

Differential Behavioural Patterns Associated with Aspects of Trait Shame

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A thesis submitted in partial fulfilment of the requirements for the Degree of Master of  
Science in Psychology

2020

### Abstract

This thesis consisted of two studies that explored whether aspects of trait shame are characterized by differential behavioural patterns. Study 1 administered the Internalised Shame Scale (ISS) and Depressive Experiences Questionnaire-Short Form (DEQ-SF) to a student sample ( $N = 592$ ). The ISS was later modified (ISS-m) to include only items unique to shame. Partial correlations were calculated and compared between components of the ISS (original and modified) and personality orientation (anaclitic and introjective orientation) as a proxy for approach and withdrawal behaviours. Study 2 administered the same scales to an adult community sample ( $N = 198$ ) along with a modified Other As Shamer Scale (OAS-m), and a modified Compass of Shame Scale (CoSS-m) that included approach shame-responses. The study confirmed a two-factor structure of the modified ISS developed in Study 1, with factors called Inferiority (New) and Fragility. Partial correlations were compared to explore how internalised shame, its factors and external shame were differentially associated with personality orientation and also specific shame-responses (approach, withdraw, attack-self, attack-other, and avoid). Similarities and differences were found between the samples. The Inferiority (New) factor was consistently associated with withdrawal behaviours across both samples, whilst the Fragility factor was less consistent within both samples. Trait shame was associated with approach behaviours via anaclitic personality orientation in the student sample and via a relationship between external shame and both anaclitic orientation and specific approach shame-responses in the adult sample. Overall, each aspect of trait shame had differential behavioural configurations. Theoretical and clinical implications were discussed.

Shame is a painful and distressing self-focussed emotion (Elison, Garofalo, & Velotti, 2014; H. B. Lewis, 1971; Tangney, Miller, Flicker, & Barlow, 1996; Tomkins, 1963) that involves perceptions of personal failure, self-defectiveness, inadequacy, and inferiority, along with relational concerns of exposure, criticism, rejection and abandonment (Del Rosario & White, 2006; Gilbert, 1998, 2003; M. D. Lewis, 1992; McGregor & Elliot, 2005; A. P. Morrison, 2011; Nathanson, 1992; Tangney et al., 1996). It is a ubiquitous emotion, conceptualised as both innate and interpersonally developed, and which has powerful motivating and social functions (De Hooge, Breugelmans, Wagemans, & Zeelenberg, 2018; Gilbert, 2003; Kaufman, 1996; McGregor & Elliot, 2005; Nathanson, 1992; Tangney et al., 1996; Tomkins, 1963). Shame is associated with a plethora of negative effects including psychopathology (Goss, Gilbert, & Allan, 1994; Scheel et al., 2014), substance abuse (Cook, 1987, 2001; Rybak & Brown, 1996), intimacy deficits (Dorahy, 2010; Dorahy & Hanna, 2012), aggression and violent offending (Nathanson, 1992; Tangney & Dearing, 2003; Velotti, Elison, & Garofalo, 2014). However, shame can also have positive and constructive effects through motivating reparation for wrongdoings (De Hooge, Zeelenberg, & Breugelmans, 2010; Gausel, Leach, Vignoles, & Brown, 2012; Gilbert, 1998; Leach & Cidam, 2015).

Originally elicited by breaches in interpersonal connection, frequent, intense and unmitigated exposure to the experience of shame can become internalised into one's personality as a trait (Claesson, Birgegard, & Sohlberg, 2007; Cook, 2001; Gilbert, 1998; Goss et al., 1994; Kaufman, 1996). Internalised shame is a type of trait shame that involves the development of a shame-based identity and self-image wherein shame is triggered by negative evaluation of oneself and can occur without reference to an interpersonal context (Claesson et al., 2007; Cook, 2001; Gilbert, 1998; Goss et al., 1994; Kaufman, 1996; Rybak & Brown, 1996). External shame describes another form of trait shame which is characterised

by a tendency to perceive others as shaming and negatively evaluate oneself (Gilbert, 1998; Goss et al., 1994). Internalised and external shame are conceptually distinct in the source from which negative evaluation arises (self or others) (Gilbert, 1998; Goss et al., 1994). While they are often highly correlated, they need not always be so since shame arising from external sources does not necessarily become internalised (Gilbert, 1998; Goss et al., 1994). Both types of trait shame have been found to consist of various distinct factors involving themes such as inferiority, fragility and emptiness (Cook, 2001; Del Rosario & White, 2006; Goss et al., 1994; Vikan, Hassel, Rugset, Johansen, & Moen, 2010).

