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Maria Monteiro Candeias

FROM SOCIAL ANXIETY TO DEPRESSION:
THE IMPACT OF EARLY SHAME EXPERIENCES, INTERNAL SHAME AND SELF-COMPASSION

Dissertação no âmbito do Mestrado Integrado em Psicologia, área de especialização em Psicologia Clínica e da Saúde, subárea de especialização em Intervenções Cognitivo-Comportamentais nas Perturbações Psicológicas e da Saúde, orientada pela Professora Doutora Maria do Céu Salvador e pela Professora Doutora Marcela Matos e apresentada à Faculdade de Psicologia e de Ciências da Educação.

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"Happiness can be found, even in the darkest of times,

if one only remembers to turn on the light"

A. D.

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From Social Anxiety to Depression:

The Impact of Early Shame Experiences, Internal Shame and Self-compassion

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Abstract

Previous studies have explored the relationship between shame and early experiences of shame with psychopathology, namely social anxiety and depression. Indeed, research has shown that shame experiences are linked to the emergence of shame, social anxiety and depression. Furthermore, research has linked social anxiety and depression, showing that the two conditions are frequently comorbid and that social anxiety disorder precedes the emergence of depression. Moreover, there is growing evidence that self-compassion is negatively associated to social anxiety, depression and shame. Since there were no prior studies addressing all these variables together, this was the aim of the present study, particularly to explore the impact of shame experiences with parents on depression and if social anxiety, shame (both external and internal), and self-compassion would mediate this relationship. The cross-sectional study included a university students' sample (M_{age} = 20.63; *SD* = 3.53). Partial correlations revealed positive, moderate and significant associations between all variables, with the exception of self-compassion that was significantly and negatively associated to all variables. Two mediation models were estimated revealing that shame experiences with parents were indirectly associated to depression, through social anxiety, internal shame and self-compassion. Other results are discussed, as well as contributions of the present study. Our study points to clinical implications related to the Compassion Focused Therapy, since it is an integrated and multimodal approach it may be more fitting to address individuals with social anxiety and comorbid depression, presenting high levels of shame.

Key-Words: shame experiences; shame; self-compassion; social anxiety; depression

Resumo

Estudos anteriores exploraram a relação entre vergonha e experiências precoces de vergonha com a psicopatologia, nomeadamente ansiedade social e depressão. De facto, a investigação mostrou que as experiências de vergonha estão ligadas ao desenvolvimento de vergonha, ansiedade social e depressão. Além disso, estudos associaram ansiedade social e depressão, mostrando que as duas condições são frequentemente comórbidas e que a perturbação de ansiedade social precede o desenvolvimento da depressão. Além disso, existem crescentes evidências de que a autocompaixão está negativamente associada à ansiedade social, depressão e vergonha. Uma vez que, não existiam estudos que relacionassem todas estas variáveis em conjunto, esse foi o objetivo do presente estudo, particularmente explorar o impacto das experiências de vergonha com os pais na depressão, e se a ansiedade social, a vergonha (externa e interna) e a autocompaixão mediariam esta relação. O estudo transversal incluiu uma amostra de estudantes universitários (M_{idade} = 20,63; *DP* = 3,53). As correlações parciais revelaram associações positivas, moderadas e significativas entre todas as variáveis, com exceção da autocompaixão que foi significativamente e negativamente associada a todas as variáveis. Dois modelos de mediação foram estimados, revelando que as experiências de vergonha com os pais foram indiretamente associadas à depressão, através de ansiedade social, vergonha interna e autocompaixão. Outros resultados são discutidos, bem como contribuições do presente estudo. O nosso estudo aponta para implicações clínicas relacionadas com a Terapia Focada na Compaixão, uma vez que, por ser uma abordagem integrativa e multimodal, pode ser mais adequada para abordar indivíduos com ansiedade social e depressão comórbida, e que apresentem altos níveis de vergonha.

Palavras-Chave: experiências de vergonha; vergonha; autocompaixão; ansiedade social; depressão

Introduction

Human relationships have evolved to provide a range of valued and necessary resources to individuals in form of protection, care, support, and opportunities for reproduction (Buss, 2003). Therefore, the need to affiliate with or belong to a social group is considered one of the central social motives of humans, with systems monitoring both inclusionary status (Baumeister & Leary, 1995) and social rank (Sapolsky, 2005). In the course of human evolution, people developed innate role-forming systems evolved for social relating, to avoid and prevent threats (Gilbert, 1989).

Additionally, researchers suggest that at least three types of emotion regulation systems can be distinguished in humans (Depue & Morrone-Strupinsky, 2005). The first system is the threat and protection one, whose function is to quickly detect threats and give rise to feelings of anxiety, anger or disgust that alert us to act against the threat, activating defensive responses such as escape, avoidance, inhibition, isolation, defence, persecution, aggression, submission, reconciliation, seeking security and affiliation with others (Gilbert, 2005, 2009). The second, the drive system activates positive feelings, which guide, motivate and encourage us to seek the necessary resources for survival (Gilbert, 2009). When in balance with other systems, it guides and motivates us to achieve important life goals; however, when overstimulated, it impels us to always seek and want more, which can result in frustration and disappointment (Gilbert, 2009). Finally, the soothing, contentment and affiliation system is characterized as an acceptance of the moment. Contentment is not just the absence of threat or low activity in the threat and protection system; it is related to a feeling of security and calm, a sense of peacefulness and well-being, also including feelings of affection and kindness (Gilbert, 2009).

Shame, shame experiences, social anxiety and depression

Studies have shown that shame can act as an internal process that stimulates threat and defensive emotions and behaviours; it is this stimulation of the threat system, as well as an incapacity to self-reassure or be kind to the self, which leads to negative emotions that are difficult to regulate and can lead to psychopathology (Gilbert, 2005, 2007a, 2009).

Shame seems to be a response to the social threat of being socially unattractive, i.e., a warning signal that one exists negatively in the mind of others, alerting individuals to do

adjustments within their social rank and social relationships, and activating defensive strategies to repair damage and consequent rejection, exclusion or harm (Gilbert, 1998, 2007a). According to the biopsychosocial model of shame (Gilbert, 1998, 2007a) it is possible to distinguish two types of shame. External shame is related to the perception of existing in a negative way in the minds of others (e.g., inferior, inadequate). The social world is experienced as dangerous, in which others are seen as critical, and the individual adopts defensive strategies to try to positively influence one's image in the minds of others. Internal shame results from the internalization of external shame as a defensive strategy and can result in the evaluation of the self in the same way that others do (as inferior and inadequate). Thus, it involves a self-critical attitude towards oneself and the implementation of submissive strategies associated with self-monitoring and self-blame in order to prevent or reduce possible damage (Gilbert, 1998, 2007a; Mikulincer, & Shaver, 2005).

Research has linked early negative experiences and shame memories to the emergence of shame (Andrews, 2002; Gilbert et al., 2003). Shame experiences are typically associated with perceptions of being criticised and diminished by others for attributes or actions of the self that others consider undesirable or unattractive (Gilbert, 1998), and tend to occur very early in life in interactions with significant others (e.g., parents, peers), therefore presenting a threat to the social self (Gilbert, 1998, 2003) and to self-identity (Andrews, 2002; Andrews & Hunter, 1997). Also, early experiences of shame, neglect or abuse have been associated with increased vulnerabilities to mental health problems (e.g., Castilho et al., 2014; Gilbert et al., 2003; Matos & Pinto Gouveia, 2010). Moreover, early shame interactions with attachment figures seem to be crucial in the way shame memories are structured and impact upon mental well-being (Matos & Pinto-Gouveia, 2011; Matos, Pinto-Gouveia & Costa, 2011). Such experiences, characterized by shame, neglect, fear of withdrawal of love and support, may over stimulate several brain pathways that mediate the threat system, leading to more easily triggered and intense negative affect and defensive strategies, such as depression (Matos & Pinto-Gouveia, 2011; Perry et al., 1995) and social anxiety (Calvete, 2014; Gilbert & Miles, 2000). In short, these negative early experiences may overstimulate the threat system (Eisenberger, 2011; Gilbert, 2005; Matos & Pinto-Gouveia, 2014; Perry et al., 1995; Taylor et al., 2011), while, at the same time, contribute to the underdevelopment of the soothing system (Gilbert, 2005, 2010), blocking feelings of

safeness and soothing in following relationships (Gilbert, 2010, 2015; Kelly & Dupasquier, 2016).

