating in a discrete period of time accompanied by a sense of lack of control that causes great distress. During these episodes one may eat until feeling uncomfortably full; gorging in the absence of hunger, engage in these behaviours in secrecy due to the embarrassment they generate, and feel disgusted with oneself, depressed or very guilty after eating (American Psychiatric Association, 2013).

Extant evidence converge on the notion that negative affect is the most common antecedent of binge eating (e.g., Haedt-Matt & Keel, 2011; Stice, 2001; Stice, Akutagawa, Gaggar, & Agras, 2000). In particular, several studies suggest that depressive symptoms are important risk factors for binge eating (Meno, Hannum, Espelage, & Douglas, 2008; Saules et al., 2009; Spoor et al., 2006). Moreover, it has been suggested that binge eating may result from maladaptive emotional regulation processes, aiming at the avoidance or escape from disturbing thoughts or unstable and undesirable emotional states (Arnow, Kenardy, & Agras, 1992; Goldfield, Adamo, Rutherford, & Legg, 2008; Heatherton & Baumeister, 1991). This attempt to control the internal experience may be effective in the short term, and may even be related to pleasant feelings (Del Parigi, Chen, Salbe, Reiman, & Tataranni, 2003). However, it subsequently increases negative affect and, simultaneously, more difficulties in controlling later eating behaviour. This process may be accompanied by greater shame and self-criticism, which, in turn, seem to further fuel the occurrence of these episodes, generating a self-sustained cycle (Goss & Gilbert, 2002; Jambekar, Masheb, & Grilo, 2003).

Several studies have shown that shame is a major component in several psychological difficulties, namely depressive symptoms (for a review see Kim, Thibodeau, & Jorgensen, 2011). There is also growing evidence showing the relevant role that shame plays in body image and eating related psychopathology (e.g., Ferreira, Pinto-Gouveia, &

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Duarte, 2013; Gee & Troop, 2003; Goss & Allan, 2009; Murray, Waller, & Legg, 2000; Pinto-Gouveia, Ferreira, & Duarte, 2014). However, the specific role of this emotion in binge eating remains less investigated. Shame is a multifaceted, self-conscious and socially focused emotion, acting as a warning signal that others see and judge the self negatively, and may reject, exclude, or even harm the self (Gilbert, 1998, 2002, 2007). These evaluations can be internalized, in the sense that one may start to view the self in the same negative manner (Gilbert, 1998, 2002). According to an evolutionary biopsychosocial approach to shame (Gilbert, 1997, 1998, 2002, 2007) humans are a highly social species, whose survival and prospering depends on the relationship they establish with others and how others relate to them. Hence, throughout evolution we developed a set of social motivational systems to create in others a positive image of the self to form advantageous social relationships (e.g., to be chosen as a friend, lover, team member; Gilbert, 1997, 2005; Mikulincer & Shaver, 2005). Shame emerges therefore when an individual believes he/she is failing on creating such image or lacks qualities others value, and is, on the contrary, perceived as a defective, flawed, inadequate, unattractive social agent.

Physical appearance has always been a central domain to define how socially attractive one is to others. In this sense, the sociocultural context clearly defines what others will praise and what others will find negative or rejectable in terms of body weight and shape (Gilbert, 2002). In Modern western societies portraying a slender body shape became a synonym of positive and desirable personality features such as will power and determination (Strahan, Wilson, Cressman, & Buote, 2006), while not fitting into this thin ideal became a highly stigmatized condition (e.g., Puhl & Heuer, 2009) with relevant pathogenic consequences, namely among women (Bessenoff & Snow, 2006; Castonguay, Brunet, Ferguson, & Sabiston, 2012). Actually, perceiving that one's body may somehow differ or be distant to what the social group considers to represent a socially attractive individual, may be linked to the emotion of shame and to the further engagement in disordered eating behaviours as a mean to avoid social inferiority (Ferreira et al., 2013; Pinto-Gouveia et al., 2014).

In this sense, one's physical appearance may be experienced as shaming. When feeling shame about one's body image one may perceive oneself as having unattractive, defective and rejectable physical attributes and thus that one may stand at risk of being put down, excluded, passed by, or even harmed by others (Gilbert, 1997, 1998). Body image concealment or avoidance of situations of possible negative scrutiny by others may then be adopted as defensive outputs to protect the self of such presumed social threats, leading however to increased distress and invalidation in one's life (Gilbert, 2002).

