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The impact of Traumatic Shame Experiences in Social Anxiety – the moderator role of Emotional Intelligence

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The impact of Traumatic Shame Experiences on Social Anxiety: The moderator role of Emotional Intelligence

Abstract

Adolescents whose traumatic shame experiences (TSE) reveal traumatic characteristics and who regard shame events as key to identity tend to develop a sense of self as shameful. Social anxiety (SA) can be influenced by current and pervasive feelings of shame and adolescents with Social anxiety disorder (SAD) present excessive fear/anxiety in social situations where they fear to be negatively evaluated by others. Since individuals with emotional intelligence (EI) are likely able to deal with traumatic experiences, EI may perform an important role in the association between the impact of TSE and SA in these adolescents. This study explores the associations between the impact of TSE, SA and EI.

Self-report questionnaires assessed the impact of TSE, SA and EI in two adolescent samples (from the general population and clinical sample of SAD). A weak association between the impact of TSE and SA was found in both. The impact of TSE predicted SA and the relationship between the impact of TSE and EI were statistically significant in the general sample. EI had a moderator role in the predictive effect of the impact of TSE on SA in this sample and not in the clinical one.

Adolescents with SAD might be dealing with TSE but its impact on SA may not be expressed by traumatic characteristics related with the TSE, as it is the case in other nosological entities (e.g., PTSD). Other hypotheses are discussed to explain the results obtained. Future studies are needed to highlight the association between TSE, EI and SAD.

Key-Words: Social Anxiety Disorder (SAD), social anxiety (SA), impact of traumatic shame experiences (TSE), emotional intelligence (EI).

O impacto das Experiências Traumáticas de Vergonha na Ansiedade Social: o papel moderador da Inteligência Emocional

Resumo

Os adolescentes cujas experiências traumáticas de vergonha (ETV) demonstram características traumáticas e cujos acontecimentos de vergonha adquirem um papel central na identidade, tendem a desenvolver uma noção do eu como vergonhoso. A ansiedade social (AS) pode ser influenciada pela vergonha e os adolescentes com Perturbação de ansiedade social (PAS) apresentam medo ou ansiedade excessivos perante situações sociais nas quais temem ser negativamente avaliados pelos outros. Visto que os indivíduos com inteligência emocional (IE) estão mais aptos a lidar com experiências traumáticas, a IE pode desempenhar um papel importante na relação entre o impacto das ETV, AS e EI. O presente estudo explora as possíveis relações entre o impacto das ETV, AS e EI.

Instrumentos de auto-resposta avaliaram o impacto das ETV, a AS e a IE em duas amostras de adolescentes (população geral e adolescentes com PAS). Foi encontrada uma fraca associação entre o impacto das ETV e a AS em ambas. O impacto das ETV previu a AS, associação entre o impacto das ETV e a IE foram significativos e IE revelou moderar o efeito predictor do impacto das ETV na AS, apenas na amostra da população geral.

Os adolescentes com PAS podem lidar com ETV mas o seu impacto na AS pode não expressar características traumáticas associadas à ETV, como é o caso de outras entidades nosológicas (e.g., PTSD). Deste modo, outras hipóteses para os resultados obtidos são discutidas. Estudos futuros são necessários para compreender melhor as associações entre as ETV, a IE e a PAS.

Palavras chave: Perturbação de Ansiedade Social (PAS), ansiedade social (AS), impacto das experiências traumáticas de vergonha (ETV), inteligência emocional (IE).

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INTRODUCTION

Social Anxiety Disorder in adolescence

Humans are social beings and social anxiety (SA) exists in a *continuum* between normal to pathologic levels (McNeil, 2010), having an adaptive and defensive role since millions of years ago (Gilbert, 2004). SA can have a benefic role in social performance or interfere in social functioning (Pinto-Gouveia, 2000).

Adolescence is a difficult period in terms of SA experiences since one of the main tasks is to learn how to socially interact with other people and if an excessive SA is present, it may impair adjustment and day-to-day functioning (Cunha & Salvador, 2000). This period is characterized by processes of rapid physiological development, personality development and the resulting emotional and behavioral instability may contribute to the development of behavioral strategies for adult life (Tolegenova, Jakupov, Chung, Saduova, & Jakupov, 2012).

Social interactions with peers play an important role in the adolescents psychosocial adjustment (Tillfors, Persson, Willén, & Burk, 2012) as they develop a progressive capacity to understand the complexity of social interactions, think about themselves as social objects, become aware of the importance of the impression they cause in the others, deal with several body changes, face situations like school integration, peer acceptance and performance in new roles, that not only engender insecurity but also imply the ability to fear negative evaluation by others (Cunha & Salvador, 2000). However, if the novelty of events that move youth to larger and less familiar school and social environments are interpreted as threatening or ambiguous, they may evoke SA and elicit self-protective behaviors that lead to a decrease in peer acceptance, an increase in peer victimization and hinder the development and maintenance of intimate close relationships (Tillfors et al., 2012). Furthermore, colleagues and parents also become less tolerant to mistakes and inadequate behaviors, increasing the probability for criticism and feelings of ridicule (Cunha & Salvador, 2000).

According to DSM-5 (APA, 2013), Social Anxiety Disorder (SAD) is characterized by a marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others where s/he fears a negative evaluation. The social situations almost always provoke out of proportion fear or anxiety and are avoided or endured with great difficulty which accounts for the clinical significant distress or impairment. Individuals with SAD have frequent thoughts of negative social evaluation, rejection, humiliation, failure, embarrassment, inadequacy and self-criticism (Cunha & Salvador, 2000). To evade the perception of negative evaluation by others, they try to avoid blushing, shaking and trembling, speaking in public, expressing an opinion in a group, speaking to someone of the opposite sex or an authority figure (Neal & Edelmann, 2003). They also avoid parties, meeting someone new, shopping, speaking in class, working in group, walking in the school (Cunha & Salvador, 2000) but as most of everyday functioning involves contact with others, SAD can be

extremely disruptive and distressing, causing great distress in individuals and sometimes in those close to them, with impact on many areas of an individual's life (Neal & Endelmann, 2003).

SAD's development is associated with social aversive experiences of hostility, overprotection, absence of family socialization (Taylor & Alden, 2005), presence of childhood trauma (Kuo, Goldin, Werner, & Gross, 2011) and stress experiences (Kimbrel, 2008). The specific memories of adverse social events (e.g., being mocked by peers, being harshly criticized, blushing) that are clustered in time around the onset of SAD are associated with memories of negative impression of the self. (Hackmann, Clark, & McMannus, 2000) and reinforce anxiety and avoidance behaviors (Kimbrel, 2008). The negative events may function as a key precipitating event for SAD although this disorder may also emerge in the absence of such kind of events (Carleton, Peluso, Collimore, & Asmundson, 2011).

