Two forms of self-criticism mediate differently the shame-psychopathological symptoms’ link
Abstract

**Objectives:** This study explored the relation between external shame, two types of self-criticism and depressive, anxious and stress symptoms, in a clinical sample. Specifically, we set out to test whether the impact of external shame in such symptoms would be mediated by two forms of self-criticism.

**Method:** 279 patients (228 female and 51 male; mean age of 28.58) with Axis I and II disorders recruited from several outpatients Psychiatric services in Portugal completed the Other as Shamer Scale (OAS), the Forms of Self-Criticizing/Attacking and Self-reassuring Scale (FSCRS) and the Depression, Anxiety and Stress Scales (DASS-42).

**Results:** Self-criticism mediated in part the shame-psychopathological symptoms’ link, especially the hated self form. This result suggests that fear of being devalued in the minds of others has a significant impact on people’s psychological well-being, and this effect can be partially explained by self-criticism.

**Conclusions:** External shame and self-criticism play a key role in depression, anxiety and stress symptoms in patients and thus should be a target in treatment.

**Keywords:** External shame; self-criticism; depression, anxiety and stress; clinical sample.
Practitioner Points

- External shame and self-criticism are associated with depressive, anxious and stress symptoms, in a clinical sample.

- Self-criticism, especially hatred for the self, mediates the shame-psychopathological symptoms’ link.

- Shame and self-criticism should be addressed in therapeutic interventions targeting the reduction of depression, anxiety and stress symptoms.
Shame is a self-conscious emotion that guides our behaviour, influences who we are and is intrinsically linked to self-other relationships, and thus has an important role in social relating and crucial implications to one’s self-identity (Gilbert, 1998; Kaufman, 1989; Nathanson, 1996; Tangney & Dearing, 2002). From an evolutionary perspective, shame is seen as an evolved response to social threat situations, specifically experiences of social rejection or devaluation, which would have dire consequences for the individual’s survival. This emotion involves involuntary affective-defensive action tendencies (e.g., flight, submission) intended to limit possible self-presentation damage (Gilbert, 1998, 2000). Shame is thus associated with feelings of inferiority, rejection and negative social comparison (Kaufman, 1989), with beliefs regarding how one exists in the mind of others (e.g., the self as inadequate, bad or inferior) and with a strong will to hide and conceal the self (Gilbert, 1998; Tangney & Fischer, 1995).

Shame can be conceptualized, measured and analysed in different ways. Gilbert (1998) made the distinction between internal shame and external shame. While in internal shame the attention is focused on the self, with negative self-evaluations particularly of the whole self, in external shame the attention is focused on the views others have of the self, particularly whether others hold negative views of the self.

Many studies have used measures of negative self-evaluations to assess shame, such as the Test of Self Consciousness Affect (TOSCA; Tangney, Dearing, Wagner, & Gramzow, 2000.), and Internalized Shame Scale (ISS; Cook, 1994). Allan, Gilbert and Goss(1994), on the other hand, developed a measure to assess more externally-focused shame, the Other as Shamer Scale (OAS). Distinguishing these different types of shame is important. For example, in Kim, Thibodeau and Jorgensen’s meta-analysis (2011) it was found that external shame showed stronger links to depression compared with internal shame.
People can also internalize negative judgments and criticism from others, such that the person self-devalues, also known as self-criticism (Gilbert, 1998).

Gilbert et al. (2004) suggest that self-criticism is multidimensional, and can assume different forms and functions. One can have feelings of inadequacy and inferiority and thus self-criticism is aimed to correct and improve the self, to try harder, to maintain certain standards. This form may be less problematic than self-criticism rooted in desires to persecute and harm the self, associated with feelings of self-disgust and self-hatred. So, people can be self-critical to try to correct their behaviour or to persecute or punish the self.