In the face of such perceived shortcomings of the self, due to one's physical appearance, one may engage in critical and punitive responses towards the self. Self-criticism has been conceptualized as a form of self-to-self relating marked by negative judgements and evaluations that may be activated as a safety response in face of setbacks, failures or other threats to the self (e.g., Gilbert, Clarke, Kempel, Miles, & Irons, 2004). In this sense, self-criticism may be understood as a maladaptive defensive strategy, driven by shame (Gilbert & Irons, 2005; Gilbert & Procter, 2006), that aims at correcting and improving personal features or behaviours to protect the self (Gilbert & Irons, 2005). However, when one fails to defend against one's self-attacks this may often lead to states of defeat. In fact, research has shown that when individuals feel controlled and discouraged by their own harsh self-attacks they may develop submissive and defensive behavioural and emotional outputs, such as depressive symptoms (e.g., Gilbert & Irons, 2005). A more harsh self-attacking relationship characterized by self-hatred, disgust and contempt, has been particularly linked to severe psychological suffering (e.g., Castilho, Pinto-Gouveia, & Duarte, 2013; Gilbert et al., 2010).

There is also evidence showing that self-criticism may play an important mediator role on the association between shame and eating psychopathology (Pinto-Gouveia et al., 2014). The link between self-criticism, depressive symptoms and body image evaluation in BED patients has also been demonstrated (Dunkley & Grilo, 2007; Dunkley, Masheb, & Grilo, 2010). Although these studies suggest the relevance of shame and self-criticism in the vulnerability to and maintenance of disordered eating symptoms, little is known about the extent to which body image shame and self-criticism contribute for the engagement in binge eating. Thus, the current paper aimed to examine whether experiencing shame regarding one's physical appearance is a significant predictor of binge eating and whether this association is mediated by increased levels of self-criticism, while controlling for the effect of depressive symptoms as overall negative affect.

2. Material and methods

2.1. Participants

Participants in this study were 329 women, 221 college students attending different courses and grades, and 108 women from the general population working in private and public corporations. The participants' age ranged from 18 to 57 years old, with a mean of 23.30 ($SD = 10.41$), and their years of education ranged from 6 to 22, presenting a mean of 13.81 ($SD = 2.40$). Participants' Body Mass Index (BMI) mean was 22.85 ($SD = 3.78$). In regard to binge eating, 92.7% ($n = 305$) of the participants presented mild to no binge eating; 5.2% ($n = 17$) moderate binge eating; and 2.1% ($n = 7$) severe binge eating, which is in accordance to recent studies (Kessler et al., 2013).

2.2. Measures

2.2.1. Body Mass Index

Participants' BMI was calculated by dividing the weight (in kg) by height squared (in m).

2.2.2. Binge Eating Scale

The Binge Eating Scale (BES; Gormally, Black, Daston, & Rardin, 1982; Duarte, Pinto-Gouveia, & Ferreira, submitted for publication) is a 16-item scale designed to measure the behavioural manifestations and emotional and cognitive factors associated with binge eating. Each item comprises three or four statements regarding which participants are asked to choose the one that best describes their eating behaviour. Each option reflects a rating of severity ranging from 0 (reflecting no difficulties with binge eating) to 3 (severe problems with binge eating). Higher scores denote more severe binge eating. The scale yields good internal consistency in both clinical samples (e.g., Gormally et al., 1982; Tapadinhas & Pais-Ribeiro, 2012) and nonclinical samples (Anton, Perri, & Riley, 2000; Duarte et al., submitted for publication). The Cronbach's alpha of the scale in the current study was .88.

2.2.3. Body Image Shame Scale

The Body Image Shame Scale (BISS; Duarte, Pinto-Gouveia, Ferreira, & Batista, in press) assesses the experience and phenomenology of body image shame. It comprises 14 items measuring an externalized dimension of body image shame involving the avoidance of social situations in which others may criticize the self because of one's body image; and an internalized dimension, comprising negative self-evaluations and consequent behaviours to control the exposure of one's body image (i.e., concealment). Respondents are asked to rate each item according to the frequency they experience body image shame, using a 5-point Likert scale (ranging from 0 = *Never* to 4 = *Almost always*). Higher scores indicate higher levels of body image shame. In the original study the scale revealed high internal consistency with a Cronbach's alpha of .92. In the current study the scale also revealed a very good internal consistency with a Cronbach's alpha of .94.