

Development and Validation of the Adolescent Shame-Proneness Scale

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Abstract

Like other self-conscious emotions, shame takes on particular significance during late childhood and adolescence due to a developing capacity for self-reflection, self-other comparisons, and sensitivity to the views of others. Shame is a potentially important variable in adolescent wellbeing given its established associations with depression, reduced feelings of self-worth, and problematic anger. Three studies are reported that describe the development and validation of the Adolescent Shame-Proneness Scale (ASPS), a novel semi-idiographic measure of shame-proneness. The ASPS is a 19-item measure assessing three components of shame-proneness - negative self-evaluation, externalisation, and emotional discomfort. Taken together, the studies support the reliability and validity of the ASPS as a semi-idiographic measure of shame-proneness in adolescents aged 11 to 18 years. ASPS scores correlate as expected with scores on existing measure of shame-proneness and with measures of anger, negative affect and self-esteem. Importantly, the data suggest that ASPS scores are related to, but distinct from, guilt. Confirmatory factor analysis supported the validity of the ASPS factor structure (RMSEA=.08, SRMR=.05, CFI=.97, NNFI=.97). The ASPS represents a unique contribution to existing options for measuring shame-proneness in research and clinical contexts. Further work is required to assess the ASPS' temporal stability and its viability and psychometric properties in more culturally diverse samples.

Keywords: shame, adolescence, anger, self-esteem, measure, psychometric

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Introduction

Shame, along with guilt, is classified as a 'self-conscious' emotion. Self-conscious emotions are prompted by self-reflection and self-evaluation (Lewis, 1995; Tangney, Stuewig & Mashek, 2007). There is general agreement in the literature that there are no universal situations that evoke shame and guilt, and similar situations can evoke either emotion (Tangney et al., 2007). Given that shame and guilt are emotions that may arise from similar situations and both have the self as their object, a substantial body of empirical work has sought to identify dimensions along which shame and guilt might be differentiated. The ability to distinguish between these emotions is critical to the development of valid instruments to assess them (Tangney, 1996).

One empirically supported distinction between shame and guilt is the type of attributions associated with each (Lewis, 1971; Lewis, 1995; Tracy & Robins, 2006; Kim, Thibodeau & Jorgensen, 2011). Shame-inducing attributions are internal, stable, uncontrollable and global ('I failed this test because I am incompetent') whereas guilt-inducing attributions are internal, unstable, controllable and specific ('I failed this test because it is difficult'). Kim et al. (2001) summarise other distinctions between shame and guilt that have received empirical support. When a person feels shame, the focus of their attention is directed inward - the global self is the object of negative evaluation. This results in feeling small and exposed and produces a desire to hide, to disappear and to avoid others. Shame is an intensely painful emotion that is associated with anger and anxiety. Conversely, when a person feels guilt, the focus of their attention is directed outwards towards others - the

specific behaviour is the object of negative evaluation. This results in feelings of remorse and concern for others and a desire to approach others, to apologise and repair the damage done. Guilt is a less painful emotion and is associated with sorrow and empathy (Kim et al., 2011).

Some theorists consider that shame is a more public experience than guilt (i.e. the transgression is more visible to others) whereas guilt is a more private experience. This way of differentiating shame and guilt has received rather mixed support however (Kim et al., 2011). Tangney et al. (2007) suggest the public/private distinction may have arisen from the observation that when a person feels shame they are principally concerned with what other people think of them whereas, when a person feels guilt, they are more focussed on concern for others. Gilbert (2011) elaborates on the importance of perceived evaluation by others in shame, drawing a distinction between 'external' and 'internal' shame. This distinction is based on the observation that self-evaluation comprises how a person believes others view them, and how they view themselves. For Gilbert, external shame arises when a person experiences or anticipates creating a negative response in others (e.g. provoking contempt, ridicule, being seen as unworthy or incompetent). This is a threatening state because it raises the possibility of rejection by others and, as a consequence, reduced safety and security. Internal shame arises when a person makes negative evaluations or has negative feelings about themselves (e.g. disappointment and frustration). Internal shame is likely to be more acute if one perceives that others share the negative view of self and, therefore, one might expect external and internal shame to be correlated. Indeed, Goss, Gilbert and Allan (1994) reported a substantial overlap ($r=.81$) between a measure of external shame (the 'Other As Shamer Scale'; Goss et al., 1994) and a measure of internal shame (the Internalized Shame Scale; Cook, 1987). Kim et al. (2011) reported significantly larger effect sizes for the

relationship between external shame and depression versus internal shame and depression. However, these authors conclude that their analysis was very limited given there is only a single measure to specifically assess external shame (the Other As Shamer Scale, OAS) and that the higher correlation between the OAS and depression might be due to features of the OAS.

One further distinction in the literature between shame and guilt focuses on their relationship with anger and the question of whether the painful experience of shame is transformed into anger or aggression. Lewis (1971) observed that shame preceded anger and hostility in her clients and proposed that shame may involve defensively passing responsibility onto others as a way of managing the threat associated with being perceived negatively. Similarly, Kim et al. (2001) suggest that, in order to cope with the pain of shame, some people may shift blame onto others. Lindsay-Hartz, De Rivera and Mascolo (1995) observed in their data that shame might promote a rage reaction in some and suggested that putting someone else down might serve to bolster ones self-evaluation. Evidence suggests that shame-prone individuals are more likely to externalise blame, manifest destructive expressions of anger, indirect aggression and self-directed aggression (Tangney et al., 2007). In contrast, guilt results in more constructive behaviours and, as noted, the action tendency is to repair damage.

Shame and Wellbeing in Adolescence

Discussing the evolution of shame, Gilbert (2011) proposes that the intense focus on evaluation by others is necessary to maintain helpful and nurturing social relationships. To retain social bonds, humans need to create a positive view of themselves in the minds of

others. A function of shame is to signal when this positive view, and hence social bonds, might be under threat. Adolescence is a critical period of identity development and it is during this period that individuation from parents and the formation of peer affiliations take central importance. In this period, therefore, actual and perceived evaluation of others becomes increasingly important. Cognitive changes in adolescence allow for a more sophisticated capacity for self-reflection and social perspective taking. Along with the increasing importance of peer and intimate relationships and personal striving for greater autonomy, biological, emotional and physical changes during adolescence, such as hormone-related transformations that can feel uncontrollable, provide an ideal context for the development of shame as young people strive to develop a valued sense of self within their peers groups (Anastasopoulos, 1997).

The link between shame and psychological difficulties is well documented. In adults, shame is associated with depression (Andrews, Qian & Valentine, 2002; Harder, Cutler & Rockart, 1992; Tangney, Wagner & Gramzow, 1992) and anger and aggression (Tangney, Wagner, Fletcher & Gramzow, 1992; Tangney, Wagner, Hill-Barlow, Marschall & Gramzow, 1996). Similarly, in adolescents, research indicates a positive correlation between shame and depression (Aslund, Nilsson, Starrin & Sjoberg, 2007; Stuewig & McCloskey, 2005; Tilghman-Osborne, Cole, Felton & Ciesla, 2008). Tangney and Dearing (2002) provide further evidence of the detrimental impact of shame from a longitudinal study of young people assessed for shame proneness in the fifth grade and followed up when graduating from high school. Greater shame-proneness, assessed during the fifth grade, was predictive of lower likelihood of applying to college, greater unsafe sexual practices, greater use of drugs and alcohol, and a greater number of suicide attempts. Conversely, greater guilt-proneness,

measured at fifth grade, predicted lower likelihood of engaging in unsafe sex, lower use of drugs and alcohol, and a lower likelihood of being involved in crime, even when controlling for baseline aggression and socio-economic status. Recently, Stuewig, Tangney, Kendall, Folk, Reinsmith Meyer and Dearing (2015) followed up 258 emerging adults (aged 18 to 21 years) from whom they had previously taken measurements of shame and guilt proneness, in the fifth grade. After controlling for parental socioeconomic status and teacher reported aggression in fifth grade, shame proneness positively predicted number of occasions of unprotected sex and number of illegal drugs ever used and negatively predicted age of first use of alcohol. In contrast, guilt proneness negatively predicted number of sexual partners, number of occasions of unprotected sex and having sex without birth control, lifetime alcohol use, number of illegal drugs used, and number of occasions of driving under the influence of alcohol, arrests and detentions.