Feelings of shame are also positively associated with social anxiety (Gilbert, 2000; Gilbert & Miles, 2000; Matos et al., 2013; Weeks et al., 2011). Social anxiety can be defined as a fear of creating negative impressions in the minds of others and being negatively judged by them (APA, 2013; Gilbert & Trower, 2001). It is this focus on the self as unattractive, and diminished in the eyes of others, with fear of being negatively judged by them, that links social anxiety to shame (Clark & Wells, 1995; Gilbert, 2001; Gilbert & McGuire, 1998; Gilbert & Trower, 2001). Furthermore, studies have associated shame and depressive symptoms (Andrews et al., 2002; Cheung et al., 2004; Matos & Pinto-Gouveia, 2010; Tangney et al., 2007). In fact, shame and depression both relate to negative affective experiences involving self-relevant negative evaluations, such as direct attacks on a person's self-esteem, events undermining a person's sense of rank, social attractiveness and value (Gilbert 1997; Gilbert et al., 1995).

Social Anxiety and Depression

Social anxiety can be an adaptive response, since it may help people to pay attention to what is not socially acceptable and that could result in social damage (Gilbert, 1997, 2001; Gilbert & McGuire, 1998), i.e., to cope with social threats (Weeks et al. , 2008). According to Trower and Gilbert (1989), individuals with SAD tend to overuse the social rank system and to underuse the affiliation system, perceiving social cues and social relationships as a threat and dealing with social situations in a competitive way, instead of in an affiliative way (Gilbert, 2001; Gilbert & Trower, 2001; Weisman et al., 2011). Thus, these individuals seem to be entrapped in the interaction between drive and threat systems, associated with an under-stimulation of the soothing system (Gilbert, 2001, 2005; Gilbert & Trower, 2001).

In evolutionary terms, depression has been described as a defensive response to positions of low rank and powerlessness (Gilbert, 1992; Price et al., 1994). In this sense, depression is an involuntary defeat strategy that may arise from loss or reductions in one's perceived ability to compete for social place, (e.g., being rejected by a lover or feeling inferior to others), i.e., perceptions of inferior social rank (Gilbert, 1992; Price et al., 1994; Seligman, 1991; Sloman et al., 2003). Furthermore, depression is linked to innate protection strategies

that evolved for coping with loss of control over social resources, social disconnection and defeat, and can supress affect systems (Gilbert, 2007b).

SAD has been considered the most common comorbid anxiety disorder in patients with MDD (Belzer & Schneier, 2004). Furthermore, SAD has been found to preced the emergence of MDD (Beesdo et al, 2007; Beidel et al., 1999; Chavira et al, 2004; Dalrymple & Zimmerman, 2011; De Graaf et al., 2003; Kessler et al, 1999; Stein et al, 2001) demonstrating that SAD can be an important predictor of consequent depression. Different mechanisms have been hypothesized to link social anxiety to depression, including the presence of common factor between the two conditions (e.g., low self-esteem; Beidel et al., 2007) but research on such factors is still scarce.

Compassion, psychopathology and well-being

Compassion has been defined as a sensitivity to the suffering in the self and others, with a deep commitment to try to prevent and alleviate that same suffering (Gilbert, 2000, 2014). Compassionate motivations can be guided and directed through three different flows: experiencing compassion for other people; receiving compassion from other people; and experiencing compassion for ourselves (self-compassion) (Gilbert, 2009, 2010). The innate motivate for compassion is related to experiences of care, closeness, investment and sharing of positive affection on the part of caregivers who stimulate feelings of connection, deserving of love, empathic understanding and acceptance of their own emotions, which activate the soothing system (Collins & Feeney, 2000; Gilbert, 2005, 2006; Kunce & Shaver, 1994). On the other hand, shame experiences seem to activate and strengthen the threat regulation system, creating a sense of a threatened social self, in which the self is perceived as vulnerable, defective, unlovable or weak, and others are seen as critical, hostile, emotionally unavailable or even dangerous, which reinforces shame and other negative emotions (e.g. anxiety, sadness). In addition, these shame experiences may also be related to the underdevelopment of the soothing affect regulation system, linked to the sense of one's social security and the capacity to regulate negative threat emotions through affiliative affective and motivational states, such as (self)compassion (Gilbert, 2009; Liotti, 2004; Matos et al., 2015).

Several studies have concluded that compassion is positively related with well-being indicators such as life satisfaction, happiness, social connectedness, optimism, and positive affect, and negatively associated to anxiety, stress, depression, self-criticism, shame and rumination (Barnard & Curry, 2011; Goetz et al., 2010; Neff, 2003; Neff et al., 2007). Furthermore, high levels of self-compassion and compassion for others have been associated with improved mental and physical health and wellbeing, and better interpersonal relationships (Kirby, 2017). On the contrary, low levels of compassion and self-compassion have been linked to high levels of self-criticism, guilt, worry and rumination (Gilbert et al., 2011; Raes, 2010).

Compassion-Focused Therapy (CFT) hypothesises that the soothing and contentment affect regulation system is poorly accessible in people with high shame and self-criticism, in whom the threat system dominates their orientation to both the internal and external worlds (Gilbert, 2009). Moreover, the CFT model hypothesises that early experiences of warmth and safeness promote the development of the affiliative soothing system, which is linked to one's ability to access affiliative positive affective and motivational states, such as self-compassion, to down-regulate the threat system and negative affective states, such as shame and depression (Gilbert, 2009). Additionally, research has shown that compassion training has important health benefits, revealing that the presence of self-compassionate attitudes in the face of difficulties can protect against the traumatic effects of shame memories and negative affect, and act in promoting feelings of safeness (e.g., Steindl et al., 2018).

The present study

Previous studies have explored the relationship between shame and early experiences of shame with psychopathology, namely social anxiety and depression. Indeed, research has shown that early negative experiences and shame memories are linked to the emergence of shame and social anxiety. Furthermore, early shame interactions with attachment figures seem to be crucial in the way shame memories are structured and impact upon mental well-being, and can trigger negative affect and defensive strategies, such as depression. Likewise, studies have associated shame with social anxiety and with the development and maintenance of depression. Furthermore, research has linked social anxiety and depression, showing that the two conditions are frequently comorbid and that SAD precedes the emergence of

depression. Moreover, there is growing evidence that self-compassion has a powerful influence on physical and mental well-being, being positively associated with life satisfaction, happiness, social connectedness, optimism, and positive affect, and negatively associated to anxiety, stress, depression, self-criticism, shame and rumination.

However, no study had previously explored the relationship between early shame experiences with parents, external and internal shame, self-compassion and social anxiety, and its impact on depression. In this sense, the first aim of this study was to understand the mediator role of social anxiety and shame (both external and internal) on the relationship between shame experiences with parents and depression. The second aim to the study was to explore if (the lack of) self-compassion could also be a mediator factor between shame experiences with parents and depression, along with social anxiety and shame. In line with this, we expected shame experiences with parents, social anxiety, external and internal shame and depression to be significantly and positively correlated with each other, and that all these variables would be negatively associated with self-compassion (H1). It was also expected that social anxiety, external shame and internal shame would mediate the relationship between shame experiences with parents and depression (H2). Furthermore, we expected that the effect of shame experiences with parents on depression through social anxiety would also be mediated by internal and external shame (H3; double mediation). Finally, we predicted that self-compassion would mediate the impact that shame experiences with parents would have on depression and the impact of these experiences through social anxiety and shame on depression (H4).