Shame has been associated with a broad range of responses and coping strategies (Gilbert, 1998; H. B. Lewis, 1971; M. D. Lewis, 1992; Tangney & Dearing, 2003). One model which summarises these responses is known as the Compass of Shame, and summarises four overarching shame-responses, namely withdrawal, avoidance, attack-self and attack-other behavioural tendencies (Nathanson, 1992). These four respective categories of shame-response have received both theoretical attention and empirical support (e.g., Elison et al., 2014; Elison, Lennon, & Pulos, 2006; Elison, Pulos, & Lennon, 2006; Gilbert, 1998; H. B. Lewis, 1971; M. D. Lewis, 1992; Scheff, 1988; Tangney & Dearing, 2003; Tangney, Stuewig, & Martinez, 2014). Interestingly, recent research has demonstrated that state and trait shame can also be associated with prosocial approach behaviours such as apologising, helping, showing empathy, cooperation, interpersonal commitment, a preference to be with others, and a personality orientation that emphasises intimacy and interpersonal connectedness (De Hooge et al., 2018; De Hooge, Breugelmans, & Zeelenberg, 2008; Ferguson, Brugman, White, & Eyre, 2007; Gausel et al., 2012; Gausel, Vignoles, & Leach, 2016; Leach & Cidam, 2015; Miller & Tangney, 1994; Wu, Dorahy, Johnston, & Hanna, 2019). Moreover, chronic shame-proneness and avoidance orientation tends to be only

weakly correlated (Leach & Cidam, 2015), further suggesting the possibility of approach behaviours in trait shame.

It appears somewhat paradoxical that both withdrawal and prosocial approach responses to shame can occur (De Hooge et al., 2018; Gausel et al., 2016). This paradox reflects Kaufman's (1996) description that shame has an ambivalent nature and seeks both interpersonal withdrawal and reunion. Some theories have been proposed to explain whether shame is associated with interpersonal approach or withdrawal. Individual differences such as temperament, ability to acknowledge shame, self-compassion, seeing the self as malleable, and having the ability to focus on specific reparable behaviours may influence approach and withdrawal behaviours (Cibich, Woodyatt, & Wenzel, 2016; De Hooge et al., 2010; Kaufman, 1996; Wu et al., 2019). Situational factors such as having social support may also be involved (Cibich et al., 2016; De Hooge et al., 2010). The nature of the shame experience itself may also have a role. For instance, approach behaviours may be moderated by the intensity and frequency of shame experiences (Cibich et al., 2016), whether shame is experienced as bearable or unbearable (A. P. Morrison, 2011), and whether the self and social image is perceived to be reparable (Cibich et al., 2016; De Hooge et al., 2018; De Hooge et al., 2010; Gausel & Leach, 2011; Gilbert, 1998; Leach & Cidam, 2015). Moreover, cognitions are theorised to influence the shame-responses on the Compass of Shame (Nathanson, 1992), and this could possibly extend to approach behaviours.

However, there is a lack of research investigating how aspects of trait shame may be differentially involved in approach and withdrawal behaviours, along with other shame-responses. Whilst factors of trait shame have been assessed (Del Rosario & White, 2006; Goss et al., 1994; Matos, Pinto-Gouveia, & Duarte, 2013; Vikan et al., 2010), research on the relationship of these factors with various shame-responses appears to be limited, and the available research on the relationship between trait shame and shame-responses has not

included approach behaviours (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006).

Recent research that has begun to compare approach and withdrawal as shame-responses has instead focussed on state shame (De Hooge et al., 2018; De Hooge et al., 2010; Gausel et al., 2016; Leach & Cidam, 2015). Moreover, research on trait shame and shame-responses has focussed on internalised shame and not external shame (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). A more comprehensive understanding of the how various aspects of trait shame are associated with various shame-responses is therefore required.

This thesis therefore sought to explore whether various aspects of trait shame are differentially associated with approach and withdrawal behaviours along with other shame-responses. It aimed to clarify whether there are particular factors and triggers of trait shame that are more strongly associated with certain behavioural patterns. This research objective was explored over two studies. The first study explored how components of internalised shame differentially correlated with broadly-defined approach and withdrawal behaviours on a student population. The second study sought to replicate and expand on the first study. It used an adult community sample and confirmed the factor structure of internalised shame before exploring how these factors, along with whether internalised shame and external shame were related to various behaviours. Specific shame-responses were also assessed in addition to the broad measures of behaviour used in first study.