The foregoing discussion suggests that guilt is a more adaptive emotion than shame. Recent work however suggests that shame might have adaptive potential. Lickel, Kushlev, Savalei, Matta and Schmader (2014) point out that the distinction between shame (avoidance, self-protection) and guilt (approach, apologising) action tendencies is principally about a person's immediate response to a situation. In two studies, Lickel et al. (2014) explored the potential of shame and guilt to promote motivation to change the self in the longer term, reasoning that shame might be a stronger motivator of change than guilt because shame involves a discrepancy between current and desired self whereas guilt focuses on specific behaviours. In their first study, Lickel et al. found that shame predicted motivation to change the self more strongly than did guilt. In a follow-up study, although regret was evident in shame-related experiences, it was shame rather than regret that predicted motivation to

change. However, the authors point out that more research is needed to understand the circumstances under which motivation to change, prompted by shame, translates into actual change, and that the strong desire to escape associated with shame might paradoxically inhibit such change.

Measurement of Shame-Proneness

The Test of Self-Conscious Affect Child (TOSCA-C: Tangney, Wagner, Burggraf, Gramzow & Fletcher, 1990) and Adolescent Version (TOSCA-A: Tangney, Wagner, Gavlas & Gramzow, 1991) are the most widely used measures of shame and guilt in young people. The TOSCA measures are scenario-based. After reading each scenario (e.g. not doing well in a test, hurting someone), the respondent is asked to rate shame and guilt relevant statements indicating the likelihood that they would experience each emotion in the focal situation. The TOSCA measures have received substantial empirical support and an evident strength is that their format is in keeping with the conceptual literature - the same situation can provoke both shame and guilt. The TOSCA measures assess generalized tendencies to experience self-conscious emotions across a range of everyday situations. As Tangney (1996) observes, they do not capture less common experiences that might be more salient to individuals at a particular point in time. Additionally, the scenarios mainly focus on actions on the part of the respondent. Shame, though, might arise from individual physical (e.g. appearance) and non-physical (e.g. association with an undesirable person) characteristics and through being subjected to maltreatment by others (e.g. being bullied or sexually assaulted). Shame may also arise from the experience of unwanted intrusive images, urges and thoughts (Gilbert, 2011).

As a supplement to existing measures in this area, the current study aimed to develop a semi-idiographic measure of shame. The development of valid measures of shame and guilt is difficult given that both are negative self-evaluative emotions (Stuewig, Tangney, Heigel, Harty & McCloskey, 2010) that may arise from the same situations. Consequently, there is a danger of conceptual contamination when developing tools to assess these separate emotions. Tangney (1996) urged researchers to be clear about the definition of shame and guilt underpinning their measure and the assessment technique chosen. The semi-idiographic technique asks respondents to bring to mind recent shame-eliciting situations they have experienced and then asks them to indicate the intensity of shame experienced across them using a number of standard items. Therefore, like the TOSCA, the shame-proneness index derived represents shame felt across all those situations. This method recognises that exposure to shame-eliciting situations is common but the intensity of the shame response varies. This method is in keeping with the conceptual literature that indicates there are no universal situations that provoke shame. An obvious challenge to this method of assessment is that it assumes that respondents can understand the concept of shame. There is, however, support that young people are able to do this. Ferguson, Stegge and Damhuis (1999) found that seven to twelve year olds could describe shame in appropriate ways. For example, they thought that shame resulted in avoidance behaviour whereas guilt resulted in reparative behaviour. By age ten, children held similar opinions to adults about the distinction between shame and guilt.

If it is not the situation per se that prompts shame or guilt and that some situations might provoke either emotion, then the use of self-generated shame situations to focus a respondent is a potentially useful method so long as the subsequent items to assess the

intensity of shame experienced in these situations are distinct from guilt. In line with Tangney's (1996) recommendation, the forgoing discussion has outlined the conceptual and empirical literature differentiating shame and guilt and which forms the definition of shame on which the semi-idiographic measure is based. This literature indicates that items assessing shame should capture global, stable self-evaluations reflecting external (how the respondent perceives others evaluate them) and internal shame (how the respondent evaluates him/herself), negative affect, and action tendencies relating to avoiding others and externalisation. With regard to externalisation, the literature suggests that the negative feelings associated with shame might be projected outwards. Thomaes, Stegge and Olthof (2007) proposed that whilst some young people accept perceived negative evaluation and engage in submissive responses such as hiding, an alternative response to shaming situations is to reject the negative self-evaluation and to direct negative affect outwards. This response may then produce acts of aggression or violence. These responses differentiate shame from guilt in that the latter typically prompts apologising, making amends and being concerned for others.

Research Aims

The studies outlined herein report our attempt to develop a viable, valid and reliable semi-idiographic assessment of shame-proneness for adolescents aged 11 to 18 years. Our constituent aims were to: (1) demonstrate that adolescents can readily generate self-defined shaming situations; (2) develop a measure that assesses external and internal shame, the internal discomfort associated with it, and the propensity to externalise as part of the shame response; (3) provide evidence on the reliability and validity of the measure by correlating scores on it with measures of self-esteem, negative affect and anger; and, (4) support scale

validity via confirmatory factor analysis.

Study 1: Scale Development

The overall aim of Study 1 was to generate items for a semi-idiographic measure of shame-proneness. To achieve this, the study was designed to elicit young people's understanding of shame and guilt, the kinds of situations that give rise to shame and how young people think and feel and what they do when they experience shame.

Method

Participants and Design

Twelve young people, six boys and six girls, aged 11 to 15 years ($M = 13.08$, $SD = 1.16$) participated in a semi-structured interview. Seven were White British, two Black British, one British Asian, one British Caribbean, and one South American. Participants resided in the south of England. Eleven were recruited from a co-education secondary school and one via an email advertisement sent out to staff from one university. The fourth author conducted all interviews and each lasted between 20 and 30 minutes. An interview guide was used consisting of the following questions: *What does the word shame mean to you? What does the word guilt mean to you? Is there a difference between shame and guilt? Can you describe a situation that might make someone feel shame? What does shame feel like (in mind, in body)? What does shame make you think? What does shame make you feel like doing?* The interviews were audio recorded and transcribed verbatim. Permission to conduct the research was given by the authors' institutional ethics board. Consent for participation was required from the young person and from a parent.

Data Analysis

The data analysis had three main functions. First, to assess whether young people can distinguish between shame and guilt appropriately. Second, to assess whether they can bring to mind situations that provoke shame. Third, to identify shame-related evaluations (made by self and others), negative affect, and action tendencies that young people associated with shame. The purpose of this latter aspect of the analysis was to develop questionnaire items.

The analytic process involved the fourth author coding each interview transcript in order to extract data within the following broad categories: distinctions made between shame and guilt; situations that prompt shame; and evaluations, feelings and action tendencies that young people associated with shame. Data that could be coded into these broad categories was extracted from each transcript. Each piece of extracted data was organised into its relevant category. The first and second authors audited the data extraction process by checking the data extracts against the transcripts. Next the extracted data within each broad category was then organised into sub-categories.