Method

Sample

A cross-sectional correlational study with university students was conducted. Exclusion criteria were ages below 18 and over 65 years old or evidence of random answers in the questionnaires.

The sample comprised 486 college students, 349 (71.8%) female and 137 (28.2%) male, with a mean age of 21 (M = 20.63; SD = 3.53). The average years of schooling was 13 (M = 13.33; SD = 1.48). There were no statistically significant gender differences in age ($F_{(1)}$

= 2.14, p = .144). There were statistically significant gender differences in terms of education years ($F_{(1)}$ = 10.487, p = .001); however, the effect size revealed to be small (η^2p = .021).

Measures

A sociodemographic data questionnaire was administered in order to obtain information regarding gender, age, years of education successfully completed, course and year. In addition, the following self-reported instruments were administered.

The Childhood Shame Experiences Scale (EEVI; Dinis et al., 2009) is a 15-item self-report scale that seeks to assess the experiences of shame in childhood, i.e., the extent to which participant felt humiliated, criticized, degraded and shamed by their parents, and how frequently those shame experiences occurred. Participants respond to each item based on a 5-point Likert scale ranging from 1 ("Never true") to 5 ("Always true"), in which the higher the score of the items, the more frequent was the shame experience. In the original study, this scale presented an excellent internal consistency for both parents ("Father", α = .93 and "Mother", α = .92). In the present study, we used a total of the scale, adding together both parents, and this composite measure showed an excellent internal consistency value (α = .93).

The External and Internal Shame Scale (EVEI; Ferreira et al., 2020) is an 8-item self-report scale that measures the frequency of shame feelings, in which higher scores represent a higher frequency of external and internal shame. Each item is rated in a 5-point Likert scale (ranging from 0 = "Never" to 4 = "Always"). In the original study, this scale presented a good internal consistency, revealing a factorial structure comprised of external shame and internal shame, with a Cronbach's alphas of .80 and .82, respectively, and a Cronbach's alpha of .89 for the global score. In the present study, both subscales revealed a good internal consistency (α = .85 for external shame and α = .82 for internal shame).

The Compassionate Engagement and Action Scales (CEAS; Gilbert et al., 2017) is a 39-item self-report scale that assesses competencies that facilitate turning towards and engaging in suffering (compassion engagement) and competencies that facilitate actions to reduce and prevent suffering (compassionate actions) through three different orientations of compassion: compassion for others, from others and for self. Each scale consists of 8 items reflecting specific compassion engagement competencies and 5 items which reflect specific compassionate actions, with participants being asked to, on a 10-point Likert scale (1 =

"Never" to 10 = "Always "), record how they respond in the face of their own suffering, the suffering of others or when they experience compassion from others. Higher results correspond to greater compassionate skills. The original scale shows good internal consistency (ranging between .72 and .94) and good temporal stability, (ranging between .59 and .75) in all samples. In the present study, only the scale of Self-Compassion was used, presenting a good internal consistency (α = .76).

The Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1998; Portuguese version by Pinto-Gouveia & Salvador, 2001) measures social anxiety felt in the interaction with others. It is a 19-items self-report scale, answered with a 5-point Likert scale ranging from 0 ("Not at all") to 4 ("Extremely"), in which a higher overall score is associated to a higher level of anxiety in situations of social interaction. The original version presented an excellent internal consistency, with a Cronbach's alpha of .94 for a community sample and .93 for a social phobic sample. The Portuguese version also displayed good psychometric characteristics, with a Cronbach's alpha of .90 and a test-retest correlation coefficient of .77. In this study, the scale also revealed an excellent internal consistency, with a Cronbach's alpha of .91.

The Depression Anxiety and Stress Scale-21 (DASS-21; Lovibond & Lovibond, 1995; Portuguese version by Pais-Ribeiro et al., 2004) is a 21-item self-report scale including three subscales, depression, anxiety and stress. It measures the extent to which a person has experienced each symptom over the past week and participants respond based on a 4-point Likert scale (ranging from 0 = "Did not apply to me at all" to 3 = "Applied to me most of the time"). Both the original study and the Portuguese version presented very good internal consistencies for each scale (ranging between .74 and .91) and acceptable convergent validity. In the present study, only the subscale of depression was used, presenting a very good internal consistency (α = .87).

Procedure

The present study was previously approved by the Ethics Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra. The sample was collected after proper consent was given by the faculties and respective teachers, in 17 different courses of higher education in Coimbra. Prior to the application of the research

protocol, subjects were given a brief explanation of the research's purposes, its confidentiality and their voluntary participation. Anonymity and data confidentiality were ensured, as well as the use of data only for the purposes of this study. Participants then provided their informed consent. Participants answered a sociodemographic data questionnaire and the set of self-report questionnaires in paper format. The research protocol had an average filling time of 40 minutes and two counterbalanced versions in order to prevent effects of fatigue and response contamination.

Data Analysis

The SPSS program (Statistical Package for the Social Sciences version 22; Armonk, NY: IBM Corp.) was used to perform the data analyses and path analyses were carried out using PROCESS computation tool for SPSS (version 3.5; Hayes, 2018).

Gender differences for all the variables under study were explored using general linear model. The interpretation of the effect size parameter was based on Cohen's criteria (1988), according to which partial eta squared values from .01 to .06 are considered small, from .07 to .13 medium and above .14 are considered high. The examination of skewness and kurtosis of each variable was assessed, to verify the adherence to normality, where skewness and kurtosis values between -2 and 2 were considered reasonably normally distributed (George & Mallery, 2010). Outlier's analysis was performed by graphing the results (box diagrams). Descriptive statistics were performed to analyse demographic variables and variables under study. The internal consistency indices were calculated for each instrument, considering Cronbach's values in which less than .60 are considered inadmissible, between .60 and .69 are low, from .70 to .79 are interpreted as acceptable, between .80 to .89 are high and excellent between .90 to 1 (Pestana & Gageiro, 2008). In order to explore the relationships between variables under study, Pearson correlation coefficients were conducted, identifying possible covariates and analysing the associations between variables, according to the proposed hypotheses. For the assessment of the magnitude of correlations we considered a correlation coefficient lower than .20 to reveal a very low association, between .21 and .29 a low association, between .30 and .69 moderate, between .70 and .89 high and between .90 and 1 an excellent association (Pestana & Gageiro, 2014). We examined the variance inflation factor ($VIF < 5$) and the correlation matrix for all constructs

(Kline, 2005) to detect multicollinearity. Regarding the remaining assumptions needed for regression analysis, homoscedascity, normality of residuals and linearity were analyzed through the dispersion graphs of the residuals and autocorrelation of the residuals through the Durbin Watson's test (where values around 2 indicate no autocorrelation).

To examine whether the shame experiences with parents would be associated with depression through social anxiety, external shame and internal shame a mediation model was estimated with PROCESS (model 81 in Hayes, 2018; Fig. 1). The shame experiences with parents was used as an independent variable; social anxiety, external shame and internal shame were tested as mediators; and depression was entered as the dependent variable. The mediation effect was evaluated using a bootstrapping procedure with 10000 resamples which creates a 95% bias-corrected and enhanced confidence intervals of the indirect effects. These effects are considered significant ($p < .05$) if zero is not included within the lower and upper bounds of the confidence intervals.

In addition, to examine the association between shame experiences with parents and depression through social anxiety, shame and self-compassion another mediation model was estimated with PROCESS (model 6 in Hayes, 2018; Fig. 2). The shame experiences with parents was used as an independent variable; social anxiety, shame and self-compassion were entered as mediators; and depression was the dependent variable. The indirect effect was assessed through the same procedure as the first mediation model, as mentioned above.