Individuals with SAD often believe that their negative self-images are accurate reflections of how they appear to others and these seem to be strongly related to fears of being criticized and anxiety symptoms, encouraging the use of safety behaviors (Wild, Hackmann, & Clark, 2008). Indeed, negative self-images are seen as true images of oneself, linked with early socially traumatizing experiences in childhood (Hackmann et al., 2000) and are associated with higher anxiety levels, self-focused attention, negative appraisal of performance, negative self-cognitions and post-event processing (Makkar & Grisham, 2011). Information processing bias is linked with autobiographic memory that includes imagetic memories of early aversive social experiences and social memories with self-referent properties that provoke anxiety and where individuals put themselves in an observer perspective (Morgan, 2010). The most recurrent images involve sensory modalities such as body sensations and perceptions (Hackmann et al., 2000). Moreover, individuals with SAD tend to monitor threats, focus attention on perceived ones during social experiences, and their anxious memories are accessible and readily available to be retrieved from autobiographic memory (Morgan, 2010). Adolescents with SAD also experience negative self-images frequently and vividly and the associated memories are described as more distressing than in healthy individuals (Schreiber & Steil, 2013).

Shame and Traumatic Shame Experiences

Shame is a multifaceted experience (Gilbert, 2002) of unquestionable social importance. It guides behavior and influences the way we see ourselves, being intrinsically associated with the relation between the self and the others (Tangney & Dearing, 2002). It is related to the competitive dynamics of life, linked with social standing and personal reputation, where humans try to create advantageous roles by stimulating positive emotions in the others (Gilbert, 2003).

The representations of the *self as shameful* or of *others as shaming* may be activated by attributional processes (Lee, Scragg, & Turner, 2001). Shame requires cognitive competences such as self-others representations,

metacognition, theory of mind to imagine how the individual exists in the minds of others, self-conscious awareness capacities to reflect on behavior, attribute qualities to the self and judge them as good or bad, as well as reflect on the likely outcomes of the individual's actions on others and how others will react (Gilbert, 2003). Even when others feel positively about the individual, s/he can still feel inferior and inadequate in comparison with others (Gilbert, 2002) and without approval and recognition one may feel devalued, subordinated and excluded (Gilbert, 2003).

Shame-proneness lies in early negative experiences of shame, abandonment, emotional control, harsh parenting styles (Gilbert & Gerlsma, 1999), emotional neglect and abuse (Gilbert & Gerlsma, 1999; Kuo et al., 2011). The internalization of affections' expression, interpersonal needs, motivations and competences associated with shame has impact on further experiences without shame (Kaufman, 1989). Shame experiences create a sense of self and guide behavior because individuals must align their self-referent systems to the social domain (Gilbert, 2003). Subsequently, they become foundations for self-beliefs, being present in the memory systems as emotionally textured experiences (Gilbert, 2003). Hence, when shame-schemas are activated in the aftermath of a traumatic event, 'shame-charged' intrusive images appear and shame becomes pervasive and is perpetuated (Lee et al., 2001).

Pinto-Gouveia and Matos (2011) found that shame experiences are recorded in autobiographical memory as powerful and distressing emotional memories, become central to identity and emerge as central for the organization of autobiographical knowledge, being perceived as reference points to everyday inferences. These experiences reveal traumatic memory characteristics (intrusions, avoidance and hyperarousal), have impact on shame in adulthood and amplify the impact of shame and depression (Matos & Pinto-Gouveia, 2010). When early shame experiences function as anchoring events and generate future expectations, they shape the individual's negative perceptions of the way they believe s/he exists in the minds of others (Pinto-Gouveia & Matos, 2011) and tend to believe and judge themselves as inferior, undesirable, defective, bad or inadequate (Matos & Pinto-Gouveia, 2010; Pinto-Gouveia & Matos, 2011). Moreover, the experience of trauma, post-rumination and revelation of traumatic experiences to others may impact significantly on self and social identity (Lee et al., 2001) and traumatic shame memories have a crucial role in the human functioning and suffering which goes above and beyond its negative emotional valence (Matos, Pinto-Gouveia, & Duarte, 2012).

A recent study in adolescents by Cunha, Matos, Faria and Zagalo (2012) also support the prior findings of traumatic shame memories in adults. Adolescents whose traumatic shame memories reveal traumatic characteristics and regard shame events as key to their identity and as turning points in their life story, tend to develop a sense of self as existing negatively in the eyes of others and in their own eyes. They presented increased negative emotional states (e.g. anxiety and depression) and the

impact of shame memories operated through their influence on fostering current shame feelings focused on this sense of the self (Cunha et al., 2012).

All these findings are supported by the Centrality of Event Theory where, according to Berntsen & Rubin (2006; 2007), trauma memories or emotional negative events become central in the individual's life history and identity, and create internal stable global attributions associated with post-traumatic stress reactions, depression and anxiety, as the re-experience results from the traumatic memory over-integration. One can perceive threats and react to non-traumatic events as if they were actually threatening or perceive high risk for experiencing future trauma.

Social Anxiety and Traumatic Shame Experiences

Socially anxious individuals are particularly prone to interpret a variety of experiences as distressing or traumatic (Carleton et al., 2011) and demonstrate re-experiencing, avoidance and hyperarousal related to stressful events at intensities that interfere with processing such events (Erwin, Heimberg, Marx, & Franklin, 2006). The more traumatic memories are anchored in the autobiographic memory for further events evaluation and organization, the greater the post-traumatic symptomology levels (Smeets, Giesbrecht, Raymsekens, Shaw, & Merckelbach, 2010).

Although research on traumatic shame memories linked with SAD in adolescents and adults is still scarce, it is important to notice that traumatic shame memories are associated with SA in adults, being regarded as central components of personal identity and life story and as reference points to give meaning to the past (Matos, Pinto-Gouveia, & Gilbert, 2012). Although traumatic shame memories may bias attention and social information processing towards interpersonal threat, being able to elicit intrusions, avoidance and hyperarousal in adults they did not predict SA (Matos, Pinto-Gouveia, & Gilbert, 2012). Despite this result, traumatic shame memories may make people believe that others see them negatively, as unattractive or undesirable social agents, becoming internalized self-evaluations and feelings (Matos, Pinto-Gouveia, & Duarte, 2012).

Emotional Intelligence, Social Anxiety and Trauma

Emotional intelligence (EI) has shown to grow from early adolescence to young adulthood (Mayer, Caruso, & Salovey, 2000). One early definition of EI presented it as *“the ability to monitor one's own and other's feelings and emotions, to discriminate among them, and use this information to guide one's thinking and action”* (Salovey & Mayer, 1990). However, years later, the authors revised this definition to make it more complete and less vague. Thus, according to Mayer and Salovey (1997) EI is *“the ability to accurately perceive emotions, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth”*. To enter an emotional situation with knowledge of what one and others feel,

why those feelings arise and which behaviors are appropriate appears to help choosing useful emotional regulation strategies (O'Toole, Hougaard, & Menin, 2013). The capacity to use the information given by emotions is adaptive and the relation between emotions and thoughts is not antagonistic (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). EI is related to psychological well-being (Salami, 2011), life satisfaction and happiness (Riaz, Shahzad, & Ansari, 2009), physical and psychological health (Tsaousis & Nikolaou, 2005), social (Engelberg, & Sjöberg, 2004) and interpersonal adjustment (Summerfeldt, Kloosterman, Antony, & Parker, 2006).

