Shame and eating psychopathology in Portuguese women: Exploring the roles of self-judgment and fears of receiving compassion

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Abstract

Shame has been for long associated with the development and maintenance of body image and eating-related difficulties. However, the mechanisms underlying this association remain unclear. Therefore, the current study sought to examine the mechanisms of self-judgment and fears of receiving compassion from others in the association between external shame and disordered eating, while controlling for body mass index (BMI). Participants in this study were 400 women from the general population, aged between18 and 55 years old.

Correlation analyses revealed significant and positive relationships between external shame, self-judgment, fears of receiving compassion from others and eating psychopathology. A path analysis confirmed that, when controlling for the effect of BMI, external shame has a direct effect on disordered eating severity, and also an indirect effect, mediated by higher levels of self-judgment and increased fears of receiving others' kindness and compassion. Results showed the plausibility of the tested model which explained 36% of the variance of disordered eating. These findings seem to support that women who perceive that others view them negatively tend to be defensive and engage in maladaptive emotion regulation strategies (such as harsh critical attitudes towards the self and being resistant to others' compassion), which may trigger maladaptive eating attitudes and behaviours.

The current research appears to be an innovative study in the field of body image and eating-related psychopathology and seems to represent a new avenue for future research and for the development of intervention programs.

Keywords:

External shame; Self-judgment; Fears of compassion; Eating psychopathology; Women.

Introduction

Growing evidence has been showing that shame may represent a key factor in the development and maintenance of psychopathology (Gilbert, 1998; Tangney & Dearing, 2002). Particularly, higher levels of this emotion have been consistently associated with higher proneness to eating psychopathology (e.g., Gee & Troop, 2003; Troop, Allan, Serpell, & Treasure, 2008).

Numerous theoretical accounts converge on the notion that shame is a painful self-conscious and universal emotion (Gilbert, 1998; Kaufman, 1989; Lewis, 1995). Conceptualized as a socially-focused emotion, shame arises when the self perceives that others evaluate him/her as weak, unattractive, inferior and/or defective – external shame – (Gilbert, 1998, 2000; Kaufman, 1989). According to an evolutionary perspective, the need to be approved, valued, desired, and chosen by others, represents a fundamental human need (Gilbert, 2002; Gilbert & Irons, 2009). Thus, the perception that the self holds negative qualities or lacks attractive ones may trigger defensive responses, enacted to avoid others' rejection (e.g., Gilbert, 2000). In this line, shame can have a defensive function since it acts as a warning signal that one may be negatively evaluated by others and therefore devalued, ostracized, or rejected (Gilbert, 2002; Gilbert & Irons, 2009).

Shame may also become an internalized emotion, giving rise to a negative self-evaluative domain (Gilbert, 2000, 2003; Goss & Gilbert, 2002). In other words, internal shame involves automatic negative thoughts and judgments concerning the self (e.g. worthless, bad and unattractive), which create a hostile internal world (Gilbert, 1998, 2000; Tangney & Dearing, 2002). Some studies have reported that the way one deals with him/herself (e.g., critically versus kindly) has a major impact on one's mental health and well-being (Gilbert, 1989, 2002). Thus, when individuals present a self-judgmental attitude towards one's failures or inadequacies, over-identify themselves with one's own

thoughts and emotional states, and engage in feelings of isolation, they tend to reveal higher levels of distress, and may become more vulnerable to psychopathology (Neff, 2003a, 2003b). Indeed, a harsh and critical self-relationship appears to be linked with several psychopathological conditions, namely eating disorders (Ferreira, Pinto-Gouveia, & Duarte, 2013; Mendes, Marta-Simões, & Ferreira, 2016; Pinto-Gouveia, Ferreira, & Duarte, 2014). On the contrary, a self-compassionate relationship can be seen as an adaptive emotion regulation process, in which painful or distressing feelings are not avoided but instead held in awareness with kindness, understanding, and a sense of shared humanity (Neff, 2003b). Accordingly, this emotion regulation process is characterized by a self-to-self relationship which is punctuated by the ability to be kind, warm and sympathetic towards oneself, to recognize that mistakes are intrinsic to human experience, and to be aware of one's feelings and accept them, instead of becoming over-identified with them (Costa, Marôco, Pinto-Gouveia, Ferreira, & Castilho, 2015; Gilbert, 2005a; Neff, 2003b).

