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Shame and Social Anxiety in Adolescence

The Experience of Shame Scale for Adolescents

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Abstract

Symptoms associated with social anxiety disorder and shame arise mainly during early adolescence, which is expected to happen given that it is a period of great development. All these changes call attention to the self and its exposure and shame experiences recruit anxiety and are typically associated with the perception that the individual is being submitted to the scrutiny by others. Firstly this study explores the psychometric properties of the Experience of Shame Scale (ESS) in a Portuguese adolescent sample (N=326). This self-report measure assesses three types of shame (characterological, behavioral and bodily shame) and was used in the second study to explore the relationship between social anxiety and shame among different groups [individuals with social anxiety disorder (N=45), individuals with other anxiety disorders (N=24) and individuals with no psychopathology (N=33)]. Social anxiety was also assessed using self-report questionnaires. In the clinical groups, diagnoses were confirmed with ADIS-IV. The ESS reveals good psychometrics properties. Shame was positive and significantly correlated with social anxiety among adolescents with social anxiety disorder. The ESS's total score and the characterological and behavioral shame factors were significant predictors of social anxiety. These results suggest that the ESS is a valid instrument for clinical assessment and research on adolescent social anxiety disorder.

Key words: Experience of Shame Scale (ESS); Reliability, Social Anxiety Disorder (SAD), Shame and Adolescence.

Vergonha e Ansiedade Social na Adolescência
A Escala de Experiência de Vergonha para Adolescentes

Resumo

Os sintomas associados à perturbação de ansiedade social e à vergonha emergem maioritariamente na fase inicial da adolescência, o que é expetável dado ser um período de desenvolvimento caracterizado por importantes alterações. O *Eu* característico de uma criança transforma-se pouco a pouco num *Eu* caraterístico de um jovem adulto sujeito a exposição. A vergonha provoca ansiedade e está intimamente ligada à perceção de se estar sob escrutínio dos outros. Por conseguinte, pretendeu-se pimeiramente estudar as características psicométricas da Escala de Experiência de Vergonha (ESS) numa amostra de adolescentes portugueses (N=326). Esta escala avalia três tipos de vergonha (a vergonha caraterológica, comportamental e corporal) que foram utilizados, no segundo estudo, para explorar a associação entre ansiedade social e vergonha em diferentes grupos [adolescentes com perturbação de ansiedade social (N=45), adolescentes com outras perturbações de ansiedade (N=24) e adolescentes sem psicopatologia (N=33)]. A ansiedade social também foi avaliada com recurso questionários de autorresposta. Nos grupos clínicos os diagnósticos foram confirmados com a ADIS-IV. A ESS revelou ser um instrumento válido e fidedigno na avaliação da vergonha em adolescentes. Os estudos correlacionais revelaram que a vergonha se associa positivamente e significativamente com a ansiedade social em adolescentes com perturbação de ansiedade social. Para além do dito, a vergonha e dois dos seus fatores (vergonha caraterológica e comportamental) revelaram-se preditores da ansiedade social. Os resultados obtidos apontam para a utilidade da ESS na prática clínica e investigação na perturbação de ansiedade social.

Palavras-chave: Escala de Experiência de Vergonha (ESS); Validade, Perturbação de Ansiedade Social, Vergonha e Adolescência.

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Introduction

Shame

The study of self-conscious emotions is recent and shame in particular has been the focus of great scientific interest, assuming a leading role in the study of psychopathology (Gilbert & Andrews, 1998). Shame emerges from the social relationships in which people not only interact but also evaluate and judge others as well as themselves (Fischer & Tangney, 1995). Emotions such as shame play an adaptive function and serve to increase the chances of survival, as they mobilize and organize individual adaptive responses to situations through the influence they exert either in thoughts or behavior (Mills, 2005). According to Barret (1995), the adaptive purpose of shame serves to maintain the acceptance of others and preserve self-esteem, by learning and maintaining social patterns and submitting to others. According to this perspective, shame plays three roles - behavioral regulation (reducing the exposure to others evaluation by distancing themselves or showing disinvestment); internal regulation (focusing attention on social patterns or self-attributes) and social regulation by showing consideration for others. Optimal development of conscience depends on the adequacy of shame levels (Tangney & Fischer, 1995), which is assumed as a key component of consciousness, of our sense of morality and emphasizing moral transgression (Rapee, 2004). For many authors it is considered an experiential ground in which consciousness or identity emerge (Fischer & Tangney, 1995), playing a central role in the individual's social development (Mills, 2005).

Shame not only refers to a kind of affect but to a rather complex system of emotional regulation of social relationships (Melvin & Lansky, 1999). This can be expressed in many aspects of behavior or behavior situations judged negatively or considered by the self or the other as far behind the moral, aesthetic or performance patterns (Leeming & Boyle, 2004). Shame is characterized by the feeling of "being small", useless, inadequate, helpless and exposed (Kaufman, 1996; Tracy, Robins, & Tangney, 2007). When a person experiences shame he/she, feels an immediate desire to hide or escape from the situation inducing this feeling, difficulty in maintaining social interactions, speak fluently and think coherently (Lewis, 1992;Tangney & Dearing, 2002). At normal levels, the experiences of shame facilitate interactions and day-to-day activities by encouraging appropriate behaviors. However, at extreme levels, the self-critical of shame tends to be globally applied, so that people experience intense levels of shame that are disproportionate to the situation, and their feelings of shame are easily triggered in a multiplicity of situations (Tangney & Dearing, 2002).

Gilbert (2002) characterizes shame as a multifaceted experience that contains several components. The social or external cognitive component is associated with automatic thoughts in which others see the *Self* as inferior, from a perspective of condemnation or contempt, in that feelings of shame arise mostly in social contexts. The internal self-evaluative component

involves a global negative evaluation of the self as bad, inadequate and imperfect (Fischer & Tangney, 1995). The emotional component is linked to emotions and feelings evoked by the experience of shame (e.g. anxiety, anger and disgust). The behavioral component is related to defensive behaviors such as the urgent need to escape, to hide or to avoid the situation. Finally, the physiological component concerns the stress response inherent in the experience of shame. In short, shame is characterized by a complex set of cognitions, actions and trends whose complexity takes different forms from person to person. Some people can tolerate the feelings of shame without having to act or to adopt safety behaviors. For others it is an intolerable emotion they want to avoid (Gilbert, 2002). Yet, shame guides our behavior in social contexts, influence feelings about the self, shapes identity and feelings that interfere with our acceptance and social desirability (Tangney & Dearing, 2002).

Shame is usually conceptualized either by science or by culture as a visual and public emotion. However, its origin can be either in the presence or absence of someone to observe the self (Kaufman, 1996). Shame can be distinguished in terms of its focus of attention, thinking and behavior (Gilbert, 2003) and be experienced in two perspectives: shame as a state, when it is experienced as an acute feeling, and shame or embarrassment as a trait when it is felt more wider and continuous (Goss, Gilbert & Allan, 1994). Shame can be internal, to the extent that we have a negative vision and negative feelings about our own attributes and behaviors (Cook, 1996; Kaufman, 1996), experiencing Self as unwanted, worthless, unattractive, with loss of social status (Gilbert, 1998). Internal shame is so related to cognitions and affects that the person has for his attributes, personality characteristics or behaviors, being the basis of negative self-evaluations (Gilbert, 2000). Attention and cognitive processing are directed inward, to the emotions, personal attributes and behavior and focused on the failures and/or deficits of the Self (Gilbert, 2003). External shame is characterized by external evaluations focused on aspects and features that we believe to be cause of rejection or attack if they become public (Gilbert, 2000). From a cognitive point of view, external shame concerns the image that the Self believes to be in the mind of others (Gilbert, 2000). This type of shame directs attention to the social world, i.e., to the outside (Matos, Pinto-Gouveia, & Duarte, 2012) and is characterized as a painful social experience linked to the perception that one is judged, seen as inferior or with defects which may lead to rejection or some form of diminution (Gilbert, 2002; Kaufman, 1996). In this sense, behavior is oriented in order to positively influence the image of the Self in the minds of others (showing qualities) or avoidance strategies, submission or appeasement (Gilbert, 1998; Matos, Pinto-Gouveia, & Duarte, 2012).

Moreover, by focusing on shame we can also consider body shame. The concept of body shame focuses on negative experiences of both appearance and functions of the body, which can involve various sensory modalities (e.g. smell, touch as well as vision or image). Body shame is

reflected when people experience their physical bodies, in some way, as unattractive, undesirable and a source of "shamed self" (Gilbert, 2002) that involves both negative evaluations of one's body and an emotional component, a desire to hide oneself and one's body (Schooler, Ward, Merriwether & Caruthers , 2013).