A growing body of research has found that both shame and self-criticism may be important vulnerability and maintenance factors in several psychological difficulties, such as anxiety (Allan & Gilbert, 1997), eating disorders (Kelly & Carter, 2012), paranoia (Pinto-Gouveia, Matos, Castilho & Xavier, 2012), self-harm (Gilbert et al., 2010; Castilho, Dinis, Duarte, & Pinto-Gouveia, 2014), personality disorders (Lucre & Corten, 2012) and particularly depression (Andrews & Hunter, 1997; Kelly, Zuroff, & Shapira, 2009; Marsall, Zuroff, McBride, & Bagby, 2008; Luyten et al., 2007). Several explanations can help illuminate the strong relation between shame and psychological symptoms. Given that external shame is activated in the presence of possible social threats, and given that social threats could have posed a threat for physical survival since our earlier evolutionary context, it is expected that it will have severe consequences for psychological functioning. Also, evolutionary explanations for both phenomena propose that external shame and depression may have similar functions, namely withdrawal and interruption of behaviour (e.g., Fessler, 2004), and subjective feelings (e.g., worthless, helpless, inferior, being a failure). Also, a great deal of research has showed that cortisol, which is released when the fight-or-flight self-
preservation system is activated, is also associated with psychological threats to the self-image (e.g., shame; Dickerson & Kemeny, 2004), to major depression (Connor & Leonard, 1998; Gold, Licinio, Wong, & Chrousos, 1995; Maes, 1999), and to mental disorders in general (Sapolsky, 1998). The activation of this system may further lead to depressive, anxious and stress symptoms. However, few studies to date have explored the psychological mechanisms linking shame to psychological symptoms. This study aims to contribute to that, hypothesising the role of self-criticism. It is known that rumination mediates the link between shame and depression (Cheung, Gilbert, & Irons, 2004; Orth, Barking, & Burkhardt, 2006). Our hypothesis is that when rumination is focused on negative self-directed attributions and judgments, i.e., self-criticism (e.g., “I’m bad, inferior, worthless, incompetent…”) psychological symptoms may develop. Also, we hypothesise that the role of such negative self-attributions may be different depending on their form (feelings of inadequacy and inferiority, or self-directed feelings of hatred and aversion). Given that the majority of studies focused on the relation between external shame and depression, we also wanted to test our hypothesis regarding anxiety and stress symptoms. Finally, most studies in this field have relied mainly on non-clinical samples, and thus we aimed to test our hypothesis in a large clinical sample.

Method

Participants and procedure

Participants were recruited from outpatient Psychiatric services of different public hospitals in Portugal’s north and centre regions. All participants were clinically assessed by a trained therapist using several diagnostic structured interviews, namely: Structured Clinical Interview for DSM-IV Axis I Disorders – SCID I (First, Spitzer,
Gibbon, & Williams, 1997); Anxiety Disorders Interview Schedule for DSM-IV – ADIS-IV (DiNardo, Brown, & Barlow, 1994); Structured Clinical Interview for DSM-IV Axis II Personality Disorders – SCID-II (First, Gibbon, Spitzer, Williams, & Benjamin, 1997); and Borderline Personality Disorder Severity Index – BPDSI-IV (Arntz et al., 2003). In total 279 patients with Axis I and II disorders (see Table 1) participated in the study, previously approved by the hospitals’ institutional boards.

The questionnaires were preceded by a page informing the subjects about the study aims and importance of their participation and confidentiality. It was emphasized that participants’ cooperation was voluntary and that the information they provided would only be used for the purpose of this study. All participants provided their written informed consent.

In this sample, 81.7% were female (n = 228) and 18.3% were male (n = 51), with a mean age of 28.58 (SD = 8.75) and years of education ranging from 3 to 24 (M = 13.98; SD = 3.23). Regarding marital status, 73% of the participants were single (n = 204), 23.3% were married (n = 65), 2.9% were divorced (n = 8) and 0.7% were widowed (n = 2). Regarding socioeconomic level, the majority of the participants were students (n = 113; 40.5%), 20.4% had low socioeconomic level (n = 57), 24% had medium socioeconomic level (n = 67) and 15.1% had high socioeconomic level (n = 42). There were no significant differences regarding marital status, socioeconomic level, age and years of education between men and women.

[Insert Table 1]

Measures
The Forms of Self-Criticizing/Attacking and Self-reassuring Scale (FSCRS; Gilbert, Clark, Hempel, Miles & Irons, 2004; Portuguese version by Castilho & Pinto-Gouveia, 2011). The FSCRS is a 22-item self-report questionnaire which asks participants to rate how they typically think and react when things go wrong for them. To a first probe statement, ‘When things go wrong for me…’ participants respond on a 5-point Likert scale (from 0 = not at all like me to 4 = extremely like me). A factor analysis of the scale suggested three factors: inadequate self (“I think that I deserve my self-criticism”), hated self (“I have become so angry with myself that I want to hurt or injure myself”) and reassured self (“I am able to remind myself of positive things about myself”). The scale has good internal consistency (Cronbach’s alphas of .86 for hated self and reassured self and Cronbach’s alpha of .90 for inadequate self; Gilbert et al., 2004). The Portuguese version replicated the three-factor structure and showed good internal consistency, with Cronbach’s alphas ranging between .62 and .89.