Research has shown that compassion may have a protective effect and promote well-being by buffering the impact of distressing and challenging situations (Leary, Tate, Adams, Allen, & Hancok, 2007; Neff, 2003b). In the area of eating psychopathology, several studies have covered the effectiveness of self-compassion, namely by showing its inverse relationship with disordered eating (Kelly, Vimalakanthan, & Carter, 2014; Webb & Forman, 2013), and its power to attenuate both body dissatisfaction (Ferreira, Matos, Duarte & Pinto-Gouveia, 2014), body shame and body surveillance (Daye, Webb, & Jafari, 2014). However, some individuals seem to perceive others' kindness and compassion as a threatening, rather than pleasant (Gilbert, 2005a). According to Gilbert (2010), fears of compassion may be due to the fact that affiliative feelings may trigger memories of desiring but not being a 'recipient' of compassionate feelings (Gilbert,

McEwan, Matos, & Rivis, 2011). In this sense, some individuals from insecure or low affection backgrounds face others' compassion with resistance and doubt, feeling that they do not deserve it, or perceiving themselves as weak or submissive if they accept these signals or expressions of kindness (Gilbert et al., 2011). Moreover, recent research demonstrated that the fear of receiving compassion from others may lead to a lower responsiveness others' caring and compassionate attitudes and, along with the fear of self-compassion, associate with self-criticism, anxiety, depression and stress (Cunha, Xavier, Galhardo, & Pereira, 2015). Specifically, in the eating psychopathology domain, Kelly and colleagues (2012) conducted a program designed to alleviate symptoms of eating disorders, and found that eating disorders' patients with low self-compassion and high fear of compassion showed higher severity of symptoms at the beginning of the intervention, and poorer treatment responses after 12-week intervention. Moreover, self-reassurance appears to be negatively linked with the fear of receiving compassion from others (Cunha et al., 2015; Gilbert et al., 2011).

To sum up, the relationship between shame and disordered eating behaviours has been well documented, in both clinical and non-clinical samples (e.g., Gee & Troop, 2003; Troop et al., 2008). Even though it is widely accepted that eating psychopathology has multiple risk factors, recent evidence has emphasized that interpersonal sensitivities and perceptions of being insecure in the social group play a central role in the development of disordered eating behaviours (Gilbert, 1989; Goss & Gilbert, 2002). Considering the current pressure in Western societies to accomplish a thin body shape, strategies such as body image and eating-related control tend to be developed by women to avoid shame, to improve one's social status, and to compete for social advantages (Burkle, Ryckman, Gold, Thornton, & Audesse, 1999; Ferreira, Pinto-Gouveia, & Duarte, 2013). Nevertheless, the mechanisms involved in the link between shame and eating

psychopathology need further clarification. Indeed, only few empirical studies have investigated the effect of self-judgment, and no research to date examined the role of fears of receiving compassion from others in this association.

Taking background data into account, the current study aimed at presenting and testing an integrative model which was designed to examine the effect of external shame on disordered eating, and the mediator roles of self-judgment and fear of receiving compassion from others. Higher levels of external shame were expected to explain a harsh self-judgmental attitude, and higher inability or difficulty to accept compassionate attitudes from others, which were hypothesized as mediator mechanisms that may explain the engagement in body image and eating-related disordered behaviours.