Results

Shame vs. guilt

Five sub-categories were developed from participants' distinctions between shame and guilt. The most common sub-category, mentioned eight times across the interviews, was that guilt and shame can co-occur, for example "*do something and feel guilty about what you did but you might also feel shame about yourself as you let yourself down*". This indicates a distinction is made between guilt arising from evaluation of action and shame arising from

evaluation of the self. The next most common sub-category were that guilt is about what a person does (four occurrences), and that shame is about being exposed (four occurrences), for example “*other people see the shaming thing*”. The final two sub-categories, with two occurrences each across the interviews, were that shame lasts longer than guilt (e.g. “*shame stays with you, guilt feelings change*”), and shame is about the self and guilt is about what you did (e.g. “*shame is about yourself guilt is about other people what you did to other people*”).

Shame-provoking situations

Ninety-three shame-provoking situations were extracted and were classified into three sub-categories. The most common represented aspects of performance, conduct or treatment of others would make the respondent appear undesirable (61 of 93 situations; 66%). Within this sub-category, situations could be classified as follows, ordered by frequency of occurrence: doing badly or not as well as one could in a test/exam/sports (8), lying/betrayal (7), letting others down/not doing as others expected (7), arguing/fighting (6), getting told off/into trouble (6), doing/getting something wrong (6), being a bully (5), physically/emotionally hurting others (5), criminality (5), giving into peer pressure (3), soiling, e.g. being sick on others/wetting the bed (2), suicide attempt (1). The second most common sub-category referred to characteristics indicating something negative either about one’s appearance or social status (17 of 93; 18%): the way you look/wearing the wrong clothes (4), characteristics of family members, e.g. their attractiveness, intellectual ability or alcoholism (4), not having any friends (3), being poor/not having what others have (2), your background (2), not having a mum/dad/family (2). The third sub-category represented being subject to the actions of others (15 of 93; 16%) and could be sub-classified into: being bullied

(9), being ridiculed (4), being verbally abused in the street (1), and being raped (1).

Shame-related thoughts, feelings and action tendencies

Thoughts. Seventy-two examples of shame-related thoughts were extracted and were classified into six sub-categories presented as follows in order of frequency: (a) Wanting to escape or disappear (16 of 72; 22%) – this sub-category reflects thoughts about wanting get out of the shaming situation or vanish from view (e.g. *“I want to camouflage into a wall”*); (b) Regret (15 of 72; 21%) – this sub-category reflects wishes that the situation had not happened (e.g. *“Why did I say that?”*); (c) Negative self-evaluation (14 of 72; 19%) – this sub-category reflects global negative self-evaluation along the lines of being stupid, nasty, worthless, useless and no good (e.g. *“I am a nasty person”*); (d) Perceived/anticipated negative judgement by others (8 of 72; 11%) – this reflects thoughts that one is globally disliked or unwanted (e.g. *“no-one likes me”*); (e) Self-disappointment/blame (6 of 72; 8%) – thoughts relating to the perception of having let oneself and others down or allocating culpability to the self (e.g. *“it’s my own fault”*); and, (f) three thoughts (4%) contained the word ‘ashamed’. Importantly, these reflected shame at the self rather than the action (e.g. *“I am ashamed of who I am”*).

Feelings. Eighty-seven feelings associated with shame were extracted. These were sub-categorised as follows, in order of frequency: a) Anger (25 of 87; 29%) – this sub-category reflects three different types of anger. The most common (10 occurrences) was anger towards others (e.g. *“anger at the person that made them feel bad”*) followed by anger towards self (9 occurrences) and general anger (6 occurrences); b) Worry/fear (13 of 87; 15%) – this includes statements about feeling afraid, nervous, worried and also somatic

descriptions such as ‘butterflies’ and feeling ‘sick’; c) Sadness (11 of 87; 13%) – including terms such as feeling ‘low’, ‘sad’, ‘downhearted’ and ‘depressed’; d) Internal unease/pain (10 of 87; 11%) – this represents a diffuse negative internal state that was sometimes characterised by pain language such as feeling ‘*ripped apart inside*’, having a ‘*pain in the back of your mind*’ and feeling as if ‘*something bad has happened to me*’; e) Embarrassment (9 of 87; 10%) – along with embarrassment other related expressions in this category were ‘self-conscious’ and ‘red’; f) Worthlessness (7 of 87; 8%) – this category reflects feelings of low worth and is also expressed in terms of feeling ‘small’. Other feelings given by participants were: feeling stupid (4), weak or powerless (3), lonely (2), regret (1), disappointed (1) and frustrated (1).

Action tendencies. Fifty-nine shame-related action tendencies were extracted and were sub-categorised as follows: a) Hiding (28 of 59; 47%) – this sub-category includes hiding away, escaping and wanting to be alone and, for two participants, might extend to attempting suicide; b) Violence towards others (16 of 59; 27%) – this includes threatening others, hurting them (e.g. “*the person who made you feel shame*”), getting revenge, damaging their possessions, and extended to stabbing and killing; c) Projecting a false self (7 of 59; 12%) – this category reflects putting up a front, boasting or exaggerating ones qualities (e.g. “*make themselves sound better than they are*”) or changing ones appearance; d) Expressing anger (5 of 59; 8%) – this involves outward expressions of anger not directed at anyone specifically (e.g. “*fly off the handle*”, “*break stuff*”). Other expressions included crying (2) and hurting oneself (1).

Discussion

Study 1 suggests that young people aged 11 to 15 years can distinguish between shame and guilt appropriately. Specifically, they recognise that shame arises from evaluation of the whole self whereas guilt is provoked by evaluation of actions, and that shame endures longer than guilt. These ideas fit with the conceptual literature. Given that guilt arises from situation-specific attributions it can be resolved by making amends for wrongdoing. Shame, on the other hand, relates to a perceived global character defect and, therefore, is perhaps perceived to be harder to resolve. The interview data also support the idea that young people can generate shame-inducing situations. The majority of these situations involve becoming an undesirable person through ones performance or conduct (i.e. someone who has been incompetent or hurtful). Critically, however, one third of the shame-provoking situations involved being subject to poor treatment from others, or experiencing shame by association with people who are perceived as undesirable or of lower social standing.

The data regarding thoughts, feelings and action tendencies that are a part of the shame response provide further support that young people are able to understand this concept. The shame-related thoughts cited by participants reflected global personal condemnation, the experience of being negatively evaluated by others and the idea that it would be better to disappear. Participants also indicated wanting to get revenge, to punch and destroy things and feeling angry towards others. Consistent with the findings of Ferguson et al. (1991) young people were able to understand the distinction between shame and guilt. Taken together, these findings support the idea that young people in this sample could articulate an understanding of shame. Although the data were derived from a small sample of self-selecting adolescents, their description of shame was consistent with the conceptual literature and the experience of shame articulated was similar across the interviews.

Development of the Adolescent Shame-Proneness Scale (ASPS)

Based on the conceptual literature on shame phenomenology and the distinction between shame and guilt, items in the ASPS were developed to assess global negative self-evaluation. Following Gilbert (2011), this negative self-evaluation represents perceived evaluations of others (external shame) and evaluations made by the self (internal shame). It also comprises thoughts about disappearing from view. Additionally, self-appraisals would expect to be consistent with global shame-related cognitions such as feeling worthless. These dimensions differentiate shame from guilt where, in the latter, the evaluation is specific (related to the action rather than the self) and the motivation is approach rather than avoidance. Items reflecting regret or self-blame were not considered appropriate as these likely arise also in the context of guilt. Indeed, regret is typically part of the evaluation of a person's role in a particular event and, although it may be a part of shame, we considered that it was not a part that differentiates it from guilt.

The literature also suggests an urge to project the difficult negative self-evaluation outwards (i.e. externalising) might be part of shame phenomenology. Theoretical and empirical work suggests that externalising is not an aspect of guilt. Regarding feelings, we considered it appropriate to include embarrassment as this might be a more familiar or easy language for young people. In addition, feelings of disappointment, sadness and frustration were also considered useful to include as well as a more diffuse sense of internal discomfort. Although these feelings might be a part of both shame and guilt, we considered that a focus only on feelings of anger and embarrassment might unduly limit the assessment of shame-relevant emotional discomfort. Although the interviews and our analysis focussed on thoughts, feelings and action tendencies associated with the experience of shame, this was

done to facilitate young people to make their experience concrete and because these are the main dimensions along which shame and guilt have been differentiated. We did not, however, have an a priori model regarding the structure of the items within the measure based strictly on these dimensions.