Assessment of shame

Despite the growing interest in shame, research on its assessment has been neglected. Although there is a considerable number of instruments to measure it, there are problems, such as unclear definition of the construct, which ultimately limit their usefulness (Rizvi, 2010). The existing instruments of shame can be classified as measures of shame while trait (global measures of predisposition to experiences of shame) and measures of shame as state (measures the current level and intensity of shame) (Rizvi, 2010). The internalized Shame Scale (ISS; Cook, 2001) was designed to measure shame as trait, assessing the frequency of thoughts or feelings of shame (Matos, Pinto-Gouveia, & Duarte, 2012; Rizvi, 2010). Also the Test of Self-Conscious Affect-3 (TOSCA-3; Tangney, Dearing, Wagner, & Gramzow, 2000) is intends to measure the probability of responding to various scenarios with a similar shame response (Rizvi, 2010). To measure shame as a state it is possible to use the Personal Feelings Questionnaire-2 (PFQ-2; Harder & Zalma, 1990), which determines how many times a person feels shame (Rizvi, 2010), the Adapted shame/Guilt Scale (ASGS; Hoblitzelle, 1987) and the other Shamer Scale (OAS; Goss, Gilbert & Allan, 1994) to assess beliefs of how others evaluate us. Both the OAS (Figueira, 2010) and ISS (Januário, 2011) were adapted to adolescent Portuguese population.

In addition to the instruments mentioned above, the Experience Shame Scale (ESS; Andrews, Qian, & Valentine, 2002), object of study of this research, is a 25-item questionnaire that assesses four areas of characterological shame (Personal habits; Manner with others; Sort of person you are, and Personal ability) three areas of behavioral shame, (Doing something wrong; Saying something stupid, and Failure in competitive situations) and bodily shame (Feeling ashamed of your body or any part of it). For each of the eight shame areas covered, there are three related items addressing: (1) the experiential component, in the form of a direct question about feeling shame (e.g. "have you felt ashamed of your personal habits?"), (2) a cognitive component, in the form of a question about concern over others' opinions (e.g. "have you worried about what other people think of your personal habits?"), and (3) a behavioral component, in the form of a question about concealment or avoidance (e.g. "have you tried to cover up or conceal any of your personal habits?"). The ESS allows the evaluation of shame from a global point of view and according to the constituent factors (Matos, Pinto-Gouveia, & Gilbert, 2012). Given its specificity, it has been used in the investigation of depression (Andrews, Qian & Valentine, 2002), social anxiety (Matos &

Pinto Gouveia, 2010; Pinto Gouveia & Matos, 2011; Matos, Pinto-Gouveia, & Gilbert, 2012) and eating disorders (Doran & Lewis, 2011). The original version presented a very good internal consistency for the total scale and good for the subscales, a good test-retest reliability (11 weeks) and good convergent and divergent validity.

Social Anxiety and Adolescence

Fear and anxiety are part of all human beings' life and are expressed in the form of defensive and adaptive processes that developed over millions of years from our ancestors, becoming part of our genetic heritage (Gilbert, 2004). Social anxiety (SA) arises from the prospect or presence of a negative interpersonal evaluation in real or imagined social context, and is characterized by the experience of stress, fear and discomfort in social situations (Denollet & Kupper, 2011). SA is a response to the need of being valued (Hofmann & DiBartolo, 2010). Therefore, human beings are in constant negotiation for the status they hold in social relationships (Gilbert, 2003).

Despite being a normal developmental experience that takes essential functions in the gregarious species (Gilbert & Trower, 2001), SA can assume a lasting nature associated with great discomfort and emotional distress, generating a significant negative impact if not submitted to a psychological intervention (Cunha, Pinto Gouveia, & Smith, 2007). SA arises mainly during early adolescence (Cunha & Salvador, 2000), which is to be expected given the fact that it is a period of development characterized by important biological, cognitive and psychosocial changes, including puberty, perspective taking and identity development (Rapee & Spence, 2004). It's emergence at this stage facilitates the performance of tasks there are typical of this period (Baptista, 2000), such as challenging social interaction and becoming aware of the importance of impressions caused on the others (Cunha & Salvador, 2000). Social interactions with peers play an important role in the psychosocial adjustment of adolescents. Most youngsters experience positive interactions within their peer group and develop friendships which provide support, intimacy and companionship (Tillfors et al., 2012). In this regard, school plays a key role in constituting a daily meeting place in which they are evaluated and put to test either by friends or adults, not only regarding academic performance but also regarding their image in various aspects (Salvador, 2009). For some individuals, this transition, from family support to peer support, can be problematic (Irons & Gilbert, 2005) and if all these changes and their respective implications are interpreted as a threat it can, according to interpersonal models, cause anxiety and appeal to self-protection strategies or behaviors (Tillfors et al., 2012) with negative consequences in school, interpersonal development, work and love life (Lagreca & Stone, 1993; La Greca & Lopez, 1998).

According to the American Psychiatric Association (APA, 2013) the central feature of social anxiety disorder is a marked or intense, fear or

anxiety of social situations that involve being exposed to the scrutiny of others. Exposure to social situations almost always provokes fear or anxiety expressed in palpitations, trembling, sweating, malaise, gastrointestinal discomfort, muscular tension and flushing (among others). Frequently, the feared situations are avoided or endured with intense anxiety and discomfort that is out of proportion to the actual threat posed by the social situation and to the sociocultural context which account for the clinical distress or impairment (APA, 2013).

Although social anxiety disorder can be diagnosed in children or in adults, it assumes a different manifestation throughout development (Beidel & Morris, 1995. In adolescents, common fears include formal and informal social interactions, public observation and situations requiring assertive behavior (Hofmann, Albano, Heimberg, Tracey, Chorpita, & Barlow, 1999). In addition, adolescents manifest a broader pattern of escape and fear, as well as higher levels of social anxiety than children and adults (Beidel, Turner, Young, Ammerman, Sallee, & Crosby, 2007).

Social anxiety disorder is an interferering disorder that affects a relatively large part of the population (Rapee & Spence, 2004) and the most prevalent disorder in adolescence (Albano & Detweiler, 2001). Several studies have shown a prevalence of around 12% (Kessler, Berglund, Demler, Merikangas, & Walters, 2005; Kessler, Chiu, Demler & Walters, 2005). A Portuguese study with a non-clinical sample of adolescents showed there 51.7% of individuals with significant anxiety in at least one type of social situation and interference in family, social and academic life, although only 3.6% fulfilled diagnostic criteria for phobia social (Cunha, 2005; Cunha, Pinto-Gouveia, & Smith, 2007).

Shame and Social Anxiety in Adolescence

Adolescence is a developmental period in which we assist to a rapid magnification of shame, in the way that great changes take place such as the pubertal process, identity formation and emerging sexuality (Reimer, 1996). The characteristic *Self* of a child becomes little by little into a characteristic Self of a young adult. All these changes call attention to the Self and to his exposure, as well as to all the inherent social comparison processes (Kaufman, 1996). It can surmise that shame becomes increasingly connected with causal attributions and that by early adolescence it appears to involve feelings of negative self-evaluations that may be intertwined with self-esteem (Reimer, 1996). Adolescence is also a crucial time for the physical and cognitive changes in girls. Physically, girls experience intense bodily changes (Reimer, 1996; Rosenblum & Lewis, 1999). At the same time, cognitive development allows higher capacities for self-evaluation and social comparison (Rosenblum & Lewis, 1999). During the transition to adolescence, girls become particularly vulnerable to experiences of shame (Burnaford & Walter, 2006). Boys also go through physical and cognitive changes that make it possible for them to compare socially with peers and have feelings of self-consciousness. It is possible for boys and girls to

experience feelings of shame, but they experience it more or react in different ways to life events that are negative or stressful (Hankin & Abramson, 2001).

Evidence suggests that shame-proneness in adolescence is associated with normative processes and, when more extreme, with psychopathological outcomes. There is an important developmental psychopathological pathway that seems to have a link with direct and pervasive experiences of shame, leading to increasingly global and stable negative evaluations of the self (Kaufman, 1996; Reimer, 1996). A number of emotional disorders associated to shame are the evidence of important shifts during adolescence and researches support the argument that several significant defensive and psychopathological outcomes are related to differences in shame-proneness in late adolescence and adulthood (Tangney, 1992). In fact, there has been a growing interest and empirical support for the importance of the role of shame in adolescence in a wide range of psychopathological symptoms. Shame was, among others, associated with depression and anxiety (Tangney, Wagner & Gramzow, 1992), depression (Cook, 1991), eating disorders (Harder, 1995), posttraumatic stress disorder (Frank, 1991; Sanftner, Barlow, Marshall & Tangney, 1995) and suicide (Borst, Noam & Bartok, 1991).

Adolescence seems to be an important period to the development of either shame or social anxiety. When experiencing shame, young people tend to focus attention on prosocial behavior, in order to increase the acceptance by others, which contribute to further increase on concern of negative evaluation and feelings of anxiety in social situations. Thus, over time, shame can contribute to the increase of social anxiety (Mills, 2005). There is evidence that excessive worries about the feeling of inferiority, tendency to submissive behavior and believing that others view us negatively is associated with high levels of social anxiety (Gilbert & Trower, 1990; Gilbert, 2000). Several authors even suggest similarities between shame and social anxiety. For example, people with both social anxiety and shame often have avoided and withdrawn behaviors in social contexts and dislike eye contact with others, are more susceptible to negative feelings such as anxiety, fear and depression, and tend to perceive things more negatively, threatening information about themselves (Tangney, Wagner, & Gramzow, 1992; Tangney, 1995).