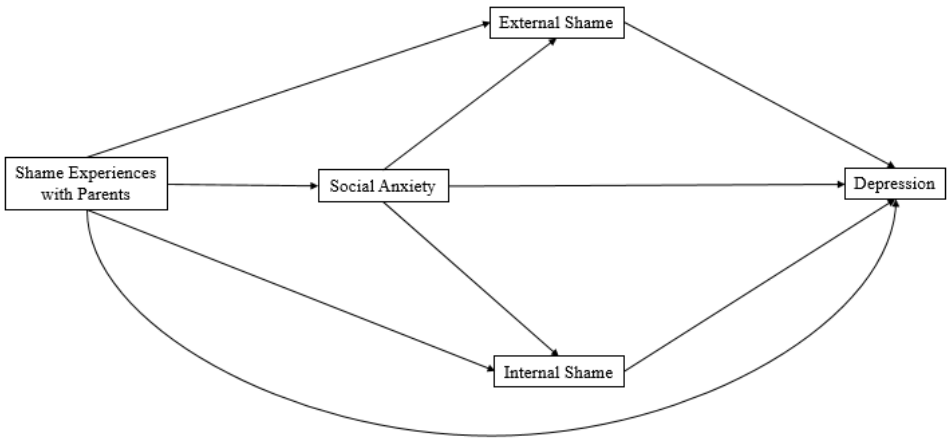

Fig. 1. *Conceptual diagram of the proposed mediation model.*

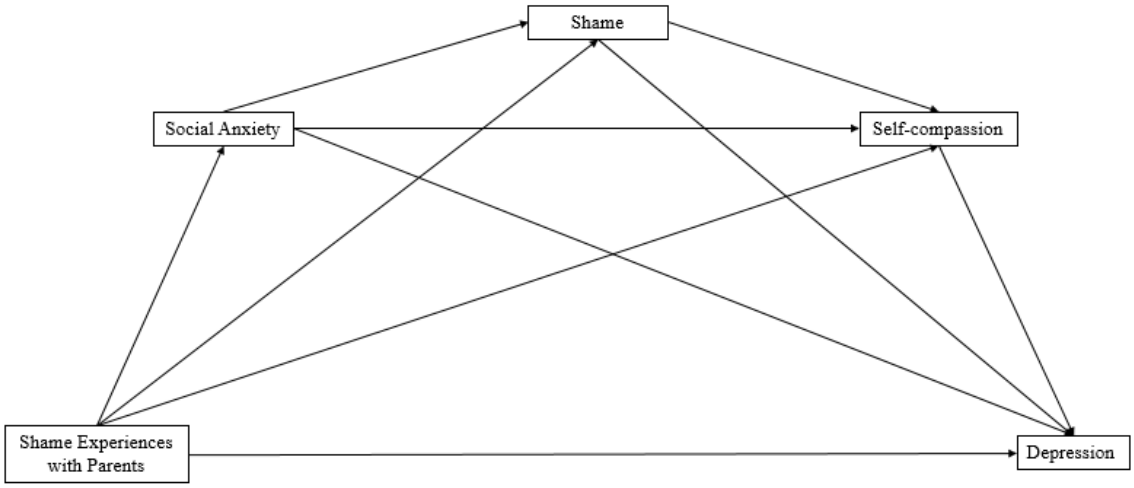

Fig. 2. *Conceptual diagram of the proposed mediation model.*

Results

Preliminary Data Analysis

Missing values for the variables under study were managed by simple substitution of the mean factor or total of each subject. When gender differences for variables under study were investigated, some significant gender differences were found; however, since the effect size was small it was decided not to control gender in later regression analyzes.

No severe violations to the normal distribution of the variables were found, with values of kurtosis and skewness within normal values. Although there were moderate outliers for some variables under study, after assessing that there were no significant differences in results with and without outliers, we opted to keep them and insure ecological validity.

Correlations between study variables revealed significant and moderate to high associations. However, when we examined the variance inflation factor (*VIF* <5), there were no multicollinearity violations. Additionally, in order to examine the adequacy of the data for regression analysis, we explored the residual dispersion graphs. The graphs showed that the residues were normally distributed, displaying linearity and homoscedasticity. Along with the good outcomes in the Durbin-Watson test, these results suggest that the data is fit for regression analysis.

Correlations

Table 1 presents descriptive statistics and Pearson correlations between variables under study. The correlation analysis revealed that all associations between study variables were positive, significant and moderate, with the exception of self-compassion that was significantly and negatively associated to all variables although the association with shame experiences with parents was very low, low with social anxiety, and moderate with shame (internal and external) and with depression.

Table 1. Means, standard deviation and matrix of inter-correlations among study variables

				Total Sample (N = 486)			
Variables	**1**	**2**	**3**	**4**	**5**	**6**	**M *(SD)***
1 EEVI-Total	-						52.42 (18.12)
2 SIAS	.311**	-					34.38 (14.24)
3 ES	.436**	.598**	-				5.51 (3.39)
4 IS	.427**	.619**	.783**	-			4.74 (3.44)
5 SC	-.171**	-.286**	-.311**	-.438**	-		58.93 (11.9)
6 DPR	.305**	.474**	.493**	.626**	-.371**	-	4.19 (4.08)

Note. EEVI-Total = Childhood Shame Experiences Scale for both parents; SIAS = Social Interaction Anxiety Scale; ES = External Shame subscale of the External and Internal Shame Scale; IS = Internal Shame subscale of the External and Internal Shame Scale; SC = Self-compassion subscale of the Compassionate Engagement and Action Scales; Depression subscale of the Depression Anxiety and Stress Scale-21; M = Mean; SD = standard deviation; **p < .01.

The Mediating Role of Social Anxiety, External and Internal Shame in the Relationship between Shame Experiences with Parents and Depression

Process model 81 (Hayes, 2018) was estimated to explore if shame experiences with parents would predict depression through social anxiety and shame (whether external or internal). As presented in Fig. 3, shame experiences with parents was significantly associated with social anxiety ($\beta = .31$, $p < .001$), explaining 10 % of its variance. Consequently, shame experiences with parents ($\beta = .26$, $p < .001$) and social anxiety ($\beta = .53$, $p < .001$) were significantly associated with internal shame, explaining 44% of its variance. Moreover,

shame experiences with parents (β = .28, p <.001) and social anxiety (β = .52, p < .001) were significantly associated with external shame, explaining 43 % of its variance. Furthermore, social anxiety (β = .14, p = .003) and internal shame (β = .56, p < .001) were significantly associated with depression, unlike external shame (β = -.05, p = .37). Additionally, shame experiences with parents (β = .04, p = .27) was not directly significantly associated with depression. All these variables explained 41 % of depression variance.

Moreover, three significant indirect effects were found in the association between shame experiences with parents and depression. Shame experiences with parents was indirectly associated with depression through social anxiety (point estimate = .04, 95 % CI = .01/.08) and internal shame (point estimate = .15, 95% CI = .01/.2), but not through external shame (point estimate = -.01, 95% CI = -.05/.02). Consequently, shame experiences with parents was indirectly associated with depression through both social anxiety and internal shame (point estimate = .09, 95% CI = .06/.13), but not through both social anxiety and external shame (point estimate = -.009, 95% CI = -.03/.01). Thus, considering that the association between shame experiences with parents and depression is only explained through our mediating variables, this presents a total mediation. Finally, the total effect of shame experiences with parents on depression was significant (β = .31, p < .001). Direct, indirect and total effects are presented in table 2.