Analysis of interview transcripts and the decision-making process outlined above resulted in the development of 30 items representing thoughts (11 items), feelings (9 items) and action tendencies (10 items) related to shame-provoking situations. In selecting items for the final measure, we paid attention to how representative each thought, feeling and action tendency was across the interviews, as well as ensuring that the measure contained enough items to sufficiently reflect the reported experience of shame across participants. To facilitate respondent engagement with the semi-idiographic component of the measure, in the instructions to the ASPS we provided respondents with some of the most representative situations from the interviews as examples of experiences that might provoke shame. These situations reflected being both the subject and object of the experience and were: being bullied, making a mistake in front of the class, doing badly in a test, a family lacking the means to buy new gadgets/fashionable clothes, and being horrible about a friend. The ASPS requires respondents to think of up to three recent situations where they have experienced shame (writing them down on the questionnaire is optional). Respondents are then asked to rate the 30 questionnaire items thinking of how they generally respond to these focal situations collectively. That is, the 30 items assess how a respondent generally experiences shaming situations (i.e. items are not rated for each different scenario). A four-point rating scale is used as follows: 0 – *not at all*, 1 – *a little bit*, 2 – *quite a bit*, 3 – *a lot*. The twelve young people who took part in the interviews were invited to attend a group discussion to

ascertain their views on the measure. Participants found the questionnaire and the instructions to it easy to understand.

Study 2: Factor Structure, Reliability and Validity

The main aim of Study 2 was to explore the factor structure, internal reliability and validity of the 30-item ASPS. To assess validity, we hypothesized that ASPS scores would: (1) correlate positively with an existing measure of adolescent shame-proneness; (2) correlate positively with scores on a measure of guilt, given the overlap between these emotions, but the size of this correlation would indicate that the ASPS measured something related to, but distinct from, guilt; (3) correlate positively with measures of trait anger and both anger expression and anger suppression. Previous work by Tangney *et al.* (1996) suggests that shame-prone individuals can have both a tendency to direct anger inwards (i.e. suppression) possibly due to the perceived unacceptability of anger, and also to express anger outwardly towards others as a means of distancing themselves from this unpleasant emotion. We further expected that higher scores on items that assess externalisation would correlate negatively with scores on a measure of the ability to control anger; (4) due to the negative self-evaluation and appraisal in those who are shame-prone, we hypothesized that young people with lower self-esteem would have higher shame-proneness scores. Tangney and Dearing (2002) reported a moderate inverse relationship between self-esteem and shame in adults using the TOSCA ($r = -.42$) and in adolescents using the TOSCA-A ($r = -.48$); and (5) ASPS scores would correlate with negative affect but would not be correlated with a measure of positive affect given that, conceptually, the presence of shame does not imply the absence of general positive affect. Internal reliability was also assessed using Cronbach's alpha. Study 2 also allowed us to again assess young people's ability to generate shame-provoking

situations, this time, as part of completing the measure and in a larger sample than in Study 1.

Method

Participants and Design

A cross-sectional survey design was used to assess the factor structure, reliability and validity of the 30-item ASPS in a non-clinical sample of young people. Head teachers at six co-education secondary schools in England were approached to request permission to conduct the study in their school. Head teachers of three of these schools allowed data collection to take place. Across these three schools information packs were distributed to students aged 11 to 16 years ($n=500$). Written consent to participate, from both young person and a parent, was received for 71 of these students (14%). Another 20 young people completed the measures in an online survey that they accessed via an email advert sent to staff at the authors' institution. Of the 91 surveys completed, two were not useable due to missing data. The final sample ($n=89$) comprised 56 girls (63%) and 33 boys. Participants were aged between 11 and 16 years ($M = 13.55$, $SD = 1.46$). Ethnicity data were not collected.

Validity Measures

Shame and Guilt. The Test of Self-Conscious Affect for Adolescents (TOSCA-A; Tangney et al., 1991) is a scenario-based measure of self-conscious emotions (shame, guilt, pride, externalization of blame and detachment/unconcern). It is a widely used measure of adolescent shame and guilt and, in the current study, only these two subscales were utilized. In this measure, participants are presented with 15 scenarios followed by single items for

each scenario assessing shame and guilt responses. Items are rated on a 5-point scale ranging from 1 (*not at all likely*) to 5 (*very likely*). Tangney and Dearing (2002) report alpha reliabilities ranging between .77 and .84 for both the shame and guilt scales. In the current study, Cronbach's alpha was .82 for the shame scale and .85 for the guilt scale.

Affect. The Positive and Negative Affect Schedule for Children (PANAS-C; Laurent *et al.*, 1999) is a 27-item questionnaire measuring extent of positive (12 items) and negative affect (15 items) felt over the past few weeks in young people aged 10 to 18 years. The items consist of single words indicating affect (e.g. happy, upset) and are rated on a 4-point scale ranging from 1 (*not much or not at all*) to 4 (*a lot*). Laurent *et al.* (1999) report Cronbach's alpha of .90 and .89 for positive affect and .94 and .92 for negative affect in two groups of school children aged 9 to 14 years old. In the current study Cronbach's alpha was .89 for positive affect and .90 for negative affect.

Self-Esteem. The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) is a widely used 10-item measure of global self-esteem that is suitable for use with adolescents. The 10 items are scored on a 4-point scale ranging from 0 (*strongly disagree*) to 3 (*strongly agree*). After conducting appropriate item reversals, the 10 items are summed give a total score with higher scores indicating greater self-esteem. A sizeable evidence base attests to the measure's reliability and validity. In the current study, Cronbach's alpha was .86.

Anger. The Anger Expression Scale for Children (AESC; Steele, Legerski, Nelson & Phillips, 2009) is a 26-item self-report measure designed to assess anger in young people aged 7 to 17 years. Four subscales assess: trait anger (e.g. "I have a bad temper"), anger expression (e.g. "I slam doors or stomp my feet"), anger suppression (e.g. "I keep it to

myself”) and anger control (e.g. “I control my temper”). Each item on the AESC is scored on a 4-point scale ranging from 1 (*almost never*) to 4 (*almost always*). The reliability and validity of the AESC was explored by Steele *et al.* (2009) in a sample of healthy children and children with chronic illnesses. Internal consistencies were: trait anger; $\alpha = .84$, anger expression; $\alpha = .69$, anger suppression $\alpha = .71$ and anger control $\alpha = .79$. Test-retest reliability was found to be adequate with the trait anger scale showing the greatest stability over time. Scores on the AESC have been found to correlate positively with other parent and child reports of aggression, anger and hostility (Steele *et al.*, 2009). In the current study, Cronbach’s alpha was .85 for trait anxiety, .75 for anger expression, .83 for anger control and .78 for anger suppression.

Procedure

The study protocol was reviewed by the authors’ institutional ethics board. Potential participants were given an information sheet, a consent form, letter for their parents and a parent consent form. For participants completing the study online, these materials were attached to an email advertisement sent to staff at a university in southern England. Participants either returned the questionnaires by post (n=71) or submitted them via the online survey system (n=20).

Results

Exploratory Factor Analysis

Data from two of the 89 participants were not included due to extreme scores on all the measures that made us question the validity of these participants’ responses. Principle

Axis Factoring (PAF) with oblique rotation (direct oblimin) was conducted to examine the underlying structure of the ASPS. The Kaiser-Meyer-Olkin measure of sampling adequacy gave a value of .83, exceeding the recommended value of .6 (Kaiser, 1960). Bartlett's Test of Sphericity was highly significant ($p < 0.001$). Most of the inter-item correlations were above .3 but were not above .8, and the determinant was $> .00001$, suggesting no problems with multicollinearity or singularity. Overall, these analyses indicated that factor analysis was appropriate with this dataset.