External shame is characterized as a painful experience, in that the prevailing perception is that of being judged, and the inherent fear of possible rejection (Gilbert, 2002) and social ridicule (Andrews & Gilbert, 1998). Thus it is assumed that either fear or anxiety responses are expected. Clark and Wells (1995) argue that fear of negative evaluation, social avoidance and exposure are the hallmarks of social anxiety. Beck, Emery and Greenberg (1985) had already linked social anxiety directly to shame by stating that the socially subject anxious is afraid to be embarrassed in a wide range of situations. Also Rapee and Heimberg's model (1997) establishes a close link between the design of social anxiety and shame, in particular

regarding assessments of the Self and the way it appears in the eyes of others, concerns related to not being up to of certain standard; deriving biases of attention and information processing to greater sensitivity to internal indicators that activate and behavioral disposition to avoidance and escape.

In line with this, Gilbert (2000), with a sample of college students, obtained a significant correlation between shame (internal and external) and social anxiety after controlling depressive symptoms. Matos, Pinto-Gouveia and Gilbert (2012) have also found an association between shame (internal and external) and social anxiety. With regard to adolescents, Carvalho (2011) found a significant relationship between external shame and social anxiety, especially with the inferiority factor. In addition, external shame was a significant predictor of social anxiety in both sexes. Januário (2011) obtained results that go in the same direction: social anxiety was related to internal and external shame. Januário also found that internal shame and the factor of Inferiority of the OAS were statistically significant predictors of social anxiety, the last one being the best predictor of social anxiety. Rebelo (2012) in a study with a group of adolescents with generalized social anxiety disorder obtained results that indicated that both internal and external shame were significant predictors in explaining social anxiety.

In spite of being strongly theoretically supported, the relationship between shame and social anxiety in adolescents has not been much researched. Given the negative impact that social anxiety disorder may have in various areas of the adolescent's life and later, as an adult (particularly in social, family, professional and occupational life, etc.), it is necessary an early identification and intervention. Given these facts, trying to understand their relationship, particularly in the adolescent population, where literature is still rather scarce, may be relevant. Therefore, the adaptation of the *Experience of Shame Scale* assumes a significant importance, because it not only assesses shame as a global construct but it also assesses different types of shame (according to each three factors), unlike the majority of instruments available that was designed to assess shame as a state or trait or shame and guilt. Thus, the objectives of the two studies in this article aim to adapt the *Experience of Shame Scale* for the adolescent Portuguese population, and to conduct an exploratory study regarding the influence of different types of shame in social anxiety disorder, which will allow a better tailored psychological intervention.

Aims

The general goals of the present article can be conceptualized at theoretical, methodological and pragmatic level. From a theoretical point of view, the existing literature on social anxiety in adolescence and the role of shame were reviewed. At a methodological level and given the lack of instruments assessing shame adapted and studied for the Portuguese adolescent population and its relation with social anxiety, we established as goal, to study the psychometric characteristics of *Experience of Shame Scale* (ESS; Andrews, Qian & Valentine, 2005). At the pragmatic level, following

the study of the ESS's characteristics, the last goal seeks to ascertain the relationship between shame and social anxiety in different groups (both clinical and non-clinical) in order to contribute to a better understanding of social anxiety disorder and improve therapeutic intervention as well as facilitate the design of further research in this area.

Study 1: ***Study of the psychometric characteristics of the Experience of Shame Scale (ESS) in a Portuguese adolescent sample.***

The aim of this article was to translate and adapt the ESS (ESS; Andrews, Qian & Valentine, 2002) for the Portuguese adolescent population, as well as to study its dimensional structure (with an exploratory factor analyses), psychometric characteristics (internal consistency, temporal stability, convergent and divergent validity) and to obtain normative data.

Method

Participants

Participants were recruited in convenient sample (3rd cycle and secondary schools) from urban and suburban areas of the north and center of Portugal. Subjects were excluded according to the following exclusion criteria: (a) adolescent aged under 14 or over 18 years old, (b) incomplete fulfilling of the scales, and (c) difficulty in understanding and answering the questionnaires. The participation in this study was anonymous and volunteer, and the consent of the adolescents' parents regarding their participation was previously obtained. Descriptive statistics were show in Table 1.

Table 1.Descriptive statistics for the total sample, gender, age, school years and socioeconomic status

	Boys		Girls		Total			
	N	**%**	**N**	**%**	**N**	**%**		
Gender	141	43.3	185	56.7	326	100		
Age								
14	39	27.7	76	41.1	115	35.3		
15	41	29.1	41	22.2	82	25.2		
16	34	24.1	35	18.9	69	21.2		
17	16	11.3	20	10.8	36	11.0		
18	11	7.8	13	7.0	24	7.4		
School Years								
9	82	58.2	117	63.2	199	61.0		
10	29	20.6	31	16.8	60	18.4		
11	17	12.1	21	11.4	38	11.7		
12	13	9.2	16	8.6	29	8.9		
Socioeconomic Status								
Low	29	20.6	40	21.6	69	21.2		
Medium	91	64.5	115	16.2	206	63.2		
High	21	14.9	30	63.2	51	15.6		
	M	**SD**	**M**	**SD**	**M**	**SD**	***t***	***p***
Age	15.43	1.23	15.21	1.28	15,30	1.26	1.568	.118
School Years	9.72	1	9.65	.989	9.68	.993	.624	.533
							X^2	***p***
Socioeconomic Status	1.74	.653	1.86	.639	1.81	.647	.203	.903

A total of 326 adolescents, 141 boys (43.3%) and 185 girls (56.7%) constituted the sample. Participants' mean age was 15.30 years (SD =1.26). The mean of school years was 9.68 (SD=.993). The majority of this sample belonged to the medium socioeconomic status. There were no significant differences between girls and boys neither in age, school years or socioeconomic status.

Instruments[1,2]

This study involves a set of self–report questionnaires to assess social anxiety, shame, depression and a semi structured interview (ADIS-C) to assess the presence or absence of a possible diagnosis.

The ***Experience of Shame Scale*** (ESS; Andrews, Qian & Valentine, 2002) is a self-report scale made of 25 items which assesses 3 areas of shame, namely: (1) characterological shame (2) behavioral shame and (3) bodily shame. Subjects are asked to rate each item in 4-point Likert scale. Higher scores indicate higher levels of shame. Several studies in the Portuguese population (Pinto Gouveia & Matos, 2011; Matos, Pinto-Gouveia, & Gilbert, 2012; Matos & Pinto Gouveia, 2010) have also show a high internal consistency. This instrument is described in a more complete way elsewhere (cf. introduction)

The ***Internalized Shame Scale*** (ISS; Cook, 1996) is a 30-item self-report inventory of internal shame designed to measure trait shame and composed by 2 subscales: a 24-item subscale that produces the Total shame score and is the core measure of trait shame experience, and a 6-item self-esteem subscale that produces a Total self-esteem score (not used in this study). Subjects answer on a 5-point Likert scale, according to the frequency that they feel the statements presented apply to them and higher scores indicate higher levels of internal shame. The original version obtained a very high internal consistency and a high test-retest reliability for both subscales. The Portuguese version for adolescents (Januário, 2011) obtained very high internal consistency and a high test-retest reliability for the shame subscale. A good internal consistency and moderate test-retest reliability for the self-esteem subscale were found. Convergent and divergent validity was also corroborated. Only the shame subscale was used in this study.

The ***Other As Shamer Scale*** (OAS; Goss, Gilbert & Allan, 1994) is based on the *Internalized Shame Scale* (ISS) and composed by 18 items that explore external shame. Respondents indicate the frequency of their feelings and experiences on a 5-point Likert scale, higher scores indicating higher levels of external shame. The original scale was found to have a very high

[1] We considered as reference values the internal consistency indices presented by Pestana & Gageiro (2003), where a Cronbach's alpha value of less than .60 is unacceptable, between .61 and .70 is weak, between .71 and .80 is reasonable, between .81 and .90 is good and above .91 is very good.
The same authors suggest that correlation coefficients of less than .20 show very low association, values between .21 and .39 a low association; between .40 and .69 a moderate association, between.70 and .89 a high association and more than .90 a very high association.

[2] Internal Consistencies for each instrument in the present study are shown in table 2.

internal consistency for the total scale and good for the 3 factors. The Portuguese adolescent version (Figueira, 2010) also presented a very good internal consistency for the total scale and good for the factors. Satisfactory convergent validity and moderate to good temporal stability were found.

*The **Depression, Anxiety and Stress Scales*** (DASS-21; Lovibond & Lovibond, 1995) aims to assess 3 psychopathology dimensions, namely, depression, anxiety and stress. Subjects answer according to how much the statements presented apply to them in the past week on a 4-point Likert scale. Higher scores on each scale represent more negative affective states. The DASS-21 presented a good internal consistency of the subscales. The Portuguese version (Ribeiro, Honrado & Leal, 2004) obtained alphas values ranging from reasonable to good in the subscales and demonstrate a good convergent and divergent validity.