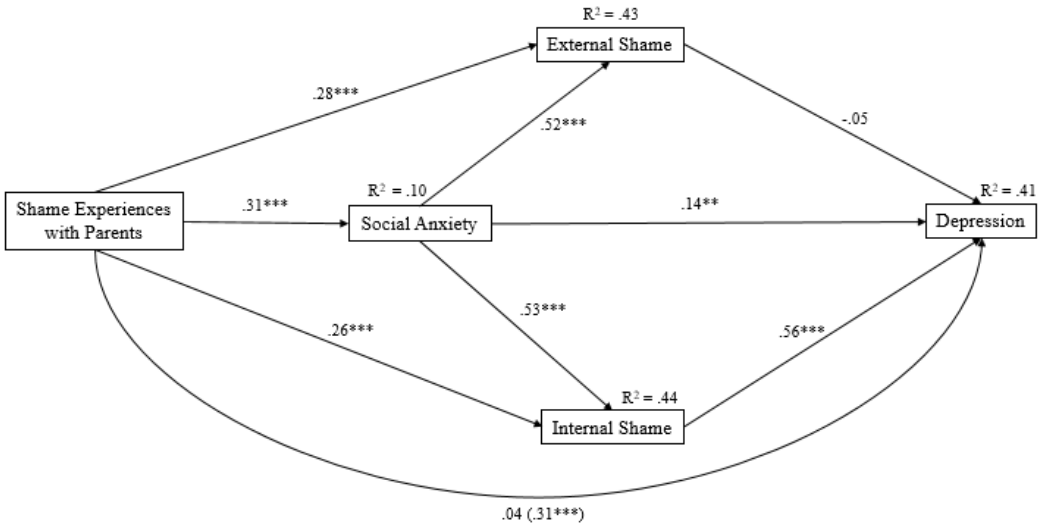

Fig. 3. Mediation model diagram (Model 81).

Note. Path values represent standardized regression coefficients. Values inside parenthesis represent the total effect of X on Y. ** $p < .01$; *** $p < .001$.

Table 2. *Summary of the direct, indirect and total effects.*

Direct Effects	***β***	***SE***	***t***	***p***	***95% CI***
Shame Experiences with Parents → Social Anxiety	.31	.03	7.1	< .001	.18/.31
Shame Experiences with Parents → External Shame	.28	.007	7.5	< .001	.04/.07
Shame Experiences with Parents → Internal Shame	.26	.007	7.2	< .001	.04/.06
Shame Experiences with Parents → Depression	.04	.009	1.1	.27	-.008/.03
Social Anxiety→ External Shame	.52	.009	14.06	< .001	.1/.14
Social Anxiety → Internal Shame	.53	.009	14.7	< .001	.1/.15
Social Anxiety → Depression	.14	.01	2.1	.003	.01/.07
External Shame→ Depression	-.05	.07	-.89	.37	-.21/.08
Internal Shame → Depression	.56	.07	9.3	< .001	.53/.81
Indirect Effects	***β***	***SE***	***t***	***p***	***95% CI***
Shame Experiences with Parents → Social Anxiety→ Depression	.04	.02	-	-	.01/.08
Shame Experiences with Parents → External Shame→ Depression	-.01	.02	-	-	-.05/.02
Shame Experiences with Parents → Internal Shame → Depression	.15	.03	-	-	.01/.2
Shame Experiences with Parents → Social Anxiety → External Shame → Depression	-.009	.01	-	-	-.03/.01
Shame Experiences with Parents → Social Anxiety → Internal Shame → Depression	.09	.02	-	-	.06/.13
Total Effect	***β***	***SE***	***t***	***p***	***95% CI***
Shame Experiences with Parents → Depression	.31	.01	6.95	< .001	.05/0.9

Note. β = standardized regression coefficient; SE = standard error; *p* = statistical significance; *CI* = confidence interval

The Mediating Role of Social Anxiety, Internal Shame and Self-compassion in the Relationship between Shame Experiences with Parents and Depression

Once established that social anxiety and internal but nor external shame were significant mediators, we proceed to estimate another mediation model (Model 6, Hayes, 2018) to explore the possible mediating role of self-compassion in the relationship between shame experiences with parents and depression. As presented in Fig. 4, shame experiences with parents was significantly associated with social anxiety ($\beta = .31$, $p < .001$), explaining 10 % of its variance. Consequently, shame experiences with parents ($\beta = .26$, $p < .001$) and social anxiety ($\beta = .53$, $p < .001$) were significantly associated with internal shame, explaining 44% of its variance. Moreover, internal shame ($\beta = -.45$, $p < .001$) was negatively and significantly associated with self-compassion, unlike shame experiences with parents ($\beta = .02$, $p = .62$) and social anxiety ($\beta = -.01$, $p = .81$), all explaining 20% of self-compassion variance. Furthermore, social anxiety ($\beta = .13$, $p = .005$) and internal shame ($\beta = .48$, $p < .001$) were positively and significantly associated with depression, and self-compassion ($\beta = -.11$, $p = .004$) was negatively and significantly associated with depression. Additionally, shame experiences with parents ($\beta = .04$, $p = .30$) was not directly significantly associated with depression. All these variables explained 41 % of depression variance.

Moreover, five significant indirect effects were found in the association between shame experiences with parents and depression. Shame experiences with parents was indirectly associated with depression through social anxiety (point estimate = .04, 95 % CI = .01/.07) and internal shame (point estimate = .12, 95% CI = .08/.2), but not through self-compassion (point estimate = -.003, 95% CI = -.01/.009). Consequently, shame experiences with parents was indirectly associated with depression both through social anxiety and internal shame (point estimate = .08, 95% CI = .05/.11), and both through internal shame and self-compassion (point estimate = .01, 95% CI = .004/.02), but not through both social anxiety and self-compassion (point estimate = .0004, 95% CI = -.004/.005). Additionally, shame experiences with parents was indirectly associated with depression through social anxiety, internal shame and self-compassion (point estimate = .008, 95% CI = .002/.02). Thus, considering that the association between shame experiences with parents and depression is only explained through our mediating variables, this presents a total mediation.

Finally, the total effect of shame experiences with parents on depression was significant (β = .30, p < .001). Direct, indirect and total effects are presented in table 3.

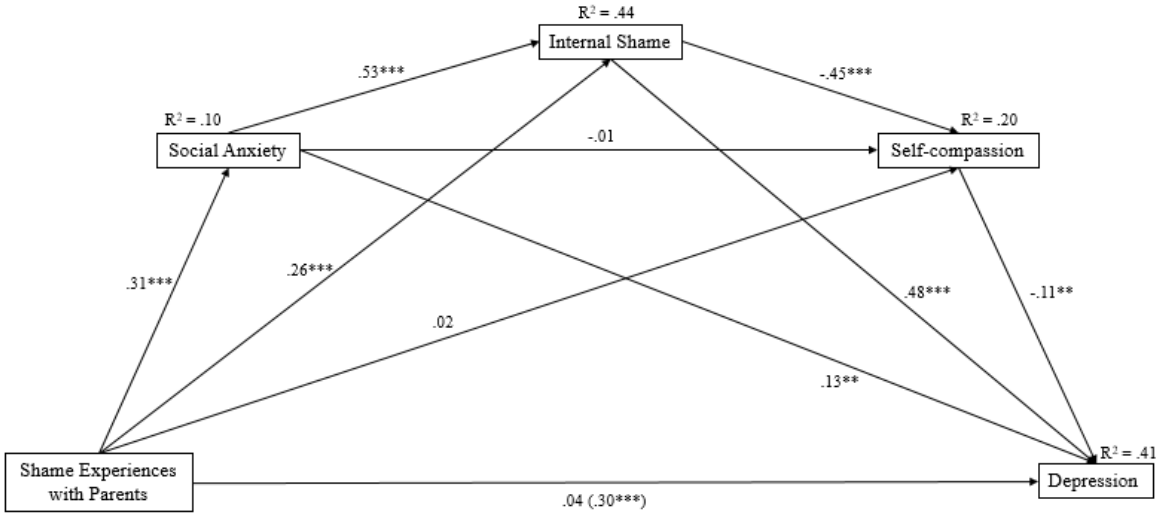

Fig. 4. Mediation model diagram (Model 6).
Note. Path values represent standardized regression coefficients. Values inside parenthesis represent the total effect of X on Y. ** *p* < .01; *** *p* < .001.