Other as Shamer Scale (OAS; Allan, Gilbert, & Goss, 1994; Goss, Gilbert, & Allan, 1994; Portuguese version by Matos, Pinto-Gouveia & Duarte, 2014). This self-report questionnaire was developed to measure external shame. Participants are asked to rate 18 items on a 5-point Likert scale according to the frequency in which they make certain evaluations about how others judge them (0 = never to 4 = almost always). Items include “Feel other people look down on me” and “Other people see me as somehow defective as a person”. In the original study the scale showed good reliability with a Cronbach’s alpha of .92 (Goss et al., 1994).

Depression, Anxiety, Stress Scale (DASS-42; Lovibond & Lovibond, 1995; Portuguese version by Pais-Ribeiro, Honrado, & Leal, 2004) is a self-report measure composed of 42 items designed to assess three dimensions of psychopathological symptoms: Depression, Anxiety and Stress. The items describe negative emotional
symptoms and participants rate each item using a 4-point Likert scale (from 0 to 3). Lovibond and Lovibond (1995) reported good internal consistency for these components (Depression Cronbach’s $\alpha = .91$; Anxiety Cronbach’s $\alpha = .84$; Stress Cronbach’s $\alpha = .90$). The Portuguese version showed a good internal consistency, with Cronbach’s alphas of .93 for Depression, .83 for Anxiety and .88 for Stress.

**Results**

*Descriptive Statistics*

All variables’ means, standard deviations and Cronbach’s alphas are presented in Table 2. All scales showed good internal consistencies. With the exception of external shame, gender differences were found in the study variables, with women scoring significantly higher than men.

Preliminary data analyses were conducted to examine the violation of tests’ assumptions. An inspection of the values of skewness and kurtosis did not reveal serious biases, as these were inferior than 3 (between -.352 and .350) for skewness and inferior than 10 (between -1.214 and -.124) for kurtosis (Kline, 1998). According to the cut off points for the Portuguese population, patients showed moderate levels of depressive, anxious and stress symptoms (Pais-Ribeiro, Honrado, & Leal, 2004).

[Insert Table 2]

*Correlational analyses*

Pearson’s correlation coefficients are described in Table 3.

[Insert Table 3]
As expected, inadequate self and hated self forms of self-criticism presented strong positive associations with current external shame. In addition, there were strong correlations between depression, anxiety and stress and both forms of self-criticism and external shame.

Path analysis

Given the theoretical background we hypothesised that the two forms of self-criticism would be mediators in the relation between external shame and depressive, anxious and stress symptoms. To estimate the hypothesised relations between the variables in study we used path analysis with Maximum Likelihood (ML) estimation method. Although there were four observations with MD2 (Mahalanobis Distance) values suggesting possible outliers, these were maintained since its removal didn’t alter the results. The resampling method Bootstrap (with 2000 resamples) was used to create 95% bias-corrected confidence intervals (CI) for estimates of total, direct and indirect effects. We can determine whether a given effect is significantly different from zero ($p < .05$, two-tailed) if zero is not between the lower and upper bound of the 95% CI. The model fit was tested through several goodness-of-fit measures, namely: Normed Chi-Square ($\chi^2/df$), Tucker Lewis Index (TLI), Comparative Fit Index (CFI) and the Root-Mean Square Error of Approximation (RMSEA), with 90% confidence interval. Path analysis and bootstrapping were computed on AMOS (v.22).

Given the gender differences found, we controlled for gender in the models. Gender was not significantly associated with any variable in the model, and thus it was removed.

The final model explained 40% of depression variance. The total effect of external shame on depression was $\beta = .54$, CI [.451; .623], $p = .001$, and the direct effect
of external shame on depression was $\beta = .26$, CI [.143; .366], $p = .001$. We also found evidence of an *indirect effect* of external shame on depression, $\beta = .28$, CI [.203; .364], $p = .001$, through hated self.