Table 2. Internal consistency of the instruments (Cronbach's alpha)

Measures	α
ESS Total	.952
ESS_ Characterological Shame (F1)	.913
ESS_ Behavioral Shame (F2)	.904
ESS_ Bodily Shame (F3)	.869
OAS_Total	.941
ISS_Shame subscale	.965
DASS-21_Anxiety subscale	.830
DASS-21_Depression subscale	.884
DASS-21_Stress subscale	.752

Note: ESS=Experience of shame Scale; OAS= Other as Shamer Scale; ISS= Internalized Shame Scale; DASS-21= Depression, Anxiety and Stress Scales-21

Procedure

Both the permission of the *General Board of Inovation and Curricular Development* (*Direção Geral de Inovação e de Desenvolvimento Curricular* - DGIDC) and the *National Comission for Data Protection* (*Comissão Nacional de Proteção dos Dados* - CNPD) were obtained. Thirteen High and Secondary schools of the northern and central provinces were contacted, eleven of which agreed to collaborate. After obtaining the parent's and adolescents' informed consent, a set of questionnaires were applied in a classroom setting in which the confidential and voluntary nature of participation were made explicit. The processing and analysis of the collected data were performed with the *Statistical Package for the Social Sciences* (SPSS 20 version) for Windows.

Both translation and adaptation of the ESS were made. The ESS was administered to 35 adolescents of the general population in order to ascertain its face validity and possible doubts regarding the meaning or interpretation of the items. The research protocol (described in 3.) was administered in group, (cf. Appendix), its length varied between 30 to 40 minutes and the order of the questionnaires was balanced in order to control possible contamination and fatigue effects. A second administration of the ESS was

made to 113 subjects, 5-6 weeks after the first administration to determine the scale´s temporal stability.

Results

Exploratory Factor Analysis

The scales' 25 items were submitted to a principal components analysis, followed by a *varimax* rotation. Regarding the Kaiser-Meyer-Olkin measure[3], the value found was .939 revealing a very good sample adequacy; the Bartlett sphericity test was significant (χ^2= 5323.75; $p < .001$), showing that the intercorrelation matrix is significantly different from the identity matrix.

The initial solution of the Exploratory Factor Analysis (EFA) for the ESS permitted the extraction of 5 Factors with eigenvalues higher than 1, which explained 67,567% of the total variance. When the distribution of the items of the 5 Factors was analyzed it did not seem to reflect any theoretically coherent categorization, based in a reliable theory.

Since the scree-plot test indicated a 3 factor solution, and once the authors based the scale development in 3 main Factors (Characterological shame; Behavioral shame; Bodily shame), which, in fact, were the factor found in their Confirmatory Factor Analysis, we decided to force the factor extraction to 3 Factors, followed by a *varimax* rotation. This solution explained 58.854% of the total variance, however the items distribution did not correspond to the original distribution (cf. Table 3). Given the high correlations between factor 1 and 2, and following the same procedure as the authors followed in their factor analysis, we computed a composite factor of this two factors, after which, we forced the factor extraction to two Factors, followed by a *varimax* rotation. This solution explained 52.924% of the total variance. However, the items distribution for the two factors found did not, again, correspond to the original distribution nor did they reflect any underlying theoretical criteria. Finally, trying to find a more parsimonious factor solution, we also conducted a EFA forced to one factor. This solution only account for 46.866% of the total variance. All this data taken into account, we chose to maintain the original model of 3 Factors, once it was the solution that explained a larger percentage of the total variance and since it was also the solution chosen by the authors.

Floyd and Widaman (1995) suggested a saturation equal or higher than .35 for the retention of items on the Factors. In addition, to the items that saturate significantly on two Factors, the authors suggest a difference greater than .10 for their retention. Following this criteria, three items would be eliminated (5, 8, and 18). However, their removal would not contribute to an increase of the total scale's alpha (cf. Table 6), so we decided to maintain

[3] Kaiser (1974) suggests that the adequacy of the sample to a principal components analysis is unacceptable whenever the value of the KMO test is less than .50, poor between .50 and .60; reasonable between .60 and .70; medium between .70 and .80; good between .80 and .90 and very good between .90 and 1.

them. Moreover, either these items (5, 8 and 18) as the itens 11 and 21 were not distributed according to the original distribution. Since only 5 items were in this situation, 3 of which (5,18 and 21) with loadings differences lower than .1 in the two Factors, and since their distribution in different Factors than the original ones did not reflect any coherent theoretical criteria, it was decided to keep them in their original place.

Table 3. Factor loadings of the ESS items and communalities (numbers in bold reflect the item that load in each factor)

Item	Factor 1	Factor 2	Factor 3	h^2
1. Have you felt ashamed of any of your personal habits?	**.656**	.055	.295	.52
2. Have you worried about what other people think of any of your personal habits?	**.554**	.361	.339	.55
3. Have you tried to cover up or conceal any of your personal habits?	**.690**	.166	.205	.55
4. Have you felt ashamed of your manner with others?	**.547**	.276	.422	.55
6. Have you avoided people because of your manner?	**.559**	.286	.227	.45
7. Have you felt ashamed of the sort of person you are?	**.575**	.205	.491	.62
9. Have you tried to conceal from others the sort of person you are?	**.656**	.207	.273	.55
10. Have you felt ashamed of your ability to do things?	**.419**	.377	.385	.47
12. Have you avoided people because of your inability to do things?	**.585**	.363	.163	.50
18. Have you avoided contact with anyone who knew you said something stupid?	**.557**	.485	.013	.55
21. Have you avoided people who have seen you fail?	**,591**	,401	-,044	.50
5. Have you worried about what other people think of your manner with others?	.319	**.531**	.435	.57
11. Have you worried about what other people think of your ability to do things?	.348	**.558**	.355	.56
13. Do you feel ashamed when you do something wrong?	.218	**.714**	.354	.68
14. Have you worried about what other people think of you when you do something wrong?	.202	**.714**	.375	.69
15. Have you tried to cover up or conceal things you felt ashamed of having done?	.200	**.661**	.320	.58
16. Have you felt ashamed when you said something stupid?	.180	**.727**	186	.60
17. Have you worried about what other people think of you when you said something stupid?	.232	**.704**	.358	.68
19. Have you felt ashamed when you failed in a competitive situation?	.415	**.666**	.032	.62
20. Have you worried about what other people think of you when you failed in a competitive situation?	.425	**.649**	.025	.60
8. Have you worried about what other people think of the sort of person you are?	.403	.434	**.439**	.54
22. Have you felt ashamed of your body or any part of it?	.152	.344	**.791**	.77
23. Have you worried about what other people think of your appearance?	.113	.532	**.634**	.70
24. Have you avoided looking at yourself in the mirror?	.347	.026	**.692**	.60
25. Have you wanted to hide or conceal your body or any part of it?	.218	.263	**.780**	.73

Note:F1=Characterological Shame; F2= Behavioral Shame; F3= Bodily Shame

Table 4. ESS Factor Distributions

	F1 *Characterological Shame*	F2 *Behavioral Shame*	F3 *Bodily Shame*
Original Distribution (items)	1,2,3,4,5,6,7,8,9,10,11,12	13,14,15,16,17,18,19, 20, 21	22, 23, 24, 25
Distribution Obtained (items)	1, 2, 3, 4, 6, 7, 9, 10, 12, 18, 21	5, 11, 13, 14, 15, 16, 17, 19, 20	8, 22, 23, 24, 25

Pearson correlations between the three Factors, each of them and the total scale showed (cf. Table 5) that the factor dimensions that form the ESS are positively and significantly correlated, and they also present very high correlations with the total score.

Table 5.Intercorrelations between the ESS Factors and the Total score

	Factor 1	Factor 2	Factor 3	Total
F1_Characterological Shame	-	.79**	.69**	.94**
F2_Behavioral Shame	.79**	-	.64**	.93**
F3_Bodily Shame	.69**	.64**	-	.80**

***p* <.01

Item study

All 25 items had item-total correlations greater than .50[4]. Regarding the Cronbach's alpha if the item is deleted, there was no advantage to remove any item since its removal would not increase the value of the total scale's internal consistency. Descriptive statistics, item-total correlations and Cronbach's alpha if item deleted for all items of the three factor structure are shown in Table 6.

[4] Kline (2000) suggests that the items should be selected when their correlation with the total score is above .30.