Material and Methods

Participants

The study's sample comprised 400 female participants from the general population, recruited through an online survey. Participants' ages ranged from 18 to 55 years (M = 30.55; SD = 11.04). Regarding marital status, most of the participants were single (n = 251; 62.7%), 128 (32.1%) were married or living together, 16 (4%) divorced and only 5 (1.3%) reported to be widows. Concerning the area of residence, 40.3% (n = 161) of the subjects lived in a rural area and 59.7% (n = 239) in an urban one. Participants' BMI (Body Mass Index) ranged from 15.2 to 38.06, presenting a mean of 23.16 Kg/m^2, which corresponds to a normal weight (18.5 < BMI < 24.99) (WHO, 1995) and reflects the BMI's distribution in the female Portuguese population (Poínhos et al., 2009).

Measures

Participants' demographic data (age, gender, education level, area of residence, marital status and current weight and height) was provided previously to the administration of self-report measures.

Body Mass Index (BMI) was calculated based on self-reported weight (kilograms) and height (meters) using the Quetelet Index (Kg/m^2).

Other As Shamer Scale (Goss, Gilbert, & Allan, 1994; Matos, Pinto-Gouveia, & Duarte, 2011). OAS is an 18-item scale designed to measure external shame, i.e., the perception that others see or judge the self as inferior, inadequate and defective. Participants were asked to rate on a five-point scale (0 = *Never* to 4 =*Almost always*) the frequency in which they make negative evaluations about how others judge them ("Other people see me as defective as a person"). Higher scores on this scale indicate higher levels of shame. The scale's reliability was found to be good in the original version (α = 0.92) and in the Portuguese version (α = 0.91).

Self-Compassion Scale (Costa et al., 2015; Neff, 2003b). SCS is a 26-item self-report instrument that assesses self-compassion through six distinct subscales: (1) common humanity; (2) isolation; (3) self-kindness; (4) self-judgment; (5) mindfulness; and (6) over-identification. According to the purpose of this study, only a composite measure gathering the 3 negative subscales (isolation, self-judgment and over-identification) was used, and defined as self-judgment dimension. Participants were asked to rate how they perceive their actions towards themselves in difficult times (e.g., "When I'm feeling down I tend to obsess and fixate on everything that's wrong") using a 5-point scale (from 1 = *Almost Never* to 5 = *Almost Always*). This scale showed good reliability, in the original study (α = 0.92), as well as in the Portuguese version (α = 0.89).

Fears of Compassion Scales (FCS; Gilbert et al., 2011; Matos, Pinto-Gouveia, & Duarte, 2011). This self-report measure includes three subscales: (1) fears of compassion

for self (15 items), which appraises the fear of demonstrating compassion for the self; (2) fears of compassion from others (FCS_fromOthers; 13 items), designed to measure how one reacts to the expression of compassion from other people, (e.g. "Feelings of kindness from others are somehow frightening"); and (3) fears of compassion for others (10 items) to assess fears of developing compassion for others. Participants were asked to rate on a 5-point Likert-type scale (from 0 = *Don't agree at all*, to 5 = *Completely agree*) how characteristic each sentence was of them. Thus, higher scores relate to increased fear of developing compassion for the self, for others, and of accepting compassion from others. For the purposes of our study, we only used the subscale fear of compassion from others. In the original version, FCS_fromOthers demonstrated good reliability, both in the students' sample and in the therapists'one (α = 0.85). Concerning the Portuguese version this subscale also revealed good internal consistency (α = 0.91) in a non-student sample (Simões & Pinto-Gouveia, 2012).

Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 1994; Machado et al., 2014). This 36-item self-report measure, developed from the Eating Disorder Examination interview, comprises four subscales that reflect the severity of eating psychopathology: restraint, eating concern, weight concern and shape concern. Participants were asked to rate the items (from 0 to 6 points) according to the frequency of occurrence (items 1-15, on a scale ranging from 0 = *None* and 6 = *Every day*) or severity (items 29-36, on a scale ranging from 0 = *None* and 6 = *Extremely*) of symptoms in the previous 28 days. Higher scores on this scale indicate higher levels of eating psychopathology. The present study only used the global EDE-Q score, computed by calculating the mean of the four subscales. The original EDE-Q and its Portuguese version presented good internal consistency (α = 0.94).