The final model explained 23% of anxiety variance. The *total effect* of external shame on anxiety was $\beta = .45$, CI [.336; .539], $p = .001$, and the *direct effect* of external shame on anxiety was $\beta = .30$, CI [.150; .422], $p = .001$. We also found evidence of an *indirect effect* of external shame on anxiety through hated self $\beta = .15$, CI [.064; .238], $p = .001$, representing 33% of the total effect.

The final model explained 27% of stress variance. The *total effect* of external shame on stress was $\beta = .46$, CI [.351; .543], $p = .001$, and the *direct effect* of external shame on stress was $\beta = .24$, CI [.104; .375], $p = .001$. We also found evidence of an *indirect effect* of external shame on stress, $\beta = .22$, CI [.116; .316], $p = .001$, through inadequate self ($\beta = .10$, 22% of the total effect) and hated self ($\beta = .12$, 26% of the total effect).

In Figure 1 the final model is presented, with the standardized coefficients estimates and the $R^2$ for depression, anxiety and stress. The final model showed a good fit to the data, $\chi^2 = 2.618$, $df = 2$, $\chi^2/df = 1.309$, $p = .270$; CFI = .999; TLI = .996; RMSEA = .033, $p < .001$.

[Insert Figure 1]

We also tested an alternative model in which self-criticism was the predictor of psychological symptoms and external shame the mediatior. Results showed that this model had the same fit to the data and the same $R^2$ for each outcome. Inadequate self had only a direct effect on stress, $\beta = .24$, CI [.123; .309], $p = .001$. The effect of
inadequate self on depression and anxiety was fully mediated by external shame, $\beta = .22$, CI [.022; .095], $p = .001$; $\beta = .22$, CI [.027; .116], $p = .001$, respectively.

Self-hated self-criticism had direct effects on depression, $\beta = .22$, CI [.261; .508], $p = .001$, anxiety, $\beta = .22$, CI [.096; .355], $p = .001$, and stress, $\beta = .22$, CI [.019; .306], $p = .029$. There were also indirect effects through external shame on depression, $\beta = .22$, CI [.062; .203], $p = .001$, anxiety, $\beta = .22$, CI [.074; .241], $p = .001$, and stress, $\beta = .22$, CI [.051; .210], $p = .001$, respectively.

In sum, our findings indicated that hated self was a significant mediator of the shame-depression link. Self-hated self-criticism also mediated the relation between external shame and anxiety. Finally, the external shame-stress link was mediated by the two forms of self-criticism. Such findings supported our hypotheses that part of the association between feelings of external shame and depression, anxiety and stress symptoms can be explained by a focus on negative aspects of the self (self-criticism). As expected, the most pathogenic form of self-criticism, characterized by self-directed feelings of hatred, contempt, and desire to hurt and punish the self, was the most important meditator when compared to inadequate self. There were also direct links between external shame and depression, anxiety and stress which suggests that other mediators may account for such effects. Results suggested that the alternative model is also plausible, in which external shame is a mediator of the two forms of self-criticism on psychological symptoms.

**Discussion**

Shame has been consistently linked to a wide range of psychopathological symptoms and disorders. However, psychological mechanisms that may explain this
link remain understudied. Based on previous studies and theory, we hypothesised that self-criticism could be an important process to explain the shame-psychopathology symptoms’ link. We used a large clinical sample with moderate levels of depression, anxiety and stress symptoms which justifies the use of such variables as the main outcomes in the study.

Our goal was to explore how external shame and self-criticism are associated with psychopathological symptoms. The model tested was theory-driven, and we hypothesised that the impact of external shame on depression, anxiety and stress would be mediated by self-criticism.

Taken together our results suggested that a significant part of the impact of external shame on psychopathological symptoms was mediated by self-criticism. For depression and stress this impact represented almost half of the total effect. Hated self was the most significant mediator for the three outcomes. These results suggest that individuals that have a fear of being devalued by others can also internalize negative judgments of others and become self-critical, which in turn may contribute to their vulnerability to psychological symptoms. This seems to be especially true for individuals who have a sense of hatred towards themselves. This is in line with a previous study that showed that hated self-criticism was more strongly associated with depression than inadequate self (Gilbert et al., 2004). The finding that external shame was associated with psychological symptoms even when controlling for self-criticism is also in line with previous findings (e.g., Kim et al., 2011).