Table 3. *Summary of the direct, indirect and total effects.*

Direct Effects	***β***	***SE***	***t***	***p***	***95% CI***
Shame Experiences with Parents ⟶ Social Anxiety	.31	.03	7.03	< .001	.17/.31
Shame Experiences with Parents ⟶ Internal Shame	.26	.007	7.14	< .001	.04/.06
Shame Experiences with Parents ⟶ Self-compassion	.02	.03	.50	.62	-.04/.07
Shame Experiences with Parents ⟶ Depression	.04	.009	1.03	.30	-.008/.03
Social Anxiety⟶ Internal Shame	.53	.009	14.63	< .001	.11/.15
Social Anxiety⟶ Self-compassion	-.01	.04	-.23	.81	-.1/.08
Social Anxiety⟶ Depression	.13	.01	2.9	.005	.01/.06

Internal Shame → Self-compassion	-.45	.19	-8.05	< .001	-1.9/-1.2
Internal Shame → Depression	.48	.06	9.5	< .001	.45/.69
Self-compassion → Depression	-.11	.01	-2.9	.004	-.07/-.01
Indirect Effects	***β***	***SE***	***t***	***p***	***95% CI***
Shame Experiences with Parents → Social Anxiety → Depression	.04	.02	-	-	.01/.07
Shame Experiences with Parents → Internal Shame → Depression	.12	.02	-	-	.08/.17
Shame Experiences with Parents → Self-compassion → Depression	-.003	.006	-	-	-.01/.009
Shame Experiences with Parents → Social Anxiety → Internal Shame → Depression	.08	.02	-	-	.05/.11
Shame Experiences with Parents → Social Anxiety → Self-compassion → Depression	.0004	.002	-	-	-.004/.005
Shame Experiences with Parents → Internal Shame → Self-compassion → Depression	.01	.005	-	-	.004/.02
Shame Experiences with Parents → Social Anxiety → Internal Shame → Self-compassion → Depression	.008	.004	-	-	.002/.02
Total Effect	***β***	***SE***	***t***	***p***	***95% CI***
Shame Experiences with Parents → Depression	.30	.01	6.9	< .001	.05/.09

Note. β = standardized regression coefficient; SE = standard error; *p* = statistical significance; *CI* = confidence interval

Discussion

Previous research has explored the relation between shame and early experiences of shame with psychopathology, such as social anxiety (Gilbert & Miles, 2000) and depression (Matos & Pinto-Gouveia, 2011). Moreover, investigation has related social anxiety and depression, showing that the two conditions are frequently comorbid (Beidel et al., 2007).

Furthermore, there is increasing evidence that self-compassion has a strong influence on physical and mental well-being, being positively associated with life satisfaction, happiness, social connectedness, optimism, and positive affect (Goetz et al., 2010; Neff, 2003), and negatively associated to anxiety, stress, depression, self-criticism, shame and rumination (Gilbert et al., 2011; Raes, 2010). Nevertheless, no study has explored the relationship between early shame experiences with parents, external and internal shame, social anxiety and self-compassion, and its impact on depression. Hence, this study's general aim was to understand the role of shame (both external and internal), self-compassion and social anxiety in the relationship between shame experiences with parents and depression.

Regarding our study aims, and as hypothesized (H1), shame experiences with parents, social anxiety, external and internal shame and depression were positively and significantly associated with each other; self-compassion was negatively associated with all variables, although presenting a very low association with shame experiences with parents. These results are in line with previous studies namely: the relation between shame experiences with parents and shame (Andrews, 2002; Gilbert et al., 2003); the relation between shame experiences with parents and social anxiety (Calvete, 2014; Gilbert & Miles, 2000); the relation between shame experiences with parents and depression (Matos & Pinto- Gouveia, 2011); as well as the relation between shame experiences with parents and self-compassion (Steindl et al., 2018). Similarly, associations between social anxiety and external and internal shame are also in accordance with previous research (Clark & Wells, 1995; Gilbert, 2000; Matos et al., 2013). Regarding the association between social anxiety and self-compassion, and in line with our results, Werner and col., (2012) have found that individuals with SAD had significantly lower levels of self-compassion compared to healthy controls. Likewise, investigation has shown that social anxiety is positively associated with depressive symptoms (Salvador et al., 2015; Stein et al., 2001; Wittchen et al., 2003), also in accordance with our results. The high correlations between external and internal shame are in line with the extensive literature on the topic and the biopsychosocial model of shame (e.g. Gilbert, 1998, 2007a). Furthermore, both external and internal shame were negatively associated with self-compassion, also in accordance with previous research. (Neff, 2003; Goetz et al., 2010). Moreover, associations between external and internal shame, and depression are in line with previous investigation (Matos & Pinto-Gouveia, 2010; Tangney et al., 2007). Finally, the

association between self-compassion and depression is also according to previous research. (Neff, 2003; Raes, 2010; Steindl et al., 2018).

Furthermore, and to the best of our knowledge, no study had investigated the mediating role of social anxiety and shame (both external and internal), in the relation between shame experiences with parents and depression (H2). Results revealed that social anxiety and internal shame (but not external shame) mediated the relationship between shame experiences with parents and depression, partially confirming our hypothesis.

The association of shame experiences with parents and social anxiety has been previously demonstrated. Research links early negative experiences and shame memories to the emergence of social anxiety (Calvete, 2014; Gilbert & Miles, 2000). Furthermore, early experiences with caregivers, such as childhood maltreatment (eg. Bandelow et al., 2004; Bruce et al., 2012; Knappe et al., 2012; Kuo et al., 2011; Simon et al., 2009), adverse experiences of subordination and threat (Cunha et al., 2015), emotional abuse (Simon et al., 2009), emotional neglect (Shahar et al., 2014), not feeling valued and relaxed in early interactions with parents (Cunha et al., 2015), and criticism and shame from parents (Arrindell et al., 1983; Bögels & Perotti, 2010; Roças, 2014) have been shown to predict SA. Nonetheless, early experiences with peers, namely, being rejected, teased, ridiculed, neglected or harmed by them, seem to be more associated with SA and can also predict it (eg. Blote et al., 2015; Kingery et al., 2010; La Greca & Harrison, 2005; Siegel et al., 2009). The fact that shame experiences with parents and not shame experiences with peers was used may explain the small effect of shame experiences with parents on SA.

In fact, shame experiences are typically associated with perceptions of being criticised and diminished by others for attributes or actions of the self that others consider undesirable or unattractive (Gilbert, 1998), and tend to occur very early in life in interactions with significant others, therefore presenting a threat to the social self (Gilbert, 1998, 2003) and self-identity (Andrews, 2002; Andrews & Hunter, 1997). Thus, experiencing shame events may cause one to feel inferior, defective and unattractive, and to see others as critical, rejecting or abusive, hence influencing the development of negative self-other schemas (Matos & Pinto Gouveia, 2014; Matos et al., 2013). This, sequentially, could lead to a sense of constant threat to one's social self which triggers the threat system (Gilbert, 2010; Matos et al., 2013; Matos et al., 2015). In line with this, Gilbert and Irons (2004) suggested that

when children are subjected to early negative experiences, they become more vulnerable to threats and more focused on issues of social power.

Likewise, depression has been described as a defensive response to positions of low rank and powerlessness (Gilbert, 1992; Price & Sloman, 1987; Price et al., 1994). In this sense, depression is an involuntary defeat strategy that may arise from loss or reductions in one's perceived ability to compete for social place, (e.g., being rejected by a lover or feeling inferior to others), i.e., perceptions of inferior social rank. Moreover, depression is linked to one's failure on achieving important biosocial goals (e.g., be chosen as a friend, lover, team member). In this sense, we can describe depression as a toning up of threat sensitivities and a toning down of the positive ones, i.e., depression is focused on threat processing and the activation of protection strategies (Gilbert, 2007b). Thus, one can hypothesize that when socially anxious individuals perceive social rank changes and being in a lower social position as a loss or a failure to compete for biosocial resources, they can adopt defensive strategies in order to cope with this loss of control over social resources. They can feel helpless, powerless, and entrapped, and, in turn, develop depressive symptoms.