The initial analysis indicated seven factors with eigenvalues exceeding 1, explaining 69% of the variance. Follow-up inspection of a scree plot suggested the extraction of three factors. Therefore, the exploratory factor analysis was re-run extracting three factors. The extracted three-factor solution explained a total of 53% of the variance (Factor 1 contributing 34%, Factor 2 - 12% and Factor 3 - 7%). The rotated solution obtained three distinct dimensions based on item content and all were marked by at least five items. The criterion for inclusion of an item in a factor was set at .512 in line with recommendations made by Stevens (1992) for samples of less than 100. Eight items did not load at this level on any factor and were subsequently omitted resulting in a total of 22 items retained. Factor 1 (11 items) was labelled 'Negative Self Evaluation'; Factor 2 (6 items) was labelled 'Externalisation'; and, Factor 3 (5 items) was labelled 'Emotional Discomfort'. Table 1 presents the factor loadings and descriptive statistics for 22 items that loaded at the criterion level on each factor. Eight items did not load at the criterion level. These were: 'I wanted to change who I was', 'I wanted to cry', 'I can't cope', 'I wanted to build up a front or cover', 'I wanted to be on my own', 'I have let myself down', 'I felt worried', 'I felt angry at myself'

Table 1 approximately here

The factor correlation matrix indicated the Negative Self Evaluation scale was strongly and positively correlated with Emotional Discomfort ($r(87) = .50$) and weakly positively correlated with Externalisation ($r(87) = .17$). There was almost no correlation between Emotional Discomfort and Externalisation ($r(87) = .02$). Given the pattern of scale correlations, a total ASPS index was not derived; instead, the relevant items in each of the three scales were summed to give three separate indices of shame-proneness.

Concurrent Validity

Table 2 approximately here

ASPS Negative Self Evaluation and TOSCA shame scores were strongly and positively correlated whilst the correlation between Emotional Discomfort and TOSCA scores was moderate although positive, as expected. However, there was a very small overlap between the TOSCA-A and the Externalisation scale of the ASPS. TOSCA-A guilt scores were moderately positively correlated with both ASPS Negative Self Evaluation and Emotional Discomfort. In contrast, the ASPS Externalisation scale was inversely correlated with TOSCA-A guilt although the effect was small. An inverse relationship would be expected given that guilt is proposed to inhibit aggression or anger. Taken together, these findings suggest that the ASPS is measuring something related to, but distinct from, guilt. In contrast the correlation between TOSCA-A shame and TOSCA-A guilt scores was strong ($r(85) = .57, p < .001$). The stronger correlation between the TOSCA-A shame and guilt compared with that between ASPS shame and TOSCA-A guilt may be due to common method variance. The implication for assessing concurrent validity, however, is that if the TOSCA-A shame and guilt scales overlap considerably, this might explain the somewhat lower than expected correlations between the ASPS and TOSCA-A shame scale.

Convergent Validity

Table 3 approximately here

ASPS scales and self-esteem were negatively correlated with Negative Self Evaluation showing the strongest effect. This might be expected given this subscale focuses on self-assessment. There was a positive correlation between trait anger and anger expression and the ASPS scales. Of note was the strong correlation between anger expression and Externalisation. The hypothesis that anger control would be inversely correlated with the Externalisation was supported. Consistent with this finding, anger suppression was correlated positively with Negative Self Evaluation and Emotional Discomfort but not Externalisation. All ASPS scales exhibited a moderate to strong positive correlation with the negative affect subscale of the PANAS. As hypothesized, there was little evidence of a relationship between the positive affect subscale of the PANAS and ASPS scores. As might be expected, the inverse relationship with positive affect was strongest for Negative Self Evaluation.

Analysis of Self-Generated Shame Situations

ASPS instructions ask respondents to think of three situations in which they have recently felt shame. Participants are asked to write these down, although this is optional. The absence of writing situations does not automatically imply an inability to think of relevant situations since it may also reflect a reluctance to put them in writing. Regarding number of scenarios written down, 52 of 87 participants (59.8%) wrote down three situations, 15 (17.2%) wrote two, 9 (10.3%) wrote one, and 11 (12.6%) did not write any down. There was a significant moderate association between gender and writing down scenarios $\chi^2(3)=9.55$, $p=.023$, Cramer's $V=.33$. Boys wrote down fewer situations than girls. There was a weak

and non-significant relationship between age and writing scenarios down $\chi^2(15)=10.61$, $p=.78$, Cramer's $V=.20$. It is an interesting question whether those participants who could write down more situations would report more shame (i.e. they experience more situations in everyday life as shaming and hence have a greater access to these). Equally, an absence of writing down shaming situations might reflect greater sensitivity about these situations. Respondents who wrote down either 0, 1, 2 or 3 situations were compared on each of the ASPS scales using Oneway ANOVA. Plots and tests of normality indicated the use of parametric tests was appropriate and Levene's test suggested equality of variances. For Negative Self Evaluation there was no evidence of a difference between groups ($F(3,83)=1.42$, $p=.241$, $\eta^2=.05$) as was the case for Externalisation ($F(3,83)=.62$, $p=.606$, $\eta^2=.02$). There was some evidence of a relationship between the number of situations written down and Emotional Discomfort ($F(3,83)=3.89$, $p=.012$, $\eta^2=.12$). However, Bonferroni post-hoc paired comparisons were all $p>.06$. Emotional Discomfort mean scores suggested no clear trend: no situations ($M = 6.00$, $SD = 4.28$, $n=11$), one situation ($M = 8.88$, $SD = 2.20$, $n=9$), two situations ($M = 6.4$, $SD = 2.74$, $n=15$), and three situations ($M = 8.9$, $SD = 3.46$, $n=52$).

The 195 situations supplied were classified using the coding scheme reported in Study 1. Five situations were not interpretable and therefore could not be placed within this scheme. As in Study 1, most of the situations involved becoming an undesirable person through ones performance or conduct (148 of 190; 78%). In contrast to Study 1, the next most frequent class of situations was being subject to the behaviour or actions of others (35 of 190; 18%). Again, however, the data indicate that shame arising from the actions of others represents a sizeable proportion of situations. Characteristics indicating something negative

about ones appearance or social status were mentioned 7 times (4%). This was much lower than in the interview study. Inter-rater reliability analysis was conducted on 30% of the situations. Two raters independently coded the data. Kappa was .76.

Discussion

Study 2 provides evidence for the reliability and validity of the ASPS. Negative Self Evaluation and Emotional Discomfort scores correlated positively with TOSCA-A shame scores and showed predicted associations with theoretically related variables. The correlations with TOSCA-A shame were perhaps lower than anticipated but this might reflect the overlap between TOSCA-A shame and guilt scores in this sample. The overlap between ASPS scales and the TOSCA-A guilt scale is weaker than that between the TOSCA-A shame and guilt. The data from Study 2 further support the idea that young people can readily generate shame-related situations. The classification scheme reported in Study 1 was replicated in Study 2 and a good level of inter-rater reliability was achieved. Most situations involved becoming an undesirable person through ones own performance or conduct. The finding that girls wrote down significantly more situations than boys might reflect the conceptual literature that girls are socialized to experience shame more than boys (Lewis, 1995) or it might reflect greater reluctance on the part of boys to write down shaming situations. The main limitation of Study 2 is that the exploratory factor analysis was based on a relatively small sample. Consequently, Study 3 reports the findings of a further exploratory factor analysis on a larger sample and then testing the model using confirmatory factor analysis.