Life transitions resulting from stressful or negative events pose challenges that can strain people's ability to cope to the point of developing clinical distress and symptomatology (e.g. depression, anxiety and stress). Thus, the capacity to regulate emotions becomes crucial to an adaptive answer to negative life events (Smeets et al., 2010) and emotional intelligent behavior in stressful circumstances is adaptive (Armstrong, Galligan, & Critchley, 2011). In the presence of EI, problem-focused and positive emotional focused coping styles are applied through the management, regulation, use, appraisal and facilitation of emotions (Noorbakhsh, Mohammad, & Zarei, 2010). Furthermore, the relation between life-events and distress is weaker when high emotional self-awareness, expression, self-control and self-management is present (Armstrong et al., 2011).

Moreover, individuals differ in the competence to identify their own and the others feelings, regulate those feelings and use the resulting information to motivate adaptive social behavior (Salovey et al., 1995). Emotionally regulated individuals catastrophize and blame themselves less, either for the problem occurrence or for the incapacity for solving it, establishing strategies to deal with it, ruminating less and showing higher emotional sensitivity (Mikolajczak, Nelis, Hansenne, & Quoidbach, 2008). Individuals with higher EI are able to keep frequent and lasting positive mental states (Salovey & Mayer, 1997), perceive emotional cues and adapt to different social and emotional situations which contributes to interaction opportunities and interpersonal relationships maintenance (Engelberg & Sjöberg, 2004). By having emotional control, they will not invest in unhealthy solutions when facing difficulties; instead they will be proactive and will search for coping strategies to deal with them (Tsaousis & Nikolaou, 2005). They choose and have a superior capacity to implement adaptive strategies to down regulate negative emotions and maintain positive ones (Mikolajczak et al., 2008). They also have a decreased propensity to experience the negative emotions and an increased propensity to experience positive ones (Mikolajczak et al., 2008).

The traumatic experiences' symptomatology is emotionally challenging and people cope differently with such experiences (Hunt & Evans, 2004). Negative underlying assumptions can mediate the development of a general shame-prone style after trauma or can be related

with shame in response to trauma-relevant stimuli (Platt & Freyd, 2012). Individuals with EI are more likely able to deal with situations without becoming distressed (Hunt & Evans, 2004) and the ones able to keep low levels of negative underlying assumptions after trauma can be more resilient to shame effects of negative feedback (Platt & Freyd, 2012). As Boden, Boon-Miller, Kashandan, Alvarez, and Gross (2012) hypothesize, increased emotional clarity provides an understanding of the optimal circumstances to use cognitive reappraisal to manage emotions and emotions elicited by trauma-cues and related symptoms. Not only higher EI is related with fewer trauma symptoms (Hunt & Evans, 2004) but also emotional clarity and cognitive reappraisal predict positive affect and potential post traumatic-growth (Boden et al., 2012). Tolegenova et al. (2012) found that EI has a direct relationship with childhood trauma and adolescents with high EI report fewer psychological symptoms from traumatic experiences. Moreover, Matos, Pinto-Gouveia and Gilbert (2012) found an association between the impact of TSE and SA in adults.

Studies researching the relationship between the impact of TSE and EI, as well as between EI and SAD in adolescents is scarce. Nevertheless, Díaz-Castela, Muela, Espinosa-Fernández, Klimstra and Garcia-Lopez (2012) found that adolescents with SAD show difficulties in understanding and regulating their emotional states, which can be due to a deficit in the mood repair capacity and a reason why they have more difficulties on regulate emotions and negative thoughts underlying social situations.

Adolescents with SAD are able to feel and express feelings appropriately (Díaz-Castela, et al., 2012) and EI may index emotional processing systems that mitigate the impact of the factors causally implicated in its development (Jacobs, Snow, Geraci, Vythilingam, Blair, Charney, Pine, & Blair, 2008).

With this review in mind, the exploration of significant associations between the impact of TSE, SA and EI in adolescents with SAD becomes an important goal: if the impact of TSE are associated with SA and if EI has a moderator role in the impact of TSE in SA, we are able to better understand the factors underlying SA.

AIMS

This study aimed to ascertain the relationship between SA and the impact of TSE, and to explore if there was any moderator role of EI in this relationship, in a sample from the general population and in a clinical sample of adolescents with SAD.

As specific goals and hypothesis the study set to explore significant associations between SA, TSE (characterized by high traumatic symptomatology) and EI in both samples, being expected that:

H1. SA will have a significant positive association with the impact of TSE and a significant negative association with EI.

H2. The impact of TSE will have a negative significant association with EI.

H3. The impact of TSE will have a predictive effect on SA, even when depressive symptoms are controlled.

H4. The impact of TSE on SA will be moderated by EI.

To pursue the aims mentioned above, Study I was held in a sample of adolescents from the general population and Study II in a sample of adolescents with SAD.

Study I: The impact of *Traumatic Shame Experiences, Social Anxiety and Emotional Intelligence* in a sample from the general population

METHOD

Sample

This sample from the general population is composed by 1018 adolescents aged between 14 and 18 years-old. The adolescents aged above 18 years old or below 14 years old were excluded. The ones that did not filled out all the items or showed difficulties in understanding its content, as well as outliers, were also excluded to avoid future statistical implications.

Table 1 presents the sample's distribution. This sample was composed mainly by girls ($n = 582$; 57.2%). Adolescents mean age was 15.97 ($SD = 1.20$) and mean of school years was 10.44 ($SD = .61$). Adolescents aged between 15 and 17 years-old constituted 76% of the sample and the ones in the 10th grade were the most prevalent (37.8%). The only statistically significant difference between girls and boys was found in the school years ($t_{(2)} = -2.904$; $p = .004$).

Table 1. Descriptive statistics for the sample from the general population (gender, age, school years and socioeconomic status). T-Student test for differences in age and school years. Qui-square test for differences in the socioeconomic status.

	Boys		Girls		Total			
	N	%	N	%	N	%		
Gender	436	42.8	582	57.2	1018	100		
Age								
14	66	15.1	58	10	124	12.2		
15	99	22.7	164	28.2	263	25.8		
16	119	27.3	155	26.6	274	26.9		
17	104	23.9	133	22.9	237	23.3		
18	48	11	72	12.4	120	11.8		
School years								
9	92	21.1	85	14.6	177	17.4		
10	164	37.6	221	38	385	37.8		
11	122	28	170	29.2	292	28.7		
12	58	13.3	106	18.2	164	16.1		
Socioeconomic Status								
Low	86	19.7	145	24.9	231	22.7		
Medium	274	62.8	354	60.8	628	61.7		
High	71	16.3	75	12.9	146	14.3		
	M	SD	M	SD	M	SD	t	p
Age	15.93	1.23	15.95	1.19	15.97	1.20	-.864	.388
School years	10.33	.96	10.51	.95	10.44	.61	-2.904	.004
							χ^2	p
Socioeconomic Status	1.97	.60	1.88	.61	1.92	.61	5.126	.077

Measures¹

A set of self-report questionnaires were necessary to assess SA, the impact of TSE, EI and depressive symptoms.