Cronbach's alphas of these measures, for the present study, are reported in Table 1.

Procedures

The current study was part of a wider research about the role of different emotion regulation processes on women' psychological functioning and mental health. Data collection and other study's procedures respected all ethical and deontological requirements, inherent to scientific research. The study's sample was obtained through online advertisements, using a social network (Facebook) and by e-mail invitations, in which a text that clarified the global aims of the study ("*Different people use different strategies when facing adversity and difficult times. We are interested in exploring the impact of using some of these strategies to cope with personal setbacks on women's psychological functioning and mental health"*), procedure, and participants' selection criteria (women aged between 18 and 55 years old) was included. The online advertisement included an Internet link which redirected potential participants to an online version of the questionnaires. All individuals who accepted to take part in the study provided their written inform consent previously to answering self-report measures.

Data analyses

Data analyses were conducted using the software IBM SPSS Statistics 22.0, and path analyses were performed using the software AMOS.

Descriptive statistics (means and standard deviations) were used to explore the features of the final sample. Additionally, product-moment Pearson correlations were conducted to examine the associations between body mass index (BMI), external shame (OAS), self-judgment (SJ), fear of compassion from others (FCS_fromOthers), and the severity of eating psychopathology (EDE_Q). The magnitudes of these correlations were examined taking into account Cohen's guidelines, in which magnitudes between 0.1 and 0.3 were considered weak, between 0.3 and 0.5 were considered moderate, and

magnitudes above 0.5 were considered to be strong, considering a significance level of 0.05 (Cohen, Cohen, West, & Aiken, 2003). Finally, path analyses were performed to test presumed structural relations among the variables in the purposed model. Specifically, the link between external shame and disordered eating was explored, and whether self-judgment and fears of compassion from others mediated this association, after controlling for BMI (Figure 1). Thus, external shame was considered as exogenous variable; self-judgment and fears of compassion from others were hypothesized as mediator variables and EDE_Q was entered as an endogenous variable.

The Maximum Likelihood estimation method was performed to test regression coefficients and to compute fit statistics. Moreover, a series of goodness-of-fit indices were calculated to examine the adequacy of the model to the empirical data (CMIN/DF; TLI; CFI; RMSEA) (Hu & Bentler, 1999).

Additionally, the Bootstrap resampling method was used to analyse the significance of the mediational paths, using 5000 Bootstrap samples and 95% confidence intervals (Kline, 2006) around the standardized estimated of direct, indirect and total effects.

Results

Preliminary analyses

Following the recommendations of Evans (1999), Osborne and Overbay (2004) and Sachs (1982), although some cases presented values that could point the presence of outliers, extreme values were not found, therefore they were not excluded, since data followed a normal distribution. Normality was examined by exploring the values of skewness (SK) and Kurtosis (Ku). Skewness values ranged from 0.18 to 1.17 (for the self-judgment and BMI variables, respectively), while the values of Kurtosis ranged from -0.06 to 1.83 (for the self-judgment and BMI variables, respectively). The inspection of

these values indicated that there was no severe violation of the normal distribution (Kline, 2005).

Preliminary analyses indicated that data followed the assumptions of homoscedasticity, normality, linearity, independence of errors and multicollinearity and singularity among the variables (Field, 2004).

Descriptive and correlation analyses

Descriptive statistics (means and standard deviations) of the study's variables for the total sample (N = 400) are presented in the Table 1.

Correlation analysis' results demonstrated that BMI was positively linked, albeit weakly, with OAS and EDE-Q. Also, external shame showed positive and strong associations with the mechanisms of self-judgment and fear of receiving compassion from others, and a moderate association with EDE-Q. Moreover, self-judgment and fear of receiving compassion from others appeared to be positively linked with each other, and evidenced a positive and moderate association with EDE_Q.