Table 6. Descriptives statistics, item-total correlation an Cronbach's alphas if item deleted for each item of the ESS

Item	M	SD	item-total correlation	α if item deleted
1. Have you felt ashamed of any of your personal habits?	1.36	.631	.53	.951
2. Have you worried about what other people think of any of your personal habits?	1.69	.827	.69	.950
3. Have you tried to cover up or conceal any of your personal habits?	1.53	.734	.57	.951
4. Have you felt ashamed of your manner with others?	1.58	.810	.67	.950
5. Have you worried about what other people think of your manner with others?	2.02	.920	.71	.949
6. Have you avoided people because of your manner?	1.56	.808	.58	.951
7. Have you felt ashamed of the sort of person you are?	1.45	.793	.68	.950
8. Have you worried about what other people think of the sort of person you are?	1.88	.889	.70	.950
9. Have you tried to conceal from others the sort of person you are?	1.47	.730	.61	.951
10. Have you felt ashamed of your ability to do things?	1.67	.793	.64	.950
11. Have you worried about what other people think of your ability to do things?	1.85	.828	.71	.949
12. Have you avoided people because of your inability to do things?	1.43	.714	.62	.951
13. Do you feel ashamed when you do something wrong?	2.40	.942	.74	.949
14. Have you worried about what other people think of you when you do something wrong?	2.27	.911	.74	.949
15. Have you tried to cover up or conceal things you felt ashamed of having done?	2.13	.932	.67	.950
16. Have you felt ashamed when you said something stupid?	2.24	.930	.63	.950
17. Have you worried about what other people think of you when you said something stupid?	2.14	.956	.74	.949
18. Have you avoided contact with anyone who knew you said something stupid?	1.53	.779	.60	.951
19. Have you felt ashamed when you failed in a competitive situation?	2.07	1.01	.65	.950
20. Have you worried about what other people think of you when you failed in a competitive situation?	2.07	.949	.64	.950
21. Have you avoided people who have seen you fail?	1.42	.735	.54	.951
22. Have you felt ashamed of your body or any part of it?	1.90	1.08	.68	.950
23. Have you worried about what other people think of your appearance?	2.19	1.03	.70	.950
24. Have you avoided looking at yourself in the mirror?	1.29	.705	.54	.951
25. Have you wanted to hide or conceal your body or any part of it?	1.71	.965	.66	.950
Total	44.85	14.7	-	**.952**

Reliability

Internal Consistency

To assess the internal consistency Cronbach's alpha was computed for the total and for each subscale. The total score showed a very good internal consistency (α=.952) as well the internal consistency of the Factor 1 (α=.913) and the Factor 2 (α= .902). Factor 3 showed a good internal consistency (α=.869).

Test-retest reliability

Temporal stability was assessed conducting Pearson correlations and paired *t* tests between scores obtained 5-6 weeks later (N=112). Strong correlations were found for the total score (r=.829; p<.01) and for each factor (F1 r =.764; F2 r =.779; F3 r =.802; p < .01). Paired *t*-tests showed no significant differences in mean scores for the 3 Factors [F1: $t_{(111)}$ = -.332, p=.741; F2: $t_{(111)}$ = -1.929 p= .056; F3: $t_{(111\ )}$= -.284, p =.777] and for the total score [$t_{111)}$=.645; p=.520] between both times, which reveals a good temporal stability.

Convergent and Divergent Validity

The convergent validity of this scale has been studied through its correlation with the *Other As Shamer Scale* (OAS), the *Internalized Shame Scale* (ISS; shame subscale) and the Depression subscale of the *Depression, Anxiety and Stress Scales* (DASS-21). Divergent validity has been studied using the Anxiety and Stress scales of the *Depression, Anxiety and Stress Scales* (DASS-21) (cf. Table 7).

Table 7. Pearson correlations between the ESS and Convergent and Divergent measures

		ESS			
		F1 Characterological Shame	**F2 Behavioral Shame**	**F3 Bodily Shame**	**Total**
Convergent measures	OAS Total	.71**	.66**	.63**	.74**
	ISS Shame	.77**	.72**	.75**	.82**
	DASS-21 Depression	.59**	.56**	.57**	.63**
Divergent measure	DASS-21 Anxiety	.53**	.48**	.44**	.54**
	DASS-21 Stress	.47**	.43**	.35**	.47**

Note: ESS= Experience of Shame Scale; OAS= Other As Shamer Scale ; ISS = Internalized Shame Scale ; DASS-21 = Depression, Anxiety and Stress Scales-21
**p < .01

As expected, subscales and total score of the ESS were correlated with the OAS, the ISS shame subscale and the depression subscale. The analysis of the correlation coefficients showed that these varied between .63 and .75, ie moderate to high correlations, all positive and statistically significant at .01 level, which confirms the scale's convergent validity. Regarding the divergent validity, correlation coefficients of the DASS-21 anxiety and stress subscales presented low to moderate correlations, both lower than the correlations found for the convergent validity, which confirms the divergent validity of the ESS.

Descriptive statistics

To study the influence of the gender, age and school years of the Factors and the total ESS we proceeded to t-tests and univariate analysis of variance (One-Way ANOVA). There were significant differences regarding gender for the ESS total score and all Factors, girls scoring higher than boys. Regarding age there were no significant differences for the ESS Total score nor for any Factors. Concerning school years there were significant differences for the ESS total score and for both Factor 1 and Factor 3. No significant differences were found in Factor 2. Descriptive statistics for the total sample, gender, age and school years for the ESS are shown in Table 8.

Table 8. Descriptive statistics for the total sample, gender, age and school years for the ESS

		ESS Total		ESS Factors						
				F1 *Characterological Shame*		F2 *Behavioral Shame*		F3 *Bodily Shame*		
	N	M	SD	M	SD	M	SD	M	SD	
Total	326	44.85	14.71	19.49	6.80	18.30	6.15	7.10	3.23	
Gender										
Boys	141	41.65	13.56	18.35	6.40	17.20	6.07	6.09	2.50	
Girls	185	47.30	15.11	20.35	6.98	19.09	6.10	7.86	3.52	
$t_{(324)}$		-3.496*		-3.652*		-2.768*		-5.084*		*p<.05
Age										
14	115	44.82	14.56	19.31	6.50	18.39	5.94	7.11	3.37	
15	82	45.62	15.01	19.72	6.96	18.57	6.02	7.33	3.50	
16	69	43.67	13.72	19.16	6.53	17.43	5.83	7.07	3.13	
17	36	45.86	15.91	20.17	7.34	19.08	7.19	6.61	2.62	
18	24	44.30	16.22	19.46	7.99	17.79	6.93	7.04	2.91	
$F_{(4,321)}$		.217		.171		.570		.309		*p>.05
School Years										
9	199	44.55	14.61	19.23	6.47	18.23	6.22	7.09	3.33	
10	60	42.61	13.39	18.62	6.21	17.37	5.41	6.63	3.09	
11	38	51.0	16.42	22.74	8.71	19.93	5.94	8.34	3.47	
12	29	43.52	14.14	18.83	6.46	18.21	7.15	6.48	2.05	
F		2.830*		3.491*		1.354		2,675*		*p<.05

*$p<.05$

Discussion

Presently, there are only two instruments adapted to the Portuguese population to assess adolescents' different types of shame - the Other as Shamer Scale (Figueira, 2010; Goss, Gilbert & Allan, 1994) and the Internalized Shame Scale (Cook, 2001; Januário 2011). Our first study reported to the assessment of the psychometric characteristics of the *Experience of Shame Scale* (ESS; Andrews, Qian & Valentine, 2002), an instrument which assesses shame according to another theoretical criteria, allowing to assess three types of shame (characterological, behavioral and bodily shame). The adaptation and exploratory study of this scale will allow its use this scale in the clinical setting for the purpose of assessment, intervention, and future research in this area.

From the factorial analysis performed, 3 factor solution was the one chosen for it explains 58.854% of total variation. The distribution of 5 items (5, 8, 11, 18 and 21) did not match the original distribution, 3 of them loaded in more than one factor with a difference lower to .10. However, we chose to

maintain them according to the distribution suggested by the original authors (Andrews, Qian & Valentine, 2002) as its removal would not contribute to an increase of the scale alpha.

Pearson's correlations between factors revealed positive and significant correlations ranging between moderate to high. Not only does it suggests that the three factors are associated, it also indicates that they represent different types of shame. Regarding the correlations between each factor and the total score of the ESS, all were positive and significant, and ranged from high to very high. The study of the items revealed that most of them presented a moderate to high item-total correlation. This correlation shows the discriminatory power of the item, that is, the level at which the item is different in the same sense from the global scale, meaning that higher levels of discriminatory power indicate consistency (Almeida & Freire, 2008). Therefore, one can conclude that the 25 items which compose the scale are built to assess shame. As for test-retest reliability, all items presented significant test-retest correlations. Globally, correlations are moderate, except for item 1 which presents a low correlation and items 22 e 25 which show high correlations. Given the specific and repeated focus on shame in relation to both behavior and personal shortcomings, it appears likely that the ESS is tapping a specific disposition to experience shame rather than assessing a transient and non-specific negative affective state (Andrews, Qian & Valentine, 2002). This proposal was also supported by the high correlations obtained between the two times for total scale and for each factor in a 5-6 week interval. Internal consistency obtained for the scale total was excellent (.952) as it was for the internal consistency of each factor. These results indicate a good reliability of the ESS, as results obtained through this instrument are determined by the latent variable and not by other factors. Concerning the validity study, ESS presents good convergent validity, as both total and its factors revealed moderate to high positive correlations, statistically significant with the Other as Shamer Scale (OAS; Goss, Gilbert & Allan, 1994), shame subscale of the Internalized Shame Scale (ISS; Cook, 1996) and depression subscale of the Depression, Anxiety and Stress Subscales-21. We chose the CDI to assess convergent validity since many studies point to the existence of an association between shame and depression (Andrews, Qian & Valentine, 2002; Gilbert, 2000; Gilbert & Miles, 2000; Rubeis & Hollenstein, 2009). Higher correlations were always highlighted between ESS total and the variables mentioned above, which was somehow expected since ESS total assesses shame from a general point of view and gathering the three factors.