Other data may help to understand the impact on social anxiety on depressive symptoms. Indeed, socially anxious individuals have a tendency to make negative assumptions about the meaning of unpleasant social events for their future and their self-worth (Stopa & Clark, 2000), which could function as a vulnerability to develop major depressive disorder (Abramson et al., 1989). In this sense, SAD might contribute to the development of comorbid MDD via demoralization, or stress of inadequate social performance (Belzer & Schneier, 2004). Moreover, social isolation, typical of SAD, may lead to peer rejection, less friends, feelings of loneliness, sadness, and low self-esteem (Beidel et al., 1999; Beidel et al., 2007; Gazelle & Ladd, 2003), also features present in depression. In addition, the lack of social support may contribute to greater severity of MDD symptoms (Belzer & Schneier, 2004). On its turn, depressive symptoms such as fatigue and anhedonia may further increase social avoidance, leading to a vicious cycle of increasing fear, avoidance, and depression (Belzer & Schneier, 2004).

According to previous research (Matos & Pinto-Gouveia, 2014) experiences of criticism, hostility, abuse or neglect from parents may lead to affect-based memories of others as threatening and of the self as unattractive, undesirable or unlovable. In fact, shame

memories involving attachment figures seem to be more strongly associated with internalized shame, where one starts to see the self the same way others have, as flawed, worthless and rejectable (Matos & Pinto-Gouveia, 2014). This fits with the biopsychosocial model of shame (Gilbert, 1998, 2007a) and attachment literature (Baldwin & Dandenau, 2005; Bowlby, 1969, 1973; Mikulincer & Shaver, 2005), i.e., an individual who has experienced the self as undesirable, flawed and worthless, through early shaming experiences with attachment figures, may internalize these experiences, that become key to the development of negative self-relevant beliefs and to self-identity (Matos & Pinto-Gouveia, 2014). Furthermore, literature has reported that early experiences with parents, particularly of lack of warmth and safeness, are essential for the child's development of representations about themselves and others (eg. Bowlby, 1969). Moreover, children tend to evaluate life events in a self-referential way, interpreting them as the result of something wrong with the self. This can also occur because, for a child, particularly in the relationship with parents, blaming powerful others may be too dangerous, being safer to blame themselves for this lack of affection (Gilbert & Irons, 2005). Therefore, the absence of early experiences of warmth and safeness may lead to feelings that one is not cared for others because he/she is seen as defective in some way (external shame) (Caiado, 2017). Nevertheless, our results showed that only internal shame mediated the relationship between shame experiences with parents and depression, unlike external shame (H2). In this sense, one can hypothesize that when an individual internalizes these early experiences, he/she begins to see the self in the same way that others do (as inferior, defective and inadequate), adopting a self-critical attitude towards oneself and submissive strategies associated with self-monitoring and self-blame, which could function as a vulnerability to develop subsequent depression.

Furthermore, according to the biopsychosocial model of shame (Gilbert, 1998, 2007a) external shame is related to the perception of existing in a negative way in the minds of others (e.g., inferior, inadequate), whereas internal shame results from the internalization of external shame as a defensive strategy and can result in the evaluation of the self in the same way that others do. Therefore, internal shame involves a self-critical attitude towards oneself and the implementation of submissive strategies associated with self-monitoring and self-blame in order to prevent or reduce possible damage (Gilbert, 1998, 2007a; Mikulincer & Shaver, 2005). Additionally, people with depression tend to have a negative view of

themselves, seeing the self as defective, inadequate or inferior (Gilbert, 1992, 2007b). In this sense, one can hypothesize that this negative view of the self may result from the internalization of early experiences of shame.

Likewise, the results of the present study partially corroborate our third hypothesis, where the effect of shame experiences with parents upon depression through social anxiety was only mediated by internal shame and not external shame (H3). Investigation has pointed to a strong association between social anxiety and external shame (e.g., Fergus et al., 2010; Gilbert, 2000), demonstrating an overlap in some characteristics of both concepts, namely the perception of existing in a negative way in the minds of others. However, studies have shown that the association between social anxiety and shame seems to be most pronounced when the emotion is evoked by an internal focus (i.e., shame experienced when one think's of their own mistakes and self-deficits) rather than by an external focus (i.e., shame experienced when one believes he/she is being judged by others; Matos et al., 2013; Hedman et al., 2013). In fact, social anxiety seems to be more closely linked to a sense of an undesirable and inadequate self, incapable to compete in a positive way for friends, lovers and status, with a greater focus on the sense of self and internal shame (Clark & Wells, 1995; Gilbert, 2001; Gilbert & McGuire, 1998; Gilbert & Trower, 1990, 2001; Keltner & Harker, 1998). Moreover, socially anxious individuals tend to blame themselves for criticism and rejections, particularly if they view such aversive social outcomes as due to their own inadequacy or inferiority (Clark & Wells, 1995). Furthermore, these individuals often adopt submissive strategies in order to avoid possible conflicts or rejection (Gilbert, 2000, 2001; Gilbert & Trower, 2001; Schlenker & Leary, 1982; Weisman et al., 2011), also a characteristic of internal shame (Gilbert, 1998, 2007a; Mikulincer, & Shaver, 2005).

Moreover, according to the cognitive model of Clark and Wells (1995), one of the processes that functions as a maintenance factor for social phobia is the post-event processing. This process consists in a detailed analysis of the situation after it has occurred, dominated by the person's negative self-perception, since it was thus encoded in memory during the situation, influenced by self-focused attention. In this analysis, social interaction is viewed more negatively than it actually was (Clark & Wells, 1995). This might explain the feeling of shame that persists after the anxiety has vanished (Clark, 2001), since in the "post-mortem" of the situation, previous situations of failure are recovered (Rachman et al., 2000),

which contributes and reinforces the person's belief of the self as socially inadequate (Clark, 2001). Indeed, post-event processing has been associated with shame (Cândea & Szentágotai-Tătar, 2017; Zoccola et al., 2012) and, particularly with internal shame (Figueiredo, 2016). Thus, it seems that in the post-event processing there is an internalization of the shame experienced by the individual at the time of the social situation (external shame), translated in negative self-perception and rumination, strengthening a sense of social inadequacy.

As mentioned above, depression involves a critical attitude towards oneself, where one sees the self as defective, inadequate or inferior (Gilbert, 1992, 2007b). Moreover, depression has also been associated with social rank and negative social comparison (Allan & Gilbert, 1997; Gilbert, 1992, 2000; Trower & Gilbert, 1989), where one sees him/herself as inferior to others, being in a low rank position (Allan & Gilbert, 1995; Leary & Jongman-Sereno, 2014; Leary & Kowalski, 1995). Consequently, people with depression often tend to adopt submissive strategies in order to avoid possible conflict or rejection and the consequential loss of resources (Allan & Gilbert, 1997; Forrest & Hokanson, 1975; Gilbert, 2001). Thus, depression also seems to be linked to internal shame, since it involves a self-critical attitude towards oneself and the implementation of submissive strategies associated with self-monitoring and self-blame in order to prevent or reduce possible damage (Gilbert, 1998, 2007a; Mikulincer & Shaver, 2005). In this sense, our results seem to be in accordance with previous studies, since they showed that internal shame was the best predictor of depression. Moreover, these findings extend previous work on the association between social anxiety and depression, suggesting that the emergence of depression when one has previously developed social anxiety, may occur through internal shame. Therefore, the link between these conditions seems to be focused on a negative self-image, where one sees the self as inadequate, inferior and undesirable, criticizing the self for his/her defects and flaws.

Finally, we predicted that self-compassion would mediate the impact that shame experiences with parents would have on depression and the impact of these experiences through social anxiety and shame upon depression (H4). This hypothesis was partially confirmed, with self-compassion only acting as a significant mediator in the relationship between shame experiences with parents and depression, through both social

anxiety and internal shame or only through internal shame. This complex relationship may be accounted for considering previous research.