The **Social Anxiety Scale for Adolescents** (SAS-A; La Greca & Lopez, 1998) has 22 items (including 4 *filler items*) and assesses social anxiety experiences and fear of negative evaluation in the adolescents' peer relationships. The answers are given in a 5-point *Likert* scale and higher scores correspond to higher social anxiety. This scale has three factors: (1) *Fear of Negative Evaluation* (FNE), (2) *Social Avoidance and Distress Specific to New Situations* (SAD-N) and, (3) *Generalized Social Avoidance and Distress* (SAD-G), with acceptable to very high internal consistencies and moderate to strong temporal stability (La Greca & Lopez, 1998). In the Portuguese study (Cunha, Pinto-Gouveia, Alegre & Salvador, 2004), the same factor structure was found, with acceptable to high internal consistencies, acceptable temporal stability and, satisfactory convergent and divergent validities. The cut-of-point of .55 allows the differential classification between adolescents with and without SAD. This scale is sensible to the changes due to treatment (Salvador, 2009).

The **Impact of Event Scale- Revised** (IES-R; Weiss, & Marmar, 1997) has 22 items and assesses traumatic stress reactions and subjective suffering due to any specific life event. The answers are given in a 5-point *Likert* scale and high scores correspond to high traumatic symptomatology translated in the 3 subscales: (1) *Intrusion*; (2) *Avoidance*, and (3) *Hyperarousal* and has one single factor. Acceptable to very high internal consistencies, moderate to very strong temporal stability (Weiss & Marmar, 1997), high convergent validity were found. The Adolescent Portuguese version (Zagalo, 2011) maintained the instruction of relying on a traumatic shame event/memory, from the Adult Portuguese version (Matos, Pinto-Gouveia, & Martins, 2011). This study found also an unidimensional structure, a very high internal consistency, a moderate temporal stability, and good convergent and divergent validities.

The **Trait Meta-Mood Scale** (TMMS; Salovey et al., 1995) has 48 items and assesses the perceived emotional intelligence, with individuals evaluating their emotional state attention, distinction and regulation abilities. The answers are given in a 5-point *Likert* Scale and higher total scores correspond to higher perceived emotional intelligence. The authors recommend to use 30 of 48 items. These 30 items are distributed in three factors: (1) *Attention to Feelings*; (2) *Clarity of Feelings*; and, (3) *Mood*

¹ The internal consistency values taken as reference were the ones presented by Pestana & Gageiro (2003) where a Cronbach's α below .60 is unacceptable, between .61 and .70 is weak, between .71 and .80 is acceptable, between .81 and .90 is high, and between .91 and 1 is very high. Using the same reference, a correlation coefficient below .20 is very weak, between .21 and .39 is weak, between .40 and .69 is moderate, between .70 and .89 is strong, and above .90 is considered very strong.

Repair, where internal consistencies were high and moderate convergent and divergent validities were found (Salovey et al., 1995).

The Portuguese study of the psychometric properties of the TMMS in adolescents (Marques, 2013) is being conducted and preliminary results showed that this scale may not follow the original factorial structure and that items may also need to be rephrased. Therefore, as this study is still in progress, we decided to only use the scale's total score.

The **Children's Depression Inventory** (CDI; Kovacs, 1985) has 27 items, each with three possible answers, and assesses the presence of depressive symptoms in children and adolescents in the two previous weeks. Higher total scores correspond to higher depressive symptoms severity. Five factors were identified: (1) *Negative mood*, (2) *Interpersonal Problems*, (3) *Ineffectiveness*, (4) *Anhedonia* and (5) *Negative Self-esteem* (Kovacs, 1985) with an acceptable to good internal consistency and an acceptable temporal stability (Smucker, Craighead, & Green, 1986). The Portuguese study (Marujo, 1994; Dias & Gonçalves, 1999) did not replicate the multidimensional structure found in the English version, pointing instead to a unifactorial structure with a high internal consistency.

Table 2 presents the internal consistencies found in Study I and II for the common measures. Internal consistencies ranged between high and very high in both samples, except the internal consistency of Generalized Social Avoidance and Distress Factor of the SAS-A. This Cronbach's α was weak in the SAD sample and acceptable in the sample from the general population.

Table 2. Internal consistencies obtained in Study I and II.

Scales	Cronbach's α	
	GS	SAD
SAS-A	.919	.905
SAS-A_FNE	.904	.903
SAS-A_SADN	.834	.844
SAS-A_SADG	.803	.695
IES-R	.933	.881
TMMS	.843	.851
CDI	.847	.832

Note: SAD= Social Anxiety Disorder; GS= Sample from the general population; SAS-A= Social Anxiety Scale for Adolescents; SAS-A_FNE= *Fear of Negative Evaluation* Factor of SAS-A; SAS-A_SADN= *Social Avoidance and Distress Specific to New Situations* Factor of SAS-A; SAS-A_SADG= *Generalized Social Avoidance and Distress* Factor of SAS-A; IES-R=Impact of Event Scale-Revised; TMMS= Trait Meta-Mood Scale; CDI= Children Depression Inventory.

Procedure

Authorizations from the CNPD², DGIDC³ and from eleven schools were obtained. Adolescents and parents informed consents were gathered, being highlighted the study's volunteer and confidential character.

A protocol with all the measures just described was administered in classroom setting, including a brief socio-demographic questionnaire relevant to the sample description. Each protocol took around 30 minutes and was balanced to avoid answer contamination and fatigue effects.

All the statistical analysis were executed using the SPSS⁴ (17.0 version for Windows). The statistical procedure specifically applied to each hypothesis is described in the results section.

RESULTS

Preliminary Analysis: Gender differences for Social Anxiety (SA), impact of Traumatic Shame Experiences (TSE) and Emotional Intelligence (EI)

Before proceeding with our analysis we first tested for significant differences between both genders for all the variables included in this study. Significant differences were found for SA ($t_{(1016)} = -6.228, p = .000$), impact of TSE ($t_{(1016)} = -6.548, p = .000$) and depressive symptoms ($t_{(1016)} = -8.643, p = .000$) where girls scored higher than boys. However, no significant differences were found for EI ($t_{(1016)} = 1.133, p = .257$). Therefore, gender was controlled for in all the following analysis.

Associations between Social Anxiety (SA), impact of Traumatic Shame Experiences (TSE) and Emotional Intelligence (EI)

In order to test for the associations between SA, impact of TSE and EI, partial *Pearson* correlations were computed between all these variables, controlling for gender (Table 3).

Table 3. Partial Pearson correlations of Social Anxiety, the impact of Traumatic Shame Experiences and Emotional Intelligence, controlling for gender.