On the other hand, correlations obtained to depression also indicated, as expected, that shame is connected in a positive and significant association with depression, suggesting that the longer the adolescent feels embarrassed, greater are the depressive symptoms presented and vice versa. The association between shame and depression in adolescent meets the results presented in several studies (Kim, Thibodeau & Jorgensen, 2011).

Regarding divergent measures they all ranged from low to moderate and were inferior than the correlations obtained with convergent measures that confirm the divergent validity.

The analysis of ESS normative data showed differences between genders, namely girls presenting shame higher scores than boys, which supports the idea that during adolescence both girls and boys go through changes but girls are more vulnerable to experience shame (Burnaford & Walter, 2006).

In summary, the results showed good psychometric qualities of the ESS. In fact, all items that compose it seem to contribute to the evaluation that the instrument intended to measure. The ESS proved to be a reliable instrument given its excellent internal consistency and good temporal stability. It is also noted that, in general, results obtained were similar to those found by the authors who developed the original version of ESS, thus consolidating the data in favor of a good psychometric quality. Despite these results, we suggest a Confirmatory Factor Analysis in order to test the adjustment of data to our three factor solution. Moreover, this instrument can be an important contribution in terms of research and in terms of clinical evaluation in the context of social anxiety.

Study 2: ***Exploratory study of the relationship between social anxiety and shame in adolescence.***

We sought to explore the relationship between social anxiety (SA) and shame in a sample of adolescent with social anxiety disorder (SAD), having two groups functioning as control groups: adolescents with other anxiety disorders (OAD) and adolescents with no psychopathology (non-clinical group – NCG) and to explore if there was any predicting role of shame in social anxiety.

As specific goals and hypothesis the study set to explore significant associations between shame and social anxiety, being expected that:

H1: The SAD will present higher levels of shame in comparison to OAD and NCG.

H2: Social Anxiety will be significantly and positively correlated with shame in SAD group.

H3: Shame will be a significant predictor of social anxiety (SA) even when depressive symptoms are controlled.

This study can contribute to a more comprehensive understanding of social anxiety disorder as well as to a more targeted and effective intervention.

Method

Participants

The study comprised a total sample of 102 adolescents divided in three study groups: adolescents with social anxiety disorder (SAD, N=45), adolescents with other anxiety disorders (OAD, N=24) and adolescents with no psychopathology (NCG, N= 33). The sample was collected in the previously mentioned schools followed by a screening process explained in the Procedure section. In addition to the criteria applied in study 1,

adolescents without the intended primary diagnosis were excluded. Moreover, the exclusion criteria for the non-clinical group was the presence of any psychopathological diagnosis. Participant's mean age was 15.64 (SD=1.18). The mean of school years was 10.16 (SD=.972). Possible differences in gender, age and school years were analyzed (Table 9). There were significant differences in the distribution of girls and boys in the three groups. However, no significant differences were found neither in age and school years (Table 10). These results were confirmed with non-parametric statistics (Kruskal-Wallis one-way analysis of variance).

Table 9. Descriptive statistics for the total sample and groups: gender

Groups	Total	Gender				
		Boys		Girls		χ^2
	N	N	%	N	%	
SAD	45	25	55.6	20	44.4	
OAD	24	7	29.2	17	70.8	9.273*
NCG	33	23	69.7	10	30.3	
Total	102	55	53.9	47	46.1	

Note: SAD= Social Anxiety Disorder; OAD= Other Anxiety Disorders; NCG= Non-clinical group
**p<.05*

Table 10. Descriptive statistics for the total sample and groups: age and school grade

Groups	Age				School Grade			
	M	SD	F	*p*	M	SD	F	*p*
SAD	15.33	1.0			9.96	.767		
OAD	15.75	1.23	3.053	.052	10.25	1.07	1.851	.162
NCG	15.97	1.29			10.36	1.11		
Total	15.64	1.18			10.16	.972		

Note: SAD= Social Anxiety Disorder; OAD= Other Anxiety Disorders; NCG= Non-clinical group

Instruments[5,6]

The ***Social Anxiety scale for Adolescent*** (SAS-A; La Greca & Lopez, 1998) is a 22-item (with 4 filler items) self-report measure which assesses social anxiety experiences and fear of negative evaluation in peers relationships. The SAS-A is composed by 3 subscales, namely, *Fear of Negative Evaluation* (FNE), *Social Avoidance and Distress Specific to New Situations* (SAD-New) and *Generalized Social Avoidance and Distress* (SAD-General). Each item is rated on a 5-point Likert scale, according to how much the item "is true". Higher scores indicate higher social anxiety. The original version presented good internal consistencies for the FNE and SAD-New subscales and reasonable for the SAD-General, a good concurrent validity as well as a high test-retest reliability (La Greca & Lopez, 1998). The Portuguese version (Cunha, Pinto Gouveia, Alegre & Salvador, 2004) also obtained the same 3 factors, a good internal

[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] Internal Consistencies for each instrument in the present study are shown in Table 11.

consistency, a high test-retest reliability and a good convergent and divergent validity. Cunha et al, (2004) suggested a 55 cut-of-point as a good score to distinguish adolescent with and without social anxiety disorder in a community sample. The SAS-A is also sensible to changes due to treatment (Salvador, 2009).

The ***Multidimensional Anxiety Scale for Children*** (MASC; March, Parker, Sullivan, Stallings, & Conners, 1997) is composed by 39 items that aim to assess anxiety symptoms in children and adolescents in a 4-point Likert scale. Higher scores represent higher anxiety. The MASC has 4 factors: (1) Physical *Symptoms*, divided in the subfactors *Tension/Restless* and *Somatic/Autonomic*; (2) *Harm avoidance*, divided in the subfactors *Perfectionism* and *Anxious Coping*; (3) *Social anxiety*, divided in the subfactors *Humiliation* and *Performing in public* and (4) *Separation anxiety*. Its internal consistency ranged between good and very good for the total score and the factors. Temporal stability was reasonable. A good convergent and divergent validity was obtained (Reynolds & Paget, 1981; Reynolds & Richmond, 1978; Kovacs, 1985; Conners, 1995; March et al., 1997). The Portuguese version (Matos, Salvador, Cherpe & Oliveira, 2012) presented a good temporal stability, convergent and divergent validity. Its internal consistency ranging between weak and high for the total score and factors and between unacceptable to high.

The ***Children's Depression Inventory*** (CDI; Kovacs, 1985) is a 27-item self-report questionnaire with 3 possible answers developed to assess depressive symptoms in children and adolescents with ages between 7 and 17 years old. The higher the total score the more severe the depressive symptoms. Kovacs (1992), identified 5 factors: (1) *Negative mood*, (2) *Interpersonal Problems*, (3) *Ineffectiveness*, (4) *Anhedonia* and (5) *Negative Self-esteem*. This scale presented a good internal consistency and a moderate temporal stability (Smucker, Craighead, & Green, 1986). The Portuguese version (Marujo, 1994; Dias & Gonçalves, 1999) obtained high internal consistencies. However the scale assumed a unifactorial structure.

The ***Anxiety Disorders Interview Schedule for DSM-IV, Child Version*** (ADIS-C; Silverman & Albano, 1996) was developed specifically to diagnose anxiety disorders in childhood and adolescence. It also diagnosis ADHD and affective disorders. If confirmed the minimum number of symptoms required for given a diagnosis, the subject is asked about the interference of symptoms in his/her life in a 9-point scale. Good concurrent validity was found in Social anxiety disorder, Separation Anxiety and Panic Disorder Diagnosis (Wood, Piacentini, Bergman, McCracken, & Barrios, 2002). 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). The ADIS-C proves to be sensitive to changes resulting from treatment in social anxiety disorder (Salvador, 2009).

In addition to the instruments described above, this study also used the ***Experience Shame Scale*** (ESS), described in the instruments section of study 1.