An interesting finding was the differential effects for inadequate and hated self. Specifically, while hated self was a significant mediator for all outcomes, inadequate self was only a significant mediator for anxiety and stress symptoms. One possible explanation is that the inadequate form of self-criticism is especially associated with
motives for self-correction and self-improvement, focused on monitoring aspects of the self that need to be corrected and improved and feelings of inadequacy and inferiority (Gilbert et al., 2004). This monitoring may then lead to anxiety, associated with fears of failure, falling short of one’s and others’ expectations, and stress associated with the mobilization to correct and improve the self to avoid such fears. Hated self shows a more significant association with depression (Gilbert et al., 2004), probably because of its toxic nature focused mainly on the persecution and attack to the self which may at times lead to feelings of helplessness, hopelessness and defeat as seen in many depressed individuals (Sloman, 2008), especially when the individual is incapable and powerless to defend against his/hers self-attacks (Greenberg, Elliott, and Foerster; 1990).

Results from the correlational analysis showed that external shame was positively correlated with self-criticism (particularly hated self), as suggested by previous research (Cheung et al., 2004; Gilbert & Miles, 2000), and clinical observations, suggesting that these two processes (shame and self-criticism) are highly and mutually associated. Additionally, our results suggested that both external shame and self-criticism (particularly in its hated self form) were positively correlated with depression, anxiety and stress which is also in accordance with previous findings (e.g., Andrews, 1995; Kim et al., 2011; Luyten et al., 2007; Whelton & Greenberg, 2005; Zuroff, Santor & Mongrain, 2005).

In sum, this study highlights that inadequate self and hated self are separable types of self-criticism, because they show different patterns of association. This is in line with previous studies (e.g., Gilbert et al., 2004; Kupeli, Chilcot, Platts & Troop, 2012; Castilho, Pinto-Gouveia, & Duarte, 2013).
Several implications might be drawn from our findings. From a theoretical point of view the present study supported the findings of Gilbert et al. (2004), indicating that inadequate and hated self are clearly separable, and the particular importance of self-hatred for psychopathology. Also, this study points to the relevance of evaluating and addressing external shame and self-criticism in the treatment of psychopathological symptoms, such as depression, anxiety and stress. This may be particularly important for individuals with intense self-directed anger and negative self-evaluations. Compassion-focused Therapy (Gilbert & Procter, 2006), for example, is a therapeutic approach specifically directed to people with high shame and self-criticism, whose problems tend to be chronic and whose early rearing environments are generally difficult and hostile. For these individuals being self-reassuring is somewhat difficult, threatening and generates high levels of anxiety and stress (Gilbert & Procter, 2006; Gilbert, Baldwin, Irons, Baccus, & Palmer, 2006). Thus, in therapeutic interventions self-criticism and shame should be central in the process of change.

Although these results shed some light on the relation between external shame, self-criticism and psychological symptoms, they should be interpreted with caution given the cross-sectional nature of the study design. In future, it would be interesting to conduct prospective or longitudinal studies to better understand the causal relations between these variables. Our hypothesis was based on the biopsychosocial approach (Gilbert, 1998) which outlines that shaming experiences by others are internalized and the individual comes to see and treat himself as others do (or at least as he perceives others do). However, results of the alternative model tested suggest that it is equally plausible that when self-criticism is elicited feelings of shame may be activated, leading to increased depressive, anxious and stressful feelings. Also, it is know that rumination can be both a causal factor and an effect of negative affect (Mor & Winquist, 2002).
Thus, it can be hypothesised that depression or anxiety can lead to increased self-criticism. Also, in future studies, hypotheses about other mediators of the shame-psychopathological symptoms’ link should be tested, since a proportion of this relation remained unexplained. The use of other assessment instruments (e.g., interview) should also be considered. Finally, the majority of the sample was female, and future studies should be more homogenous in terms of demographic characteristics to increase the generalizability of the findings.

Despite these limitations, this study offers an important contribution for the exploration of transdiagnostic factors and psychopathological symptoms in people with mental health problems. The use of a large clinical sample is, in our opinion, a great strength of this study. In fact, most of the published research in this field has relied mainly on non-clinical populations, and the psychological processes mediating shame-depression link might be different in clinical samples.

We believe that the topic of this study will be of interest to clinicians and researchers and adds to our understanding of common presenting issues in psychotherapy, and may help clinicians in assessing, understanding and targeting shame and self-criticism. In fact, if future studies corroborate this model, the treatment of depression, anxiety and stress symptoms should include interventions focused on the decrease of shame and self-criticism.
References


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