	TSE (IES-R)	EI (TMMS)
	<i>r</i>	<i>r</i>
SA (SAS-A)	.36 ***	-.29***
FNE (SAS-A)	.35***	-.20***
SADN (SAS-A)	.25***	-.24***
SADG (SAS-A)	.32***	-.34***
TSE (IES-R)		-.29***

Note: SA= Social Anxiety; SAS-A= Social Anxiety Scale for Adolescents; FNE= *Fear of Negative Evaluation* Factor of SAS-A; SADN= *Social Avoidance and Distress Specific to New Situations* Factor of SAS-A; SADG= *Generalized Social Avoidance and Distress* Factor of SAS-

²CNPD-Comissão Nacional de Protecção de Dados

³ DGIDC-Direcção Geral de Inovação e de Desenvolvimento Curricular

⁴ SPSS: *Statistical Package for the Social Sciences*

A; TSE= Traumatic Shame Experiences; IES-R= Impact of Event Scale-Revised; EI= Emotional Intelligence; TMMS= Trait Meta-Mood Scale. *** $p < .001$.

SA, fear of negative evaluation, social avoidance and distress specific to new situations and generalized social avoidance and distress showed a significant positive association with the impact of TSE and a significant negative association with EI. A negative significant association between the impact of TSE and EI was also found. According to Pestana and Gageiro (2003), these significant associations were considered weak, with the exception of the association between fear of negative evaluation and EI which is considered very weak.

Impact of Traumatic Shame Experiences (TSE) as a predictor of Social Anxiety (SA)

To test for the impact of TSE as a predictor of SA, a hierarchical regression analysis was performed. Gender was introduced in the first model to control for the already tested gender effect on SA and the impact of TSE. Given the already well-established relationship between SA and depressive symptoms, the CDI was introduced in the second model in order to control for the effect of depressive symptomatology on SA. The impact of TSE was introduced in the third and last model.

All the models were significant [Model 1: $F_{(1, 1016)} = 37.554$, $p = .000$; Model 2: $F_{(2, 1016)} = 230.846$, $p = .000$; Model 3: $F_{(3, 1014)} = 165.492$, $p = .000$] (Table 5). Only depressive symptoms ($\beta = .477$; $p = .000$) and the impact of TSE ($\beta = .145$; $p = .000$) significantly predicted SA. The impact of TSE accounted for 1.6% of SA ($R^2_{\text{change}} = .016$; $F_{\text{change}}(1, 1014) = 24.222$; $p = .000$). Meanwhile, depressive symptoms accounted for 27.7% of SA ($R^2_{\text{change}} = .277$; $F_{\text{change}}(1, 1015) = 409.056$; $p = .000$) and gender accounted for $R^2_{\text{change}} = .036$; $F_{\text{change}}(1, 1016) = 37.554$; $p = .000$) (Table 4).

Table 4. Hierarchical Regression analysis on Social Anxiety: independent effects of gender, Depression and the impact of Traumatic Shame Experiences.

Predictors	R	R ²	B	β	F	t	p
Model 1	.189	.036			37.554		.000
Gender			4.704	.189		6.128	.000
Model 2	.559	.313			230.846		.000
Gender			1.312	.053		1.960	.000
CDI			1.094	.544		20.225	.000
Model 3	.573	.329			165.492		.000
Gender			1.002	.040		1.506	.000
CDI			.959	.477		15.965	.000
IES-R			.104	.145		4.922	.000

Note: CDI= Children Depression Inventory; IES-R= Impact of Event Scale-Revised.

The moderator role of *Emotional intelligence (EI)* in the association between the impact of *Traumatic Shame Experiences (TSE)* and *Social Anxiety (SA)*

We conducted a moderation analysis using a multiple hierarchical regression to test for the significant effect of the interaction term between the independent variable (impact of TSE) and the moderator variable (EI) in the dependent variable (SA). The interaction term was computed by multiplying the centred independent and moderator variables (Aiken & West, 1991). To better visualize the association between variables, a graphic was also drawn using ModGraph *software* (Figure 1).

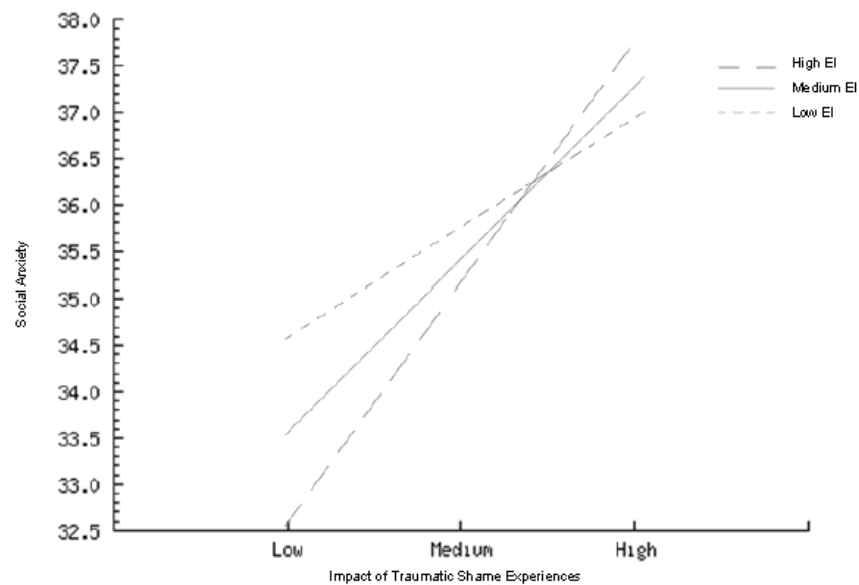
The association between the impact of TSE and SA was moderated by EI. The interaction between the impact of TSE and EI adds 0.5% to the explanation of SA ($R^2_{\text{change}} = .005$; $F_{\text{change}}(1, 1012) = 7.019$; $p = .008$) (Table 5).

Table 5. Model summary and regression coefficients of the hierarchical regression analysis on Social Anxiety: independent effects of gender, Depression and the impact of Traumatic Shame Experiences, having Emotional Intelligence as moderator.

Predictors	R	R ²	B	β	F	t	p
Model 1	.189	.036			37.554		.000
Gender			4.704	.189		6.128	.000
Model 2	.559	.313			230.846		.000
Gender			1.312	.053		1.960	
CDI			1.094	.554		20.225	.000
Model 3	.574	.329			124.323		.000
Gender			1.069	.043		1.598	
CDI			.933	.464		14.115	.000
IES-R centred			.103	.143		4.823	.000
TMMS centred			-.025	-.028		-.936	
Model 4	.578	.334			101.453		.000
Gender			1.052	.042		1.576	
CDI			.948	.471		14.333	.000
IES-R centred			.110	.153		5.141	.000
TMMS centred			-.022	-.025		-.844	
Interaction			.003	.069		2.649	.008

Note: CDI= Children Depression Inventory; IES-R=Impact of Event Scale-Revised; TMMS=Trait Meta-Mood Scale.