On one hand, studies have shown that shame experiences are linked to an overstimulation of the threat system leading to defensive strategies such as shame, social anxiety and depression (Gilbert, 2005, 2009; Matos & Pinto-Gouveia, 2014; Matos et al., 2015), and to the underdevelopment of the soothing system, blocking feelings of safeness and soothing, such as self-compassion (Gilbert, 2010, 2015). Hence, this overstimulation of the threat system, associated to self-criticism, and the underdevelopment of the soothing system, associated with a lack of self-compassion, may function as a vulnerability to the development of depression. In line with this, and since self-compassion and self-criticism are both mechanism of affect regulation (Gilbert, 2005, 2009), people with social anxiety and depression tend to utilize maladaptive strategies of affect regulation to deal with negative affect (e.g., shame), adopting a critical attitude towards the self and perceiving themselves as inferior and inadequate. On the contrary, self-compassion is a more adaptative strategy, related to the ability to be sensitive and kind with personal suffering, understanding and nonjudging unpleasant emotions (Gilbert, 2005, 2009, 2010), and is linked to feelings of kindness and warmth (Fehr et al., 2009). Indeed, social anxiety has been strongly associated with self-criticism (Shahar & Gilboa-Shechtman, 2007; Shahar et al., 2014) and individuals with SAD present lower levels of self-compassion when compared to healthy controls (Werner et al., 2012). Likewise, individuals with depression tend to have high levels of self-blame and self-criticism and low levels of self-acceptance and self-soothing, with self-compassion being negatively related to depressive symptomatology (Neff, 2003; Raes, 2010; Steindl et al., 2018). Furthermore, self-criticism is highly correlated with internal shame (Castilho et al., 2010; Gilbert, 1998) and it is considered to be an internal shaming process that reinforces the feeling of inferiority, stimulating the threat system and blocking the soothing system (Gilbert et al., 2008; Longe et al., 2010). Also, the soothing and contentment affect regulation system is poorly accessible in people with high shame and self-criticism, in whom the threat system dominates their orientation to both the internal and external worlds (Gilbert, 2009). So, the lack of self-compassion, associated with maladaptive strategies of affect regulation, may lead to a vicious cycle where one constantly criticises the self, feeling

more inferior, undesirable and inadequate, which, in turn, could function as vulnerability to the consequent development of depression.

Clinical Implications

Although the use of a non-clinical sample weakens the generalization of the findings to clinical populations, shame memories, shame, social anxiety and depression are transversal processes and mechanisms that operate at a clinical or nonclinical level, therefore allowing us to infer some clinical implications of this study.

Firstly, social anxiety was found to be a predictive factor of depression, so it would be important for preventive intervention of depression to focus on prevent or intervene in social anxiety symptoms. This may require to assess individuals with depressive symptoms for social anxiety symptoms and either redirect them for a specific program or to include a specific component to address such symptoms in programs primarily aimed at preventing or treating depression (Salvador et al., 2015).

Moreover, the important role that internal shame played on the effect of shame experiences and social anxiety on depression suggests the importance of including a component to focus on this concept in prevention and intervention programs either assessing depressive symptoms or addressing social anxiety. In general, these interventions should seek to reduce the use of maladaptive regulation strategies, preventing them from becoming patterns of dealing with negative emotions, and to develop and improve the use of more adaptive strategies.

In this sense, our study points to clinical implications related to the application of Compassion Focused Therapy (CFT; Gilbert, 2010) with patients presenting shame experiences, high levels of shame, social anxiety and depression. Furthermore, CTF is an integrated and multimodal approach (Gilbert, 2009), so it may be more fitting to address individuals with social anxiety and comorbid depression. Therapy interventions should be designed to help patients develop compassionate attributes and skills, i.e., promoting a self-to-self relationship based on feelings of compassion, warmth and kindness, which allows the individual to tone down distress and negative affect via self-soothing. These are all key goals and focuses of CFT (Gilbert, 2005, 2009, 2010). Thus, building up and experiencing these compassionate feelings, both from the self and from others (e.g., within a supportive

therapeutic relationship), and helping patients to recognize the evolved defensive function of their symptoms, may be fundamental when dealing with early experiences of shame and shame feelings. A compassionate acceptance of personal flaws or shortcomings may counteract the deleterious effect of internal shame and, in turn, of social anxiety and depression, where one sees him/herself as inadequate, inferior and undesirable, criticizing the self for his/her defects and flaws. However, clinicians should be aware that, as discussed elsewhere (e.g., Gilbert, 2010; Matos & Pinto Gouveia, 2014), some patients, especially those with high levels of shame, might feel scared and uncomfortable when experiencing self-compassion and receiving compassion from others. Therefore, dealing with these patients' early shame experiences and shame feelings, and developing their self-warmth and soothing abilities should be a key target in therapy.

Limitations, contributions and future studies

The present study holds some limitations. One possible limitation of the present study is its transversal design, hence causal relations between variables cannot be established, only interpretations based on theoretical literature. In this sense, longitudinal studies could be conducted in the future to enhance the understanding on the causal relations between the variables. At the same time, the fact that it was not a longitudinal study evaluating the same subjects, does not allow us to guarantee that the course of the study variables happens in the same subjects. Given these limitations, it would be important to replicate the present study in a longitudinal design. Another important limitation refers to the fact that this study involves a sample of the general population, specifically university students, being relevant that, in the future, the study should be replicated in broader samples of the community, representative of the Portuguese population, in order to allow generalization of results. Additionally, the findings from this study conducted in a community sample may not be generalized to clinical populations. Nevertheless, when dealing with shame and shame memories, the same processes and mechanisms may apply at a clinical or non-clinical level. To further sustain our conclusions, future studies could replicate these findings using clinical samples, such as socially anxious and depressed patients. Moreover, the majority of our sample was female, so it would be beneficial, in the future, to try to collect a more homogeneous sample. The exclusive use of self-report questionnaires is also a limitation of

this study; structured interviews should be included in future studies. Furthermore, we believe that due to the nature of some of the questions in our measures, responses might have been biased by conformity to social desirability. Further studies might add measures that allow researchers to control the effect of social desirability in responses, such as EDS-20 (Escala de Desejabilidade Social de 20 itens; Almiro et al., 2017). Likewise, the strong correlations between external shame, internal shame and social anxiety could be due to the fact that these processes are somewhat dependent and the measures that access them seem to comprise a few items that might be related to the other concepts. Future studies could use other measures of shame, such as the Other as Shamer (Allan et al., 1994; Goss et al., 1994; Portuguese version by Matos et al., 2011a), the Internalized Shame Scale (Cook, 1996) and the Experience of Shame Scale (Andrews et al., 2002; Portuguese version by Matos et al., 2011b). Regardless of the acceptability of the tested models, there could be other concurrent illustrative models for these relations considering other types or directions of association or using other variables. These concurrent models could be tested in future studies, for example, the differential effect of shame experiences with peers on the development of social anxiety and subsequent depressive symptoms.

Moreover, since feeling safe, connected and supported in attachment and social relationships is associated to affiliative positive affects and well-being, and promotes resilience against adverse life events (Cacciopo et al., 2000), future studies could explore the protective effects of recalls and current experiences of feeling soothed, safe and connected with others on the relations between our study variables. Furthermore, research has shown that the presence of self-compassionate attitudes in the face of difficulties can protect against the traumatic effects of memories of shame and negative affect, and to act in promoting feelings of security (Steindl et al., 2018). In this sense, it could also be interesting to investigate the protective effect of self-compassion on the associations between our study variables.

Conclusion

The findings of our study point out important relationships between shame experiences with parents, social anxiety and depressive symptoms. This is the first study to explore the role of shame and self-compassion in the relationship between social anxiety and

depression, showing that internal shame may be an important predictor to the emergence of depression when one has previously developed social anxiety. Furthermore, the lack of self-compassion, associated with maladaptive strategies of affect regulation, may contribute to a sense of inadequate and undesirable self, reinforcing a critical attitude towards the self, and, in turn, lead to the development of depression.

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