Study 3: Exploratory and Confirmatory Factor Analysis

The principal aims of Study 3 were to perform exploratory factor analysis (EFA) on a larger sample and then to confirm the model using confirmatory factor analysis (CFA). The data utilized in the Study 3 were collected in four separate sub-studies conducted by five of the authors that all utilized the ASPS to test hypotheses regarding the relationship between shame-proneness and mental wellbeing in adolescents. All studies were approved by the authors' institutional ethics board. All four sub-studies utilized the Rosenberg Self-Esteem Scale (RSES; as reported in Study 2). Each of the four sub-studies had different overarching aims and, therefore, the other measures used across these sub-studies varied. For the purpose of providing further validation data to that presented in Study 2, and in addition to the RSES, data from the following measures from across the four sub-studies was used and are presented here: the Test of Self-Conscious Affect – Adolescent shame and guilt subscales (TOSCA-A; as described in Study 2; utilized in one sub-study); the Positive and Negative Affect Schedule (PANAS; as described in Study 2; utilized in one sub-study); the Anger Expression Scale for Children (AESC; as described in Study 2; utilized in two sub-studies); and, the Patient Health Questionnaire for Adolescents (PHQ-A; utilized in two sub-studies). The PHQ-A (Johnson, Harris, Spitzer & Williams, 2002) assesses the frequency of depressive symptoms in adolescents. It contains nine items that are rated on a 4-point Likert scale from 0 (*not at all*) to 3 (*nearly everyday*). The sum of these items creates a total depressive symptom score with higher scores indicating higher levels of depressive symptoms. The PHQ-A has been reported to have good convergent and diagnostic validity in adolescents (Johnson *et al.*, 2002).

Method

Participants and Design

Across the four sub-studies, a total of 1385 participants aged between 11 and 18 years were recruited from secondary schools (n=1196), sixth form colleges (n=182), and via staff from one university (n=7) in England. All secondary school students and 141 of the sixth form college students completed the measures in pen and paper format in groups during class time. The remaining 41 sixth form college students and those participants recruited via university staff completed the measures via an online survey system hosted at the university. Of the 1385 participants, 743 were boys (53.6%), 624 were girls (45.1%) and 18 (1.3%) did not supply this information. The sample mean age was 15.09 (SD = 1.69). Regarding ethnic category endorsement, 933 (67.4%) endorsed White British/White Other; 63 (4.5%) Asian/Asian British; 56 (4%) Black/Black British; 48 (3.5%) Mixed; 35 (2.5%) Other; 109 (7.9%) declined to respond or left the question blank; and, for 141 (10.2%) ethnicity data were not collected.

The first of the four sub-studies conducted utilized the 22-item ASPS. Initial analysis of ASPS items from this study indicated a floor effect on three items (*'I wanted to hurt myself'*, *'I wanted to hurt someone else'* and *'I wanted to destroy other people's belongings'*). More than three-quarters of respondents endorsed either '0' or '1' for these items. It is not possible to know whether these items were unrepresentative of the experience of shame in this sample or whether participants did not want to endorse these items due to social desirability concerns. However, given that questionnaire items should be face valid and tolerable, able to discriminate between respondents, and that measures should be of a length to make their use pragmatic, these items were not included in the ASPS in the subsequent three sub-studies. Therefore, the EFA and CFA were conducted on the remaining 19 ASPS items.

Only those participants providing complete data on the ASPS were included in the analyses. Of the 1385 participants, 221 had one or more incomplete items on the ASPS. Therefore, the total analysis sample size was 1164. The gender composition of this sample differed slightly from the full sample (50.9% boys). The mean age was 15.26 ($SD = 1.65$). The data file was divided randomly to produce two data sets each comprising 582 participants. One set was used for the EFA and the other the CFA.

Exploratory factor analysis

As in Study 2, Principle Axis Factoring (PAF) with oblique rotation was conducted. Visual inspection of the distribution of the ASPS items did not suggest that any item should not enter the factor analysis. The Kaiser-Meyer-Olkin measure of sampling adequacy gave a value of .94, exceeding the recommended value of .6 (Kaiser, 1960). Bartlett's Test of Sphericity was highly significant ($p < 0.001$). Overall, these analyses indicated that factor analysis was appropriate with this dataset.

Based on study one, a 3-factor solution was requested. The three-factor solution explained approximately 62% of the variance (Factor 1 contributing around 45%, Factor 2 – around 10% and Factor 3 – around 6%). The rotated solution obtained three distinct dimensions based on item content. The criterion for inclusion of an item was set at .4. All items loaded onto a single factor and items loaded onto the same factors as Study 1. As in Study 1, Factor 1 (10 items) was 'Negative Self Evaluation'; Factor 2 (4 items) was 'Externalisation', and Factor 3 (5 items) was labelled 'Emotional Discomfort'. Table 4 presents the factor loadings and descriptive statistics for all 19 items along with the subscale correlations.

Table 4 approximately here

Confirmatory factor analysis

The confirmatory factor analysis was conducted on the remaining random half of the 1164 cases. The model was estimated using maximum likelihood estimation with the 19 items as indicators of the three factors as proposed by the EFA in Study 2 (reported in Table 1) and the EFA above (reported in Table 4). Following Hu and Bentler (1999) we assessed goodness of fit against criterion values close to RMSEA < .06, SRMR < .08, CFI > .95 and NNFI(TLI) > .95. We also report normal theory χ^2 though with large samples these figures are likely to be significant at $p < .05$ even when other fit indices are suggesting reasonable fit. This analysis yielded fit indices of RMSEA = .09, SRMR .06, CFI = .96 and NNFI = .96 with $\chi^2(149) = 887.91$ suggesting good fit on three of the indices but with indications of some possible misspecification.

Inspection of the model diagnostic statistics suggested that all items were loaded on their respective factors as predicted but the modification indices suggested some misspecification relating to correlated item residuals. These suggested that the residual terms relating to items ASPS (16) '*Other people must think I am nasty*' and ASPS (4) '*I am a nasty person*' were correlated (MI = 129.37) and similarly the residual terms for items ASPS (10) '*Other people must think I am stupid*' and ASPS (17) '*I am stupid*' (MI = 37.70). Respecifying models to contain correlated residual terms requires that there be some rationale for their inclusion. In this case both pairs of items refer to the same very specific negative self-evaluative characteristics (nastiness and stupidity) and it seems likely that these items share variance partially because of the use of these particular terms.

The model was re-run with the above residual terms permitted to correlate. This led to substantial improved fit in terms of χ^2 ($\chi^2(147) = 723.11$, $\Delta \chi^2(2) = 164.8$, $p < .001$) and relatively small improvements in terms of the other fit indices (RMSEA = .08, SRMR .05, CFI = .97 and NNFI = .97). Further modifications to the model could lead to minor improvements in the model fit but these were not made as there was no clear substantive rationale for doing so. The correlations between the factors were as follows: Negative Self Evaluation vs. Externalisation = .57; Negative Self Evaluation vs. Emotional Discomfort = .85 and Externalisation vs. Emotional Discomfort = .54. These analyses lend support to the three-factor model underlying the ASPS.

Concurrent validity – correlations with TOSCA-A shame and guilt scales

In one sub-study data were collected on the TOSCA. The correlation between TOSCA-A shame and guilt scales in this sample was strong and positive: $r(307) = .51$, $p < .001$. As in Study 2, the overlap between TOSCA-A shame and guilt scores was higher than that between ASPS and TOSCA-A guilt scores. Correlations between the ASPS scales and the TOSCA-A are shown in Table 5.

Table 5 approximately here

As expected given their relatedness, there was some overlap between ASPS and TOSCA-A guilt scores but the strength of the effect supports a conclusion that they measure related yet distinct concepts. Of note was the almost zero correlation between ASPS Externalisation and TOSCA-A guilt. This would be expected given that shame, but not guilt, is theorised to be associated with externalisation. Broadly, these findings add to those reported in Study 2 and provide stronger concurrent validity evidence for the ASPS.