Figure 1. Interaction of Emotional Intelligence with the impact of Traumatic Shame Experiences in predicting Social Anxiety.



Study II: The impact of *Traumatic Shame Experiences*, *Social Anxiety* and *Emotional Intelligence* in adolescents with SAD

METHOD

Sample

This sample is composed by 47 adolescents with SAD, aged between 14 and 18 years-old. The same exclusion criteria used in the Study I were applied and the adolescents that were already in treatment were maintained in the sample. Table 6 presents the sample distribution. This sample was composed by 25 boys (53.2%) and 22 girls (46.8%). Adolescents mean age was 15.28 (SD = 1.02) and mean of school years was 9.91 (SD = .78). Adolescents aged between 14 and 16 years-old constituted 89.3% of the clinical sample and the ones in the 10th grade were the most prevalent (46.8%). This sample was homogenous since there were no significant differences between boys and girls in age, school years and socioeconomic status.

Table 6. Descriptive statistics for the clinical sample (gender, age, school years and socioeconomic status). T-Student test for differences in age and school years. Qui-square test for differences in the socioeconomic status.

	Boys		Girls		Total			
	N	%	N	%	N	%		
Gender	25	53.2	22	46.8	47	100		
Age								
14	5	20	7	31.8	12	25.5		
15	10	40	6	27.3	16	34		
16	7	28	7	31.8	14	29.8		
17	2	8	2	9.1	4	8.5		
18	1	4	0	0	1	2.1		
School Years								
9	7	28	8	36.4	15	31.9		
10	14	56	8	36.4	22	46.8		
11	3	12	6	27.3	9	19.1		
12	1	4	0	0	1	2.1		
Socioeconomic Status								
Low	2	8	5	22.7	7	14.9		
Medium	15	60	14	63.6	29	61.7		
High	8	32	3	13.6	11	23.4		
	M	SD	M	SD	M	SD	t	p
Age	15.36	1.04	15.18	1.01	15.28	1.02	.596	.554
School Years	9.92	.76	9.91	.81	9.91	.78	.048	.962
							χ^2	p
Socioeconomic status		2.24	.60	1091	.61	2.09	.62	3.415

Note: SAD= Social Anxiety Disorder.

Measures⁵

Only two instruments were added to the protocol already described in Study I. ADIS-IV-C⁶ was applied to established or rule out diagnosis.

The **Multidimensional Anxiety Scale for Children** (MASC; March, Parker, Sullivan, Stallings, & Conners, 1997) has 39 items, assesses the frequency of anxiety symptoms in children and adolescents and is answered in a 4-point *Likert* scale. The MASC has four factors: (1) *Physical Symptoms*, which includes the subfactors *Tense/Restless* and *Somatic/Autonomic*; (2) *Social Anxiety*, with the subfactors *Humiliation/Rejection* and *Public Performance*; (3) *Separation Anxiety*; (4) *Harm Avoidance*, including the subfactors *Perfectionism* and *Anxious Coping*. Internal consistency values range between acceptable to high for the total score and factors and between weak and high for the subfactors. It also has a satisfactory to excellent temporal stability and good convergent and divergent validities (March et al., 1997). In the MASC's Portuguese Version (Matos, Salvador, Cherpe, & Oliveira, 2012), internal consistency values are ranging between weak and high for the total score and factors and between unacceptable to high for the subfactors. The scale also presented a good

⁵ The internal consistency and the correlation coefficients values taken as reference were the ones presented by Pestana & Gageiro (2003) also used in Study I.

⁶ ADIS-IV-C: Anxiety Disorders Interview Schedule for DSM-IV (Child Version)

temporal stability and convergent and divergent validities. In the present study, a high internal consistency was found.

The **Anxiety Disorders Interview Schedule for DSM-IV, Child Version** (ADIS-IV-C; Silverman & Albano, 1996) is a semi-structured interview used to diagnose Anxiety Disorders and other possible disorders in childhood and adolescence, based on DSM-IV criteria. The interview takes from 60 to 120 minutes. “Yes” or “No” answers are given, depending on the symptom presence/absence. When answers like “*don’t know*” or “*sometimes*” arise, additional explorations must be done to clarify the answer (Silverman, Saavedra & Pina, 2001). The problem interference is explored and each interfering answer (above 4, in a scale from 0 to 8) is taken into account to verify if any DSM-IV-TR (APA, 2000) diagnosis applies. This interview has an excellent temporal reliability and accuracy for SAD Disorder and for Separation Anxiety Disorder and, good accuracy for SAD and Generalized Anxiety Disorder (Silverman et al., 2001). Good concurrent validity was found for SAD, Separation Anxiety and Panic Disorder Diagnosis (Wood, Piacentini, Bergman, McCracken, & Barrios, 2002). Rao et al. (2007) established the reliability between evaluators for SAD Disorder and symptom interference, as well as the concurrent validity in comparison to self-report scales and behavioral assessment. The Portuguese ADIS-IV-C was translated and adapted by Cunha and Salvador (2003) and the study of its psychometric properties found showed good concurrent and discriminant validities and high concordance between evaluators (Casanova & Salvador, 2013). This interview is sensible to changes due to treatment (Salvador, 2009).

Procedure

A sample from the general population was obtained following the same procedure as the one in Study I. Then, a *screening* procedure was conducted to select adolescents with answers above the cut-off point in either the SAS-A, CDI or MASC. Researchers were blind to the reason why adolescents had been selected by the *screening* procedure, so that there were no bias during the interview with the ADIS-IV-C. The interviews took up to hour and half and allowed to diagnose 47 adolescents with SAD.

All the statistical analysis were executed using the SPSS⁷ (17.0 version for Windows). The statistical procedure specifically applied to each hypothesis is described in the results section.

RESULTS

Preliminary Analysis: Gender differences for *Social Anxiety (SA)*, impact of *Traumatic Shame Experiences (TSE)* and *Emotional Intelligence (EI)*

⁷ SPSS: *Statistical Package for the Social Sciences*

No significant differences in gender were found for SA ($t_{(45)} = -.935$, $p = .355$), impact of TSE ($t_{(45)} = -1.034$, $p = .307$), EI ($t_{(45)} = 1.024$, $p = .311$) or Depressive Symptoms ($t_{(45)} = -.673$, $p = .504$). Therefore, gender was not introduced as a covariate in the following analysis.

Associations between *Social Anxiety (SA)*, impact of *Traumatic Shame Experiences (TSE)* and *Emotional Intelligence (EI)*

Correlations showed that SA and fear of negative evaluation had a significant positive association with the impact of TSE. The magnitude of these associations is weak. Both correlations of EI with SA (and the remaining factors) and with the impact of TSE were non-significant (Table 7).