Table 1 goes here

Path analyses

Path analysis was performed to test whether the mechanisms of self-judgment and fear of compassion from others mediate the impact of external shame on disordered eating attitudes and behaviours, while controlling for the effect of body mass index (BMI).

The path model was tested through a saturated model (with zero degrees of freedom), consisting of 18 parameters, which explained 36% of eating psychopathology (EDE-Q). Results indicated that the two following paths were not significant: the direct effect of

body mass index on self-judgment ($b_{BMI} = 0.000$; SEb = 0.009; Z = -0.043, p = 0.965), as well as the direct effect of body mass index on fears of compassion from others (b_{BMI} = -0.063; SEb = 0.109; Z = -0.579, p = 0.563). These paths were progressively eliminated and the model was readjusted. The final model (Figure 1) predicting disordered eating revealed that all path coefficients were statistically significant and presented an excellent model fit [$\chi^2_{(2)} = 0.337$; $p = 0.845$, CMIN/DF = 0.17; TLI = 1.00; CFI= 1.00; RMSEA = 0.00; p = 0.94; 95% CI = 0.00 - 0.06] (Hu & Bentler, 1999). Particularly, this model accounted for 36% of the EDE-Q's variance, while controlling for the effect of BMI, and revealed that external shame accounted for 30% of self-judgment's variance and 39% of the variance of fear of receiving compassion from others.

Specifically, external shame presented a direct effect of 0.55 ($b_{OAS} = 0.036$; SEb = 0.003; Z = 13.039, $p < 0.001$) on self-judgment, of 0.62 ($b_{OAS} = 0.566$; SEb = 0.036; Z = 15.908, $p < 0.001$) on fear of compassion from others and 0.20 ($b_{OAS} = 0.021$; SEb = 0.006; Z = 3.657, $p < 0.001$) on EDE-Q. In turn, self-judgment and fear of compassion from others had a direct effect on EDE-Q of 0.12 ($b_{SJ} = 0.190$; SEb = 0.077; Z = 2.467, p = 0.014) and 0.18 ($b_{FCS_fromOthers} = 0.022$; SE$b$ = 0.006; Z = 3.552, $p < 0.001$), respectively.

The analysis of indirect effects demonstrated that external shame presented an indirect effect on EDE-Q of 0.18 (95% CI = 0.094 - 0.264), which was partially mediated by self-judgment and fear of compassion from others. This indirect effect occurred through self-judgment ($b = 0.547 \times 0.120 = 0.066$) and fears of others' compassion ($b = 0.623 \times 0.185 = 0.115$).

To sum up, the model accounted for 36% of EDE-Q's variance, revealing that the impact of external shame on eating psychopathology was partially carried through the mechanisms of self-judgment and fear of receiving compassion from others.

Figure 1 goes here

Discussion

For long, shame has been associated with eating psychopathology, both in clinical and nonclinical samples (e.g., Ferreira et al., 2013; Gee & Troop, 2003; Goss & Gilbert, 2002; Pinto-Gouveia et al., 2014; Troop & Redshaw, 2012). Even though growing evidence demonstrates the impact of the experience of shame on disordered eating, the underlying emotional processes remain unclear. Hence, the current study sought to explore whether a self-judgmental attitude and the fear of receiving compassion from others would mediate the link between perceptions of being negatively evaluated by others and disordered eating. It was hypothesized that the aforementioned association is not direct, and that some important maladaptive processes (e.g., critical attitude towards the self and fear of receiving kindness and compassion from others) would mediate it.

In accordance with previous literature, correlation analyses showed that external shame was strongly associated with higher levels of self-judgment and of fears of receiving compassion from others (Gilbert, McEwan, Catarino, Baião, &Palmeira, 2014; Gilbert et al., 2011). Moreover, results supported that external shame was positively linked with overall levels of eating psychopathology. These findings were expected and congruent with extant research, corroborating that shame experiences may comprise a primary threat to one’s social self and self-identity and, therefore, associated with the quick activation of defensive emotional and behavioural responses (e.g., Gilbert, 1998, 2000), namely body image and eating-related control behaviours. Therefore, these data seem to support the relevant role of shame on body image and eating-related psychopathology (Ferreira et al., 2013; Gee & Troop, 2003; Goss & Gilbert, 2002; Pinto-Gouveia et al., 2014).