Convergent validity – correlations with self-esteem, anger and affect measures

All four sub-studies administered the Rosenberg Self-Esteem Scale (RSES). Measures of other variables were not used across every sub-study. Therefore, analysis sample sizes in the analyses reported in Table 6 below vary. Only participants with complete data on each measure were used in the analyses. Given the large sample sizes in each analysis and the likelihood of detecting statistically significant but trivial departures from normality, histograms were used to examine the distribution of the data. The RSES was normally distributed as was the ASPS Emotional Discomfort scale and the AESC Trait, Control and Suppression scales. The ASPS Negative Self Evaluation and Externalisation scales were positively skewed, as were the AESC Suppression and PHQ-A Depression scores, but not markedly.

Table 6 approximately here

The findings in Table 6 replicate those in Study 2. All ASPS scales were negatively correlated with self-esteem with moderate to strong effect sizes. Trait anger and anger expression were positively correlated with ASPS scales with the effect being strongest for Externalisation. As in Study 2, anger suppression was moderately positively correlated with ASPS scales except for Externalisation where the effect was weaker. In contrast, anger control was only correlated with Externalisation with a moderate inverse relationship demonstrated. As in Study 2, negative affect shared a strong positive relationship with ASPS scale scores. Study 3 also builds on Study 2 by utilizing another measure of negative affect – the PHQ-A depression scale. Findings were consistent with the PANAS negative affect scale and show moderate to strong positive correlations with the ASPS scales. In Study 3, the

prediction that positive affect would not be correlated with shame was more strongly supported than in Study 2. The correlations indicated no evidence of a relationship.

Gender differences

Of the 1164 participants in Study 3, twelve did not indicate their gender. The remaining sample of 1152 comprised 560 girls and 592 boys. Variances were equal except for Emotional Discomfort. Independent t-tests indicated that ASPS Negative Self-Evaluation scores were significantly higher for girls ($M = 14.38, SD = 7.25$) compared to boys ($M = 8.35, SD = 7.17$): $t(1150)=14.18, p<.001, d=.83$. ASPS Externalisation scores were significantly higher for girls ($M = 4.97, SD = 3.37$) compared to boys ($M = 4.24, SD = 3.52$): $t(1150)=3.58, p<.001, d=.21$. ASPS Emotional Discomfort scores were also significantly higher for girls ($M = 9.79, SD = 3.40$) compared to boys ($M = 5.76, SD = 4.11$): $t(1130.01)=18.13, p<.001, d=1.07$.

Pearson's correlations between ASPS scales by gender were similar for Negative Self Evaluation vs Externalisation ($r=.46$ boys; $r=.45$ girls); and, Externalisation vs Emotional Discomfort ($r=.44$ boys, $r=.41$ girls). For Negative Self Evaluation vs Emotional Discomfort, the effect size was significantly stronger for boys ($r=.74$ boys vs $r=.64$ girls, $z=3.25, p=.001$).

Discussion

In a large sample of adolescents, the ASPS three-factor model derived in Study 2 was replicated in Study 3 using EFA, and was validated with CFA using a split-sample approach. ASPS scores correlated significantly and in the expected direction with existing measures of shame-proneness, anger, negative affect and self-esteem. Analysis indicated that ASPS

subscale scores are related to, but sufficiently distinct from, guilt scores. In this study, girls reported significantly higher scores on all ASPS subscales than boys although the effect size was weaker for Externalisation. Subscale correlations by gender were similar although, of note, the correlation between Negative Evaluation of Self and Emotional Discomfort was significantly stronger for boys.

General Discussion

Given the overlap between shame and guilt, Tangney (1996) urged researchers to be clear about their conceptual basis when developing measures of these emotions. The core characteristics that distinguish shame from guilt in the literature are global negative self-evaluations that represent perceived evaluations of others (external shame) and evaluations made by the self (internal shame; Gilbert 2011). Shame is self-focused, produces an urge to disappear, and makes the person feel small (Kim et al. 2011). Additionally, the painful affect of shame may be projected outwards (Lewis, 1971; Thomaes et al., 2007).

The subscale 'Negative Self Evaluation' is the strongest component of the ASPS and encompasses both external and internal shame. The fact that these items form a single subscale is consistent with previous work that has found external and internal shame measures to overlap considerably (Goss et al. 1994). As expected, Negative Self Evaluation was negatively correlated with self-esteem. Shame-related self-evaluation differs from self-esteem, however, in that the latter reflects global self-evaluation that is independent of specific situations whereas shame is an emotion that is experienced in relation to specific situations (Tangney, 1996). Over time though, shame-prone individuals are likely to develop low self-esteem. The Negative Self Evaluation subscale encompasses both negative

evaluation by the self in shame-inducing situations and, importantly, the young person's vulnerability to social criticism and rejection. As predicted this subscale was strongly and positively correlated with negative affect and depressive symptoms. These findings suggest that shame-prone young people might benefit from interventions that challenge their expectation of criticism or rejection in particular situations or that help them to manage it differently should they experience it. Research with adults indicates that interventions that increase self-compassion may help to counter shame and self-criticism (Gilbert and Procter, 2006) although research with young people is currently limited (Muris & Meesters, 2014).

The 'Externalisation' subscale operationalizes a different aspect of shame phenomenology – the projection of shame outwards. Due to the semi-idiographic nature of the ASPS, these items tap into aggression or anger felt in response to specific and personally-relevant experiences of shame rather than a general propensity to feel or express anger. A potential critique of the Externalisation subscale is that it might assess a separate construct that is related to shame, rather than being a component of shame. Several authors, however, have observed that one response to shaming situations is to reject the negative self-evaluation and to direct negative affect outwards (Kim et al., 2001; Lewis, 1971; Tangney et al. 2007; Thomaes, et al. 2007). The studies reported here, and previous studies, find a positive correlation between shame and anger. It is possible that an urge to externalise shame provides the mechanism that connects exposure to a shaming situation and subsequent anger or aggression. Of note, analysis by gender indicates that Externalisation is positively correlated with Negative Self Evaluation and Emotional Discomfort in both girls and boys. These findings are consistent with Tangney et al.'s. (1996) observation that shame-prone individuals might both take negative evaluation upon themselves and also express it

outwardly as a means of distancing themselves from this unpleasant emotion. The findings in Study 3 further support the validity of the Externalisation subscale by indicating that it is not correlated with TOSCA-A guilt. The findings in Study 3 suggest that those who report externalising responses to shame also report lower self-esteem, greater negative affect, depression and anger expression and report less control over their anger. Thomaes et al. (2007) argue that understanding potential maladaptive responses to shame provoking events in childhood, such as aggression and hostility, has potential value in preventing the use of aggression as a strategy in adulthood. The Externalisation subscale might be a useful method for identifying those young people who tend to respond in this way and the consequences of these responses.

The Emotional Discomfort subscale assesses the affective component of the shame experience. However, the feelings represented in the ASPS are likely common to both shame and guilt. Feelings of sadness, personal disappointment and feeling internally 'horrible' are doubtless part of both shame and guilt given their focus on perceived personal shortcomings. The stronger correlation between TOSCA-A guilt and the Emotional Discomfort scale compared to the other two ASPS subscales supports this interpretation. Of note, the analysis indicates that Emotional Discomfort and Externalisation emerge as separate factors in the ASPS suggesting that shame is not a single emotional experience.

Consistent with a recent meta-analysis of gender differences in self-conscious emotions (Else-Quest, Higgins, Allison & Morton, 2012), girls had significantly higher scores on all ASPS subscales than boys although the effect size for Externalisation was weaker. Whilst these data might support the idea that girls are more socialised to experience shame than boys (Lewis, 1995) these differences might reflect greater reluctance on the part

of boys to report or acknowledge feelings of shame. Additionally, Else-Quest et al. (2012) found that gender differences in shame were moderated by ethnicity. The findings reported here were based on predominantly White samples. Furthermore, these authors found that gender differences were larger when scenario-based trait measures were used and suggested that such measures might activate gender stereotypes about shame. This raises the question of whether the gender differences observed may be due to the structure of the ASPS.