Table 7. Pearson correlations of Social Anxiety, the impact of Traumatic Shame Experiences and Emotional Intelligence

	TSE (IES-R)	EI (TMMS)
	<i>r</i>	<i>r</i>
SA (SAS-A)	.36*	-.02
FNE (SAS-A)	.36*	.02
SADN (SAS-A)	.29	.02
SADG (SAS-A)	.25	-.12
TSE (IES-R)		.04

Note: SA= Social Anxiety; SAS-A= Social Anxiety Scale for Adolescents; FNE= *Fear of Negative Evaluation* Factor of SAS-A; SADN= *Social Avoidance and Distress Specific to New Situations* Factor of SAS-A; SADG= *Generalized Social Avoidance and Distress* Factor of SAS-A; TSE= Traumatic Shame Experiences; IES-R= Impact of Event Scale-Revised; EI= Emotional Intelligence; TMMS= Trait Meta-Mood Scale; * $p < .05$.

Impact of *Traumatic Shame Experiences (TSE)* as a predictor of *Social Anxiety (SA)*

The regression analysis followed the same procedure as in the regression analysis performed in the previous sample. However, gender effects were not controlled for given that boys and girls did not differ in any of the variables under study.

As shown in table 8, both models were significant [Model 1: $F_{(1, 44)} = 6.206$, $p = .017$; Model 2: $F_{(2, 43)} = 4.666$, $p = .015$]. Although depressive symptoms were a significant predictor of SA in the first model ($\beta = .352$; $p = .017$), in the second model, when impact of TSE is introduced, depressive symptoms were no longer a significant predictor ($\beta = .245$; $p = .114$). In spite of the fact that the impact of TSE was also not a significant predictor ($\beta = .257$; $p = .098$), both predictors shared the explanation of SA variance which suggests that TSE might be behaving as a mediator.

Table 8. Hierarchical Regression analysis on Social Anxiety: independent effects of Depression and the impact of Traumatic Shame Experiences

Predictors	R	R ²	B	β	F	t	p
Model 1	.352	.124			6.206		.017
CDI			.617	.352		2.491	.017
Model 2	.422	.178			4.666		.015
CDI			.430	.245		1.615	.114
IES-R			.220	.257		1.692	.098

Note: CDI= Children Depression Inventory; IES-R= Impact of Event Scale-Revised.

The moderator role of *Emotional intelligence (EI)* in the association between the impact of *Traumatic Shame Experiences (TSE)* and *Social Anxiety (SA)*

Baron and Kenny (1986) point out that it is desirable that the moderator variable be uncorrelated with both the predictor (impact of TSE) and the criterion (SA) to provide a clearly interpretable interaction term. Hence we decided to conduct the same moderation analysis as in study I. However, since according to Stevens (2002), a minimum of 15 subjects per predictor is required. Therefore, given our total sample size ($n = 47$), we were unable to control for depressive symptoms since only three variables could be introduced as predictors.

Both the independent and moderator variables were introduced in the first model, followed by their interaction term in the second model.

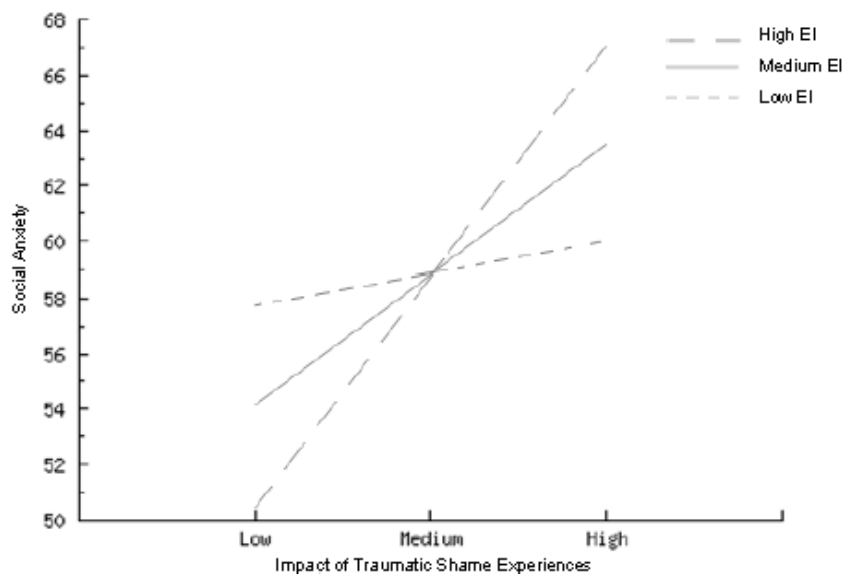
The predictive effect of the interaction between impact of TSE and EI on SA was borderline of statistical significance ($\beta = .279$; $p = .050$) (Table 9). To better visualize the association between variables, a graphic was drawn using again the ModGraph software (Figure 2).

Table 9. Model summary and regression coefficients of the hierarchical regression analysis on Social Anxiety: independent effects of the impact of Traumatic Shame experiences, having Emotional Intelligence as moderator.

Predictors	R	R ²	B	β	F	t	p
Model 1	.361	.131			3.305		.046
IES-R centred			.306	.361		2.567	.014
TMMS centred			-.026	-.034		-.240	.812
Model 2	.454	.206			3.718		.018
IES-R centred			.343	.405		2.941	.005
TMMS centred			-.009	-.011		-.081	.936
Interaction			.018	.279		2.020	.050

Note: IES-R=Impact of Event Scale-Revised; TMMS= Trait Meta-Mood Scale.

Figure 2. Interaction of Emotional Intelligence with the impact of Traumatic Shame Experiences in predicting Social Anxiety.



DISCUSSION

Social interactions with peers play an important role in the adolescents psychosocial adjustment (Tillfors et al., 2012) as they develop a progressive capacity to understand the complexity of social interactions, think about themselves as social objects, become aware of the importance of the impression they cause in the others, that not only engender insecurity but also imply the ability to fear negative evaluation by others (Cunha & Salvador, 2000). In SAD, adolescents present fear or anxiety in social situations in which they are exposed to possible scrutiny by others where s/he fears a negative evaluation (APA, 2013).

Studies concerning the impact of TSE on SA in adolescents, with or without SAD, are in fact scarce if not inexistent. In the present studies we found that adolescents with and without SAD presented an association between the impact of TSE, SA and fear of negative evaluation. Besides, adolescents without SAD also showed an association between the impact of TSE and social avoidance and distress specific to new situations and generalized social avoidance and distress. The relationship found between the impact of TSE and SA, although weak in both samples, concurs with the association found by Matos, Pinto-Gouveia and Gilbert (2012) in adults from the general population. In fact, adolescents with SAD have frequent thoughts of negative social evaluation, rejection, humiliation, failure, embarrassment, inadequacy and self-criticism (Cunha & Salvador, 2000) and in the second study we did find that the fear of negative evaluation is associated with the impact of TSE. Furthermore, Carleton et al. (2011) suggested that individuals with SA are prone to interpret a variety of experiences as distressing or traumatic, and Kuo et al. (2011) found that childhood trauma is linked with SAD development.