Additionally, our results revealed that higher levels of a judgmental inner relationship were associated with the fear of receiving others' care and compassion. Similarly, these emotion processes were positively linked to a higher engagement in maladaptive body and eating-related attitudes and behaviours. These findings appear to corroborate that people who are more self-critical, not only self-direct hostility, but also tend to be more resistant to receive others' support, kindness, and compassion (Cozolino, 2006; Gilbert et al., 2011; Gilbert et al., 2014). Likewise, these results seem to corroborate previous studies (e.g., Gilbert et al., 2014) and add to the literature, by highlighting the relationship between these maladaptive emotion regulation processes and eating psychopathological indicators.

All of these associations were further examined in a path analysis which tested whether the mechanisms of self-judgment and fears of compassion from others mediated the impact of external shame on disordered eating attitudes and behaviours, while controlling for the effect of body mass index (BMI). This mediational explained a total of 36% of the variance of disordered eating behaviours. The results of the path analysis allowed to verify that, while controlling for BMI, external shame had a direct effect on self-judgment and on fears of receiving compassion from others, as well as on eating psychopathology severity. Also, these maladaptive emotion regulation processes emerged as the mechanisms through which shame partially led to disordered body image and eating-related behaviours. More specifically, our results suggested that, although shame directly impacts on eating psychopathology, this adverse effect was partially explained by the mechanisms of self-judgment and of fears of receiving compassion from others. Indeed, even though these maladaptive defensive responses, driven by shame, are intended to correct personal features and to protect the self (Gilbert & Irons, 2005), they may have paradoxical effects and promote extreme maladaptive behaviours (e.g.,

disordered eating). In this sense, extreme behaviours of control over one´s body and eating may emerge as compensatory strategies to strive for a secure social rank position and avoid shame, fuelled by maladaptive emotional processes (Gilbert, 2005b; Pinto-Gouveia et al., 2014)

These findings cannot, however, be considered without taking into account some limitations. Firstly, the main limitation is the cross-sectional design of the study, which particularly when used to test a hypothetical mediation may produce considerably biased estimates of longitudinal parameters and therefore restrain the establishment of causal directions between the variables (Maxwell & Cole, 2007). Thus, future studies should be developed based on longitudinal designs to explore the attained associations between variables over time. Additionally, the use of self-report measures and of an online survey (which could not be presented to participants in a randomized sequence) may be susceptible to biases. Therefore, it would be important to use a counterbalance research design, and include other assessment measures (e.g., interviews), in order to corroborate our findings. Furthermore, the study's sample was only composed of women from the general population, thus precluding once again the generalization of the results. In this sense, our model should be replicated in different samples, namely clinical samples with eating and weight-related disorders and men samples. Moreover, differences regarding urban versus rural environment should be explored in upcoming studies, as well as other cultural factors that could affect the phenomenology of eating psychopathology. Finally, this study did not entirely cover the multidetermined nature of eating psychopathology, thus it would be important to further explore different emotional regulation processes involved in the link between shame and disordered eating. Specifically, it seems particularly interesting that upcoming studies explore the specific contribution of body shame (for instance Body Image-related Shame assessed by the BISS; Duarte, Pinto-

Gouveia, Ferreira, & Batista, 2015) and of body image-related inflexibility (assessed by BI-AAQ; Sandoz, Wilson, Merwin, & Kellum, 2013).