Taken together, the data presented herein suggest that the ASPS has potential utility as a semi-idiographic measure of shame-proneness. However, specific limitations should be acknowledged and these might be targeted in future research. First, we have not established the temporal stability of the ASPS. Second, whilst the ASPS invites respondents to rate their own personally-relevant shaming situations and, therefore, is potentially useful in accessing more specific shame-related situations, the items in the measure are standardised. As a result, their applicability, reliability and validity in diverse cultural and social groups should be tested. Furthermore, the ASPS items might not represent some aspects of shame phenomenology in specific clinical groups such as young people who have experienced abuse or other forms of maltreatment. Although the ASPS was developed to assess general shame phenomenology the applicability of the measure in specific groups is an important question. The validity of the ASPS would be increased by utilising it in samples of young people who would be expected to experience high shame such as those who have experienced abuse and maltreatment, young people with eating disorders or obsessive-compulsive disorders, those who have been bullied, or young offenders.

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Table 1

22-item ASPS factor loadings and Cronbach's alpha for the three factors

ASPS item	Negative Self Evaluation (α .90)	Externalisation (α .82)	Emotional Discomfort (α .82)
<i>Items loading on a single factor at >.512</i>			
Other people must think I am nasty	.757		
I am stupid	.714		
I am a nasty person	.664		
I am no good	.663		
It is better if I was not around	.658		
I wanted to hurt myself	.647		
I felt worthless and small	.636		
Other people must think I am no good	.589		
Other people must think I am stupid	.567		
No one likes me	.566		
I have let other people down	.534		
I wanted to seek revenge		.776	
I felt angry at other people		.704	
I wanted to hurt someone else		.690	
I wanted to punch walls or break things		.620	
I wanted to scream and shout		.524	
I wanted to destroy other people's belongings		.521	
I felt sad			.731
I felt frustrated			.711
I had a horrible feeling inside			.683
I felt disappointed			.599
I felt embarrassed			.565

Author

Table 2

Pearson's correlations between ASPS and TOSCA-A scales

	TOSCA-A Shame	TOSCA-A Guilt
ASPS Negative Self Evaluation	.47, $p < .001$	.29, $p = .006$
ASPS Externalisation	.09, $p = .43$	-.16, $p = .13$
ASPS Emotional Discomfort	.35, $p = .001$.29, $p = .005$

Note. N=85.

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Table 3

Pearson's correlations between ASPS scales and measures of affect and self-esteem

	Negative Self Evaluation	Externalisation	Emotional Discomfort
Rosenberg Self-Esteem	-.55 $p < .001$	-.35 $p = .001$	-.28 $p = .009$
AESC Trait Anger	.32 $p = .003$	.52 $p < .001$	.31 $p = .004$
AESC Anger Expression	.22 $p = .04$	.49 $p < .001$	.10 $p = .342$
AESC Anger Control	-.08 $p = .461$	-.27 $p = .013$	.18 $p = .103$
AESC Anger Suppression	.26 $p = .015$	.03 $p = .792$	.27 $p = .011$
PANAS Negative Affect	.47 $p < .001$	.44 $p < .001$	.41 $p < .001$
PANAS Positive Affect	-.20 $p = .063$	-.15 $p = .152$	.12 $p = .249$

Note. N=85.

Table 4

19-item ASPS factor loadings and Cronbach's alpha for the three factors

ASPS item	Negative Self Evaluation (α .90)	Externalisation (α .79)	Emotional Discomfort (α .87)
Other people must think I am nasty	.742		
I am no good	.705		
Other people must think I am no good	.704		
No one likes me	.673		
It is better if I was not around	.672		
I felt worthless and small	.666		
I am a nasty person	.629		
I am stupid	.615		
Other people must think I am stupid	.561		
I have let other people down	.442		
I felt angry at other people		.777	
I wanted to punch walls or break things		.643	
I wanted to seek revenge		.615	
I wanted to scream and shout		.589	
I felt disappointed			.720
I felt sad			.668
I had a horrible feeling inside			.655
I felt frustrated			.644
I felt embarrassed			.574

Note. Subscale correlations: Negative Self Evaluation vs. Externalisation = .38; Negative Self Evaluation vs. Emotional Discomfort = .65; Externalisation vs. Emotional Discomfort = .19

Table 5

Pearson's correlations between ASPS and TOSCA-A scales

	TOSCA-A Shame (α .85)	TOSCA-A Guilt (α .83)
ASPS Negative Self Evaluation	.52* ($N=296$)	.27* ($N=303$)
ASPS Externalisation	.23* ($N=293$)	-.01 ^a ($N=300$)
ASPS Emotional Discomfort	.43* ($N=292$)	.36* ($N=300$)

Note. * $p < .001$; ^a $p = .867$

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Table 6

Pearson's correlations between ASPS scales and measures of self-esteem, anger and affect

	Negative Self Evaluation	Externalisation	Emotional Discomfort
Rosenberg Self-Esteem (<i>N</i> =1073)	-.52*	-.28*	-.36*
AESC Trait Anger (<i>N</i> =473)	.44*	.58*	.37*
AESC Anger Expression (<i>N</i> =452)	.31*	.52*	.26*
AESC Anger Control (<i>N</i> =461)	.07 ^a	-.29*	.02 ^b
AESC Anger Suppression (<i>N</i> =460)	.26*	.11 ^c	.26*
PANAS Negative Affect (<i>N</i> =265)	.65*	.51*	.54*
PANAS Positive Affect (<i>N</i> =276)	-.07 ^d	.02 ^e	.04 ^f
PHQ-A Depressive Symptoms (<i>N</i> =289)	.56*	.41*	.41*

Note. * $p < .001$; ^a $p = .113$; ^b $p = .707$; ^c $p = .018$; ^d $p = .652$; ^e $p = .746$; ^f $p = .300$

Adolescent Shame Proneness Scale (ASPS)

It is common for young people to experience feelings of shame. Shame can occur when you have done something or when someone else has done something to you. Here are some examples of situations that might make young people feel shame:

1. You are being bullied
2. You make a mistake in front of your whole class and everyone laughs
3. You do badly in a test or examination
4. Your family cannot afford to buy you the newest gadgets or most fashionable clothes
5. You are horrible about your best friend behind his/her back

IMPORTANT

Can you think of some situations that have happened recently where you have felt shame? Please write some down, in the spaces below. If you don't want to write them down, that's ok

1.

2.

3.

Below are some things that people might think, feel or do when they feel shame. Please read each one and circle the number next to how you would **generally** think, feel and act in situations like the ones you have written down. If you haven't written down the situations, just try to hold them in mind when thinking about the statements below.

EXAMPLE: Thinking back to times when you have felt shame, if you very often think "I am no good" then you would circle the number 3, as shown below.

	Not at all	A little bit	Quite a bit	A lot
I thought "I am no good"	0	1	2	3

Circle the number next to each statement below thinking about the situations you have written down	Not at all	A little bit	Quite a bit	A lot
I thought "I have let other people down"	0	1	2	3
I felt worthless and small	0	1	2	3
I thought "Other people must think I am no good"	0	1	2	3
I thought "I am a nasty person"	0	1	2	3
I wanted to shout and scream	0	1	2	3
I felt angry at other people	0	1	2	3
I wanted to seek revenge	0	1	2	3
I thought "No one likes me"	0	1	2	3
I felt disappointed	0	1	2	3
I thought "Other people must think I am stupid"	0	1	2	3
I wanted to punch walls or break things	0	1	2	3
I felt sad	0	1	2	3
I had a horrible feeling inside	0	1	2	3
I thought "I am no good"	0	1	2	3
I felt embarrassed	0	1	2	3
I thought "Other people must think I am nasty"	0	1	2	3
I thought "I am stupid"	0	1	2	3

I felt frustrated	0	1	2	3
I thought "It is better if I was not around"	0	1	2	3

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