Table 11. Internal consistency of instruments (Cronbach's alpha)

Measures	Groups			Total
	SAD	OPA	NCG	
ESS Total	.946	.958	.942	.956
ESS_ Characterological Shame (F1)	.909	.907	.915	.923
ESS_ Behavioral Shame (F2)	.894	.927	.833	.903
ESS_ Bodily Shame (F3)	.845	.936	.883	.886
CDI Total	.813	.867	.806	.839
MASC Total	-	-	-	.861
SAS-A Total	.867	.906	.856	.896
SAS-A (FNE)	.898	.939	867	.917
SAS-A (SAD-New)	.836	.828	.618	.830
SAS-A (SAD-General).	.674	.842	.616	.737

Note: SAD= Social Anxiety Disorder; OAD= Other Anxiety Disorder; NCG=Non-Clinical Group; SAS-A (FNE)=Fear of Negative Evaluation; SAS-A (SAD-New)=Social Avoidance and Distress Specific to New Situations; SAS-A (SAD-General)= Generalized Social Avoidance and Distress

Procedure

The general procedure for this study was the same described as study 1. A screening procedure was conducted to select adolescents with answers above the cut-off point in either the SAS-A, the CDI or the MASC, and adolescents within the normative values for gender in all of these measures. Researchers were blind to the reason why adolescents had been selected by the screening procedure, so there were no bias during the performance of the ADIS-C. After the interview the sample was divided in 3 groups: (1) *Adolescents with social anxiety disorder* (SAD); (2) *Adolescents with Other Anxiety Disorder* (OAD); and (3) *adolescents with no psychopathology* (non-clinical group – NCG). These two last groups functioned as control groups.

The statistical procedures specifically applied to each hypothesis is described in the results section.

Results

Inter group study

Table 12 presents the means and standard deviations for the total sample and for each group. It also presented One-Way analysis of variances (ANOVA), to assess possible differences between groups and Post-Hoc Tukey Test to localize these differences.

The ANOVA's performed and the associated Post-Hocs Tukey Tests showed that, there were significant differences between the SAD and the others two groups (OAD and NCG) in the ESS total score and in Characterological shame (Factor 1). Regarding Behavioral Shame (Factor 2) the only significant difference found emerged between SAD and OAD group. None of the groups differed significantly in Bodily Shame (Factor 3). Cohen´s *d* revealed effects sizes between moderate (.69) and large (.90).

Table 12. Means (M), Standard Deviations (SD), ANOVA and Post-Hoc Tukey Tests

Measures	Groups	N	M	SD	F	Post-Hoc
ESS_Total	SAD	45	58.60	15.23	8.899*	SAD> OAD, NCG
	OAD	24	43.63	16.22		
	NCG	33	48.70	13.70		
ESS_F1	SAD	45	26.65	7.82	9.181*	SAD> OAD, NCG
	OAD	24	19.50	7.04		
	NCG	33	21.30	6.75		
ESS_F2	SAD	45	22.87	5.68	8.355*	SAD>OAD
	OAD	24	16.91	6.69		SAD,NCG
	NCG	33	20.06	5.31		OAD,NCG
ESS_F3	SAD	45	9.09	3.47	3.359	SAD,OAD,NCG
	OAD	24	7.21	4.04		
	NCG	33	7.33	3.11		

Note: ESS_Total= Experience of Shame Total score; ESS_F1= Characterological Shame; ESS_F2= Behavioral Shame; ESS_F3= Bodily Shame.

Intra Group Study

Preliminary Analysis: Gender differences for Social Anxiety and Shame

Before proceeding with our analysis, we first tested for significant differences between genders for all the variables included under study, in SAD group. The only significant differences found between gender was in Factor 3 of the ESS ($t_{(43)} = -2.182$, $p = .035$), where girls scored higher than boys. Therefore, gender was not controlled for in all of the following analysis, except in the regression analysis of Factor 3 as a predictor of social anxiety, where separate analysis have been made.

Correlation study

Table 13 presents two-tailed Pearson's correlations between shame measures (ESS, OAS and ISS) and social anxiety measure (SAS-A) in the SAD group.

Pearson correlations showed a significant and positive association between shame and social anxiety. Regarding the ESS, only Factor 3 (Bodily Shame) did not associate with the subscales and total score of the SAS-A Total. Both ISS and OAS (total and factors) scales correlated significantly with the measures of social anxiety except for the SAS-A subscale's SAD-New.

Correlations[7] between the ESS and the SAS-A had greater magnitude than the correlations between the OAS, ISS and SAS-A and ranging from low to moderate.

[7] The correlation coefficients values taken as reference were the ones presented by Pestana & Gageiro (2003) also used in Study I.

Table 13. Pearson Correlations between shame measures and social anxiety measure in SAD group

SAD (N=45)	SAS-A			
	FNE	SAD-New	SAD-General	SAS-A Total
ESS Total	.61**	.30**	.47**	.56**
ESS_Characterological Shame F1	.58**	.38**	.54**	.60**
ESS_Behavioral Shame F2	.58**	.36**	.42**	.55**
ESS_Bodily Shame F3	.39**	-.13	.17	.18

Note: SAS-A FNE=Fear of Negative Evaluation; SAS-A SAD-New=Social Avoidance and Distress Specific to New Situations; SAS-A SAD-General= Generalized Social Avoidance and Distress; ESS= Experience of Shame Scale;
** *p<.01*

Regression Study

Shame as a predictor of Social Anxiety

To test for the role of shame on social anxiety, a hierarchical regression analysis were performed. Given the already well-established relationship between social anxiety and depression (as well as shame and depressive symptoms), the Children Depressive Inventory (CDI) was introduced in the first model in order to control for the effect of depressive symptomatology on social anxiety. Shame (ESS Total score and each factor) was introduced in the second and last model.

Concerning the regression of the ESS total score on social anxiety, both models were significant [Model 1: $F_{(1, 42)} = 14.655$, $p = .000$; Model 2: $F_{(2,41)} = 11.113$ $p = .000$] (Table 14). However, only Shame in the second model ($\beta = .390$; $p = .020$) significantly predicted social anxiety, accounting for 9.3% of social anxiety variance ($R^2_{change} = .093$; $F_{change\ (1, 41)} = 5.871$; $p = .020$).

Table 14. Hierarchical Regression analysis on Social Anxiety: independent effects of depression and shame.

Predictors	**R**	**R^2**	**B**	**β**	**F**	***t***
Model 1	.509	.259			14,655***	
CDI_Total			.902	.509		3.828***
Model 2	.539	.352			11,113*****	
CDI_Total			.470	.265		1.649
ESS_Total			.280	.390		2.423*

Note: CDI = Children Depression Inventory; ESS_Total = Experience of Shame Scale Total score;
****p*<.001; **p*<.05

This result (Table 14) suggested the existence of an eventual mediation of shame in the relationship between depression and social anxiety. In order to test for this possible mediation, we proceeded with a mediaton analysis following Baron and Kenny's (1986) four step approach. Accordingly, the direct effect of the independent variable (CDI) on the dependent variable (SAS-A), the direct effect of the independent variable (CDI) on the mediator variable (ESS) were examined. The direct effect of

the independent variable (CDI) was then again examined controlling for the mediator variable (ESS). Additionally, the Sobel test (Sobel, 1982) was used to test indirect effects of the mediator (shame). Depressive symptoms significantly predicted social anxiety (β= .509, *p*=.000) and shame (β=.624, *p*=.000). In addition, shame was associated with social anxiety (β=.555, *p*=.000). Lastly, by simultaneously entering depressive symptoms and shame, shame was the only significant predictor of social anxiety (β=.390, *p*=.020), while depressive symptomatology was no longer a significant predictor (β=.265, *p*=.107). The Sobel test confirmed that the relationship between depressive symptoms and social anxiety was fully mediated by shame (z=2.489, *p*=.013).

As shown in Table 15, in the regression model of Characterological Shame on social anxiety, both models were significant [Model 1: $F_{(1, 42)}$ =14.655, p = .000; Model 2: $F_{(2, 41)}$ = 13.038, p = .000]. Although depressive symptoms were a significant predictor of social anxiety in the first model (β = .509; p = .010) and, in the second model, only shame significantly explained SA (β = .467; p = .005). Shame accounted for 13% of social anxiety variance (R^2_{change} = .130; $F_{change\ (1, 41)}$ =8.725; p = .005).

Table 15. Hierarchical Regression analysis on Social Anxiety: independent effects of depression and Characterological Shame

Predictors	R	R^2	B	β	F	*t*
Model 1	.509	.259			14.655***	
CDI_Total			.902	.509		3.828***
Model 2	.624	.389			13.038***	
CDI_Total			.375	.212		1.339
Characterological Shame			.654	.467		2.954**

Note: CDI = Children Depression Inventory;
***p<.001; **p<.01;

The predictive role of Behavioral Shame on social anxiety is presented in Table 16. Both models were significant [Model 1: $F_{(1,42)}$ = 14.655, p = .000; Model 2: $F_{(2,41)}$ = 12.278, p = .000] (R^2_{change} = .116; $F_{change\ (1,41)}$ =7.598; p = .009), and both depression (β =.311; p = .035) and shame (β =.394; p = .009) significantly predicted social anxiety.