To sum up, the present study seems to support that women who perceive that others view them negatively (e.g., inferior, inadequate, defectiveness) may endorse maladaptive emotion regulation strategies (such as harsh critical attitudes towards the self and higher resistance to receiving compassion from others), which may trigger disordered eating attitudes and behaviours

These findings seem to have important clinical implications suggesting the relevance of developing self-compassionate attributes and skills, rather than adopting a self-judgmental attitude, and emphasizing the importance of targeting mechanisms that block this adaptive and caring attitude (such as fears of compassion from others). Moreover, this is an incremental study in the field of body image and eating-related psychopathology and seems to represent a new avenue for future research and for the development of intervention programs.

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Table 1. *Cronbach's alpha (α),Means (M), Standard Deviations (SD), and intercorrelation scores on self-report measures (N = 400)*

Measures	*α*	*M*	*SD*	1	2	3	4
BMI	-	23.16	3.77	-	-	-	-
OAS	0.94	20.09	11.70	0.10*	-	-	-
SJ	0.92	2.81	0.78	0.05	0.55***	-	-
FCS_fromOthers	0.93	12.35	10.62	0.04	0.62***	0.47***	-
EDE-Q	0.92	1.47	1.23	0.42***	0.42***	0.34***	0.38***

Note. BMI = Body Mass Index; *OAS* = Other As Shamer Scale; *SJ* = Self-judgment dimension of the Self-Compassion Scale (SCS); *FCS_fromOthers* = Fears of compassion from others subscale of the Fears of Compassion Scale (FCS); *EDE_Q* = Eating Disorder Examination Questionnaire. ***$p < 0.001$

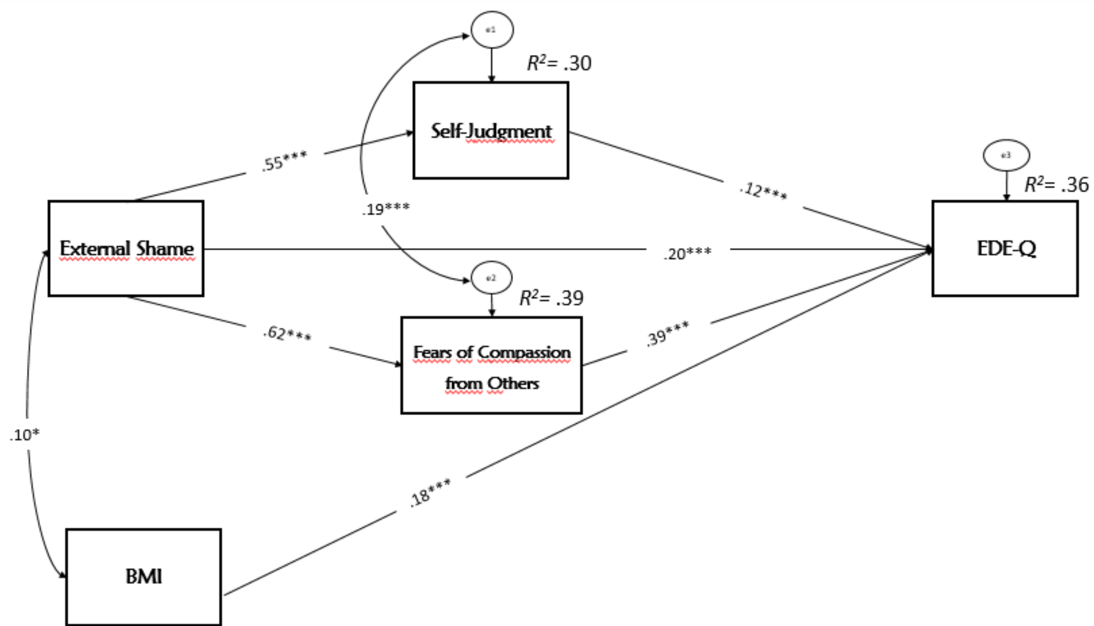

Figure 1. Final path model. *Note*: Standardized path coefficients among variables are presented. All paths were significant at the 0.05 level; $^{***}p < 0.001$. $^{*}p < 0.05$.