We also hypothesized that the impact of TSE would be a significant predictor of SA in adolescents with and without SAD, even when controlling for depressive symptoms. Study I found that SA was predicted by the impact of TSE (1.6%) and although this prediction was not found in study II, the impact of TSE in these adolescents explained 5.5% of SA's variance. The lack of statistical significance in study II might be due to sample size. These results are in line with Hackmann et al. (2000) who found that specific memories of adverse social events such as being mocked by peers or being harshly criticized are clustered in time around the onset of SAD and are associated with memories of negative impression of the self. These experiences elicit shame and can be considered as shame experiences. On the other hand, a similar study conducted in an adult sample from the general population did not find a significant predictive effect of the impact of TSE on SA (Matos, Pinto-Gouveia, & Gilbert, 2012).

Furthermore, the IES-R assesses the impact of TSEs in terms of intrusions, hyperarousal and avoidance. Thus, another possible explanation for the low correlation found and for the absence of a significant predictive effect of the impact of TSE in this study, might be that adolescents could have avoided schema activation to avoid the intense emotionality linked to it. Besides, the adolescents' answers might have been biased due to social desirability response and since the IES-R asks for relying in a specific shame event, adolescents might have been unable to capture the essence of the impact of the TSE, to focus on specific shame experiences, to appraise accurately their experiences and/or their selective memories might have contaminated the results. Adolescents could hence, presented variability in the interpretation of what constitutes a traumatic experience. Having said this we would recommend that this experience should be assessed by emotionally activating strategies instead of paper and pencil methods. Moreover, adolescents with SAD may also not be experiencing the impact of TSE in the way the IES-R assesses it (intrusions, hyperarousal and avoidance).

We also set out to explore the association between the impact of TSE and EI. We expected to find a negative significant association between impact of TSE and EI in both samples but only in study I was this result found. This negative significant association is corroborated by Tolegenova et al. (2012) who found that childhood trauma is negatively associated with EI in adolescents and by Hunt and Evans (2004) who found that EI is related with fewer trauma symptoms in adults. Since individuals with EI are able to keep low levels of negative underlying assumptions after trauma, they can be more resilient to shame effects (Platt & Freyd, 2012). Also, an increased emotional clarity and cognitive reappraisal predict positive affect and potential post traumatic-growth (Boden et al., 2012). Nonetheless we did not find any studies concerning the association between the impact of TSE and EI in adolescents with SAD.

It has been proposed that SA is associated with poor emotional knowledge, although studies have revealed mixed results (O'Toole et al.,

2013). Indeed, in study I we found a negative significant association between EI and SA but did not find the same association in study II. Specially in the second study we expected to find a negative significant association since there is a study revealing that adolescents with SAD show difficulties in understanding and regulating their emotional states which, in the authors' opinion, can be due to a deficit in the mood repair capacity and a reason why they present difficulties in controlling emotions (Díaz-Castela et al., 2012). Still, we could only analyze EI as a general ability composed by several main competences (see Mayer & Salovey, 1997) but could not ascertain the role of each one since the Portuguese adaptation of the TMMS in adolescents (Marques, 2013) is being conducted and preliminary results showed that this scale does not follow the same factorial structure as the one present in the original version. Furthermore, in both studies, it is important to highlight that adolescents may also not had sufficient insight concerning their EI to accurately report it and we could not explore if adolescents had or not less ability to regulate their emotions, because, again, we could not use the factors from the EI scale.

Our final goal was to explore if EI had a moderating role in the association between the impact of TSE and SA in both studies. We examined the effect of the interaction between the impact of TSE and EI on SA since Baron and Kenny (1986) point out that moderation implies that the causal relation between two variables changes as a function of the moderator variable. The moderator role of EI was generally the same for both samples. In study I, when interaction between the impact of TSE and EI was entered on the regression models, it significantly decreased the impact of TSE in SA, and in study II the statistical significant cut-off point did not allow to consider the impact of TSE on SA to be moderated by EI. Although it was borderline criteria, we drawn graphics for both samples, to better visualize the role of EI.

Both graphics allowed us to visualize that until and including medium levels of impact of TSE, adolescents with high EI showed medium levels of SA, compared with medium and low levels of EI. However, in respect to a high impact of TSE and high IE, this association is linked with high SA. The question that arises is why do adolescents with and without SAD present high EI and still high impact of TSE and SA, compared with adolescents with medium to low levels of EI? One possible explanation is that the impact of TSE can be strong enough to reveal traumatic characteristics (intrusions, hyperarousal and avoidance) and to regard shame events as key to adolescents' identity and as turning points in their lives, contributing to the development of a sense of self as existing negatively in the eyes of others and in their own eyes (Cunha et al., 2012). Furthermore, the Centrality of event Theory (Berntsen & Rubin, 2006; 2007) postulates that trauma memories become central in the individual's identity and create stable global attributions linked with post-traumatic stress reactions such as depression and anxiety. Hence, it is possible that even with high EI, adolescents with and without SAD, who regard the impact of TSE as central

to their identity still have high levels of SA. Hence, this result is surprising since we expected that adolescents with high EI should have been able to face the impact of TSE, decreasing the association between this experience and SA, once they would apply effective emotional regulation strategies (O'Toole et al., 2013) and invest in coping ones to deal with difficulties (Mikolajszak et al., 2008). Still, the graphics revealed that indeed this may be occurring in both samples, but only for low and medium levels of the impact of TSE. Adolescents with high EI may also maintain the association between SA and the impact of TSE because they do not avoid social situations and do not engage in safety behaviors. Therefore they can still experience SA and the impact of TSE, both as threatening, despite their levels of EI. In addition, adolescents with SAD tend to monitor threats, focus attention on perceived ones during social experiences and their anxious memories are accessible and readily available to be retrieved from autobiographical memory (Morgan, 2010) and Cunha et al. (2012) found that traumatic shame memories may bias attention and social information processing towards interpersonal threats.

The findings presented here should be considered taking into account some methodological limitations. First, the sample was collected in the center region of Portugal. Therefore we cannot generalize the results obtained. Second, all analysis depended on cross-sectional data. Short-term longitudinal studies would be better to further explore etiological pathways. Third, the sample of adolescents with SAD was small and therefore might not reflect or allow a better results' comprehension

Future research might, profit from the use of non-self-report instruments such as structured interviews that allow a more insightful, accurate and comprehensive exploration of the impact of TSE. Moreover, it might also profit from the use of activating strategies to enhance the assessment of the traumatic characteristics of shame events and their impact.

The results from study II suggest that adolescents with SAD might also be dealing with TSE but its impact on SA does not turn them central or reference points in adolescents' lives. In other words, the impact of TSE does not explain SA as one might expect. Adolescents with SAD may also not be experiencing the impact of TSE in the way the IES-R assesses it (intrusions, hyperarousal and avoidance). Thus, SAD might probably have other central features as major contributors for its development/experience besides the impact of TSE. Plus, future studies must clarify the role of EI in adolescents with SAD since it remained unclear if this ability reveals itself useful in the adolescent population.

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