Table 16. Hierarchical Regression analysis on Social Anxiety: independent effects of depression and Behavioral Shame

Predictors	R	R^2	B	β	F	*t*
Model 1	.509	.259			14.655***	
CDI_Total			.902	.509		3.828***
Model 2	.612	.375			12.278***	
CDI_Total			.551	.311		2.178*
Behavioral Shame			.759	.394		2.756**

Note: CDI= Children Depression Inventory;
***p<.001; **p<.01; *p<.05

Since both factors of Characterological Shame and Behavioral Shame pointed to a total and a partial mediation of Shame on the relationship between depression and social anxiety, we again performed

Baron and Kenny's steps to confirm its every proposed assumption. The relationship between independent and dependent variables and between the independent variable and the mediational variable was verified, confirming the total and partial mediation (Table 15 and 16, respectively).

As significant differences between gender was found for factor 3 of the ESS ($t_{(43)} = -2.182$, $p = .035$) (girls scoring higher than boys), separate analysis were performed for boys and girls.
As shown in Table 17 and 18, only for boys did we find significant results on the proposed models [Model 1: $F_{(1,22)} = 11.035$, $p = .003$; Model 2: $F_{(2,22)} = 5.335$ $p = .013$]. Nevertheless, Bodily Shame did not play any role on the prediction of social anxiety.

Table 17. Hierarchical Regression analysis on Social Anxiety: independent effects of gender and depression and Bodily Shame for boys

Predictors	R	R^2	B	β	F	*t*
Model 1	.578	.334			11.035**	
CDI_Total			.952	.578		3.322**
Model 2	.580	.337			5.335*	
CDI_Total			1.021	.371		2.749*
Bodily Shame			-.234	-.068		-.302

Note: CDI = Children Depression Inventory;
***p*<.01; **p*<.05

Table 18. Hierarchical Regression analysis on Social Anxiety: independent effects of gender and depression and Bodily Shame for girls

Predictors	R	R^2	B	β	F	*t*
Model 1	.366	.134			2.789	
CDI_Total			.697	.366		1.670
Model 2	.481	.231			2.556	
CDI_Total			.872	.458		2.066
Bodily Shame			-.975	-.325		-1.465

Note: CDI = Children Depression Inventory;
***p*<.01; **p*<.05

Discussion

SAD group presented the higher scores in Characterological, Behavioral Shame and in the ESS total scores but not in Bodily Shame. This might be due to the fact that the items through which both characterological and behavioral shame are assessed are very closely related with the nuclear fear of socially anxious individuals, that is, the fear of being humiliated or rejected in social situations in response to their perceived inability to have an adequate social behavior (Hofmann, Albano, Heimberg, Tracey, Chorpita, & Barlow, 1999) (e.g. Characterological shame: "Have you avoided people because of your inability to do things?", "Have you worried about what other people think of the sort of person you are?; Behavioral Shame: "Have you worried about what other people think of you when you do something wrong?" or "Have you avoided contact with anyone who knew you said something stupid?"). In line with this interpretation is the fact that there were

no significant differences for the levels of bodily shame between all groups. This may point to the fact that bodily shame and concerns about body image are a normative experience during adolescence (Reimer, 1996; Burnaford &Walter, 2006). Bodily shame is, by its very nature, more likely to be limited to specific and discrete areas of self and personal performance (Andrews, Qian & Valentine, 2002). Bodily shame seems to be more likely related to other psychopathology, such as eating disorders, as Doran and Lewis (2011) suggest. Congruent with this is the fact that, not only were there no significant differences between groups, but also all three groups presented mean values of bodily shame within the normative values found in the exploratory study of this scale.

Altogether, these results suggest that shame may be a construct more associated with social anxiety disorder than to other anxiety disorders. In fact, social anxiety disorder is characterized by negative thoughts and beliefs about how the self is inferior, inadequate, unattractive, defective and with fear to get known because he/she will be rejected for being who they are. The nuclear fear is the negative evaluation and subsequent rejection because of their defectiveness (Rapee & Heimberg, 1997). Unlike this, other anxiety disorders have different nuclear fears and are characterized by thoughts concerning other types of danger, such as bodily symptoms, animals, diseases, etc. Individuals with these type of fears are not usually ashamed of themselves and/or their fears. Furthermore, their difficulties are considered something external of which one has nothing to be blamed for or ashamed of. Rebelo (2012) found that higher scores of internal shame in adolescents with social anxiety disorder comparing with adolescents with other anxiety disorders and adolescents with no psychopathology.

Both the characterological and behavioral shame factors as well as the total score of the ESS were significant correlated with all the SAS-A factor's and total score. However, bodily shame was only correlated with the *Fear of Negative Evaluation* (FNE) factor, with a low correlation. This correlation pattern concurs with what was previously mentioned about the specificity of both the characterological and behavioral factors on social anxiety. Moreover, shame was more highly associated with fear of negative evaluation than with the other factors, which comes back to the assumption, and our hypothesis, that shame and social anxiety disorder are closely related, since fear of negative evaluation is social anxiety's nuclear fear. People with social phobia have consistently been found to score higher on questionnaire measures of fear of negative evaluation than have people with other forms of psychopathology, other anxiety disorders, or no mental disorder (Heimberg, Hope, Rapee & Bruch, 1988).

This result corroborates the cognitive model of social anxiety disorder (Beck et al., 1985; Clark and Wells,1995, Heimberg et al., 1997) where the fear of negative evaluation, exposure and social avoidance are the hallmarks of social anxiety.

These results support our hypothesis and are in line with other studies also conducted with adolescents. Januário (2011) and Rebelo (2012) obtained results showing that social anxiety was related to internal and external shame. Also a study of Lutwak and Ferrari (1997), in a sample of

187 subjects from the general population through correlational analysis found that shame proneness was significantly related to anxiety in social interaction. Similar results were found in other studies with adolescents (Carvalho, 2011) and college students (Gilbert, 2000). Furthermore, Xavier (2011), in an adult sample of the general population, presented positive moderate association between social anxiety and internal shame and all OAS factors. Regarding a time perspective, the obtained results seem to corroborate the typical trajectory of adolescence. The characteristic *Self* of a child will be the characteristic Self of a young adult. All these changes call attention to the Self and to his exposure, as well as to all the inherent social comparison processes (Kaufman, 1996) that emerge from the need to belong and integrate social group. This way, others´ opinion about the self seem to assume a greater importance and therefore increases shame proneness. When experiencing shame, adolescents tend to focus attention on prosocial behavior, in order to increase the acceptance by others, which contribute to further increase on concern of negative evaluation and feelings of anxiety in social situations.

The ESS total score as well as the factors Characterological and Behavioral Shame were significant predictors of social anxiety after controlling for depressive symptoms. However, bodily shame did not reveal itself to be a significant predictor of social anxiety. These results are consistent with our previous hypothesis that both the Characterological and Behavioral Shame are more relevant to social anxiety than Bodily Shame given their direct relation to the experience of social anxiety. Similar results were found in other studies. Carvalho (2011) found a significant relationship between external shame and social anxiety, especially with the inferiority factor. In addition, external shame was a significant predictor of social anxiety in both sexes. Rebelo (2012) also found that external shame, namely the inferiority and the reaction of other to my mistakes were predictors of social anxiety in adolescents with social anxiety disorder. Although not initially hypothesized, a full mediator effect (between depressive symptoms and social anxiety) was found for the total EES score and the factor Characterological Shame. On the other hand, Behavioral Shame only partly accounted for the same relationship. These mediations indicate that the experience of social anxiety resulting from depressive symptoms is accounted by the experience of shame towards one's character and behavior. In addition to its high prevalence, social anxiety disorder is highly comorbid with depression. Recently, several studies have investigated the role of shame in both depression and social anxiety disorder. Also, the importance of targeting shame during treatment in social anxiety disorder is not new. However, our results suggest that addressing shame during treatment will also help diminishing depressive symptoms usually associated with social anxiety disorder.

This article allowed to explore the association of different types of shame (through a new instrument) with social anxiety disorder, with the advantage that they are all evaluated in a single instrument - the Experience of Shame Scale. Furthermore, it has shown to be significantly correlated with social anxiety disorder, even assuming predictive effect, like other

measures of shame studied for the Portuguese adolescent population**.**

The findings presented here should be considered while taking into account some methodological limitations. The sample was collected in the center region of Portugal which may limit the generalization of the results. Additionally, the clinical sample was relatively small and there were gender differences between groups. We suggest to replicate our study in a larger sample of a wider geographical area. Also, all analysis depended on cross-sectional data and short-term longitudinal studies would be better to further explore etiological pathways.

Despite the limitations, the key data may be applied at the level of intervention, in order to improve its effectivenes, to allowi the reduction of invalidation usually associated with social anxiety disorder, and to promote greater directionality and specificity of treatments for specific components, such as different types of shame.

The present study adds some contributions to the studies that already existed in the scientific literature within this theme. First, the fact that it was performed with a clinical sample of Portuguese adolescents represents a key factor in this investigation, and in the investigations in this area in Portugal. The use of a semi structured interview was also an important aspect of this study, allowing a more complete assessment to assess sample subjects more completely when compared to the exclusive use of self-response questionnaires. Finally, the fact that it compared two clinical groups - social anxiety disorder and other anxiety disorders – allowed the understanding of the specificity of shame in social anxiety disorder.

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