## **STUDY 1**

### **Internalised Shame Components and Personality Orientation**

Internalised shame, as measured by the Internalised Shame Scale (ISS; Cook, 2001), has been found to have a three-component structure (Del Rosario & White, 2006; Matos et al., 2013; Vikan et al., 2010). Del Rosario and White (2006) named these components Inferiority, Fragile/Exposed, and Empty/Lonely. Vikan et al. (2010) found almost identical components which they called Inadequacy, Vulnerability and Emptiness. Matos et al. (2013)

also reported finding three components, albeit concluding that the ISS had a unidimensional structure based on evaluation of the scree plot, initial eigenvalues and overlapping items between components. The study by Del Rosario and White (2006) attempted to assess Cook's (1994, 2001) claim that the ISS was unidimensional by using principal components analysis with an oblique rotation method that forced the extraction of components to be independent of each other. The Other As Shamer Scale (OAS), a measure of external shame that consists of adapted items from the ISS has a similar structure (Goss et al., 1994).

One way to assess withdrawal and approach behaviours is through two fundamental polarities of personality described by Blatt (2008) and which are central to an individual's experience of self, relationships and psychopathology. Blatt (2008) named one pole of the personality spectrum as the 'introjective' orientation, characterised by self-criticism and a primary focus on self-development at the expense of interpersonal connection. The other pole, known as the 'anaclitic' orientation, is characterised by dependency on others and a primary focus on interpersonal relatedness at the expense of self-definition. Thus, introjective orientation could be said to primarily encapsulate withdrawal behaviours and anaclitic orientation to primarily encapsulate approach behaviours. Whilst this categorisation is not exclusive, since, for example, anaclitic orientation can be associated with temporary withdrawal behaviours (Blatt, 2008), it nonetheless provides a broad representation of the constructs of withdrawal and approach.

Given that the component structure of the ISS has received more research than the OAS and that there are similarities between the OAS and the ISS structure, the current study only assessed the structure of the ISS. Using the results from Del Rosario and White (2006), along with Blatt's (2008) constructs of anaclitic and introjective personality orientation as broad representations of approach and withdrawal behaviours respectively, this study explored whether the relationship between internalised shame and approach behaviours

compared to withdrawal behaviours would vary in strength depending on which component of shame was examined. The component structure found by Del Rosario and White (2006) was used because their methodology used an orthogonal rotation method to obtain independent or uncorrelated components.

The Inferiority component may have a strong association with introjective orientation, since this personality orientation is characterised by an explicit focus on inferiority, failure and unworthiness, as well as having low self-esteem (Blatt, 1998). Moreover, self-criticalness, which is a core characteristic of introjective orientation (Blatt, 2008), has strong associations with inferiority (Gilbert et al., 2010). Exploratory analyses by Wu et al. (2019) found that anaclitic orientation had a small positive correlation with self-esteem, suggesting it may be less vulnerable to feelings of inferiority than introjective orientation. Nonetheless, as the magnitude of this correlation between anaclitic orientation and self-esteem was only small, it is possible that some vulnerability to inferiority may still exist in anaclitic orientation. In addition, anaclitic orientation involves concerns about being helpless, weak and dependent on others (Blatt, 1998), concerns which may imply some sense of inferiority. Moreover, Zuroff and Mongrain (1987) found that anaclitic subjects surprisingly had high levels of introjective depression (depression which results from an interruption in positive self-worth), which suggests that anaclitic orientation may also have links with inferiority.

In contrast, the Fragile/Exposed component of internalised shame may have a relatively similar association with both introjective and anaclitic orientations. Some items in the ISS which correspond to the Fragile aspect appeared to be about self-criticism (e.g., ‘I could beat myself over the head with a club when I make a mistake’), which is a theme that is central to introjective orientation. Other Fragile-related items appeared to be about weakness (e.g., ‘I feel as if I have lost control over my body functions and feelings’), which is a theme that is central to anaclitic orientation. Other items appeared to potentially involve both self-

criticism and weakness (e.g., 'Sometimes I feel no bigger than a pea') that could apply to both personality orientations. There was no clear imbalance in the distribution of items that linked to self-criticism or weakness that would suggest that one personality orientation would have a stronger link to Fragility over the other. Thus, it was possible that both personality orientations would have similar associations with the Fragile aspect of the Fragile/Exposed component. With regards to exposure, theory and empirical evidence has linked both introjective and anaclitic orientations with concerns about negative evaluation and rejection by others (Blatt, 2008; Reis & Grenyer, 2002; Zuroff & Mongrain, 1987). This focus on the evaluation by others may result in both personality orientations having increased fears and perceptions of being exposed to others when shame is triggered. Introjective individuals may be concerned about exposure in terms of how it negatively impacts the sense of self and self-worth, while anaclitic individuals may be concerned about exposure in terms of how it negatively impacts relationships. Thus, whilst the focus may be different for each personality orientation, the feelings of exposure may be similar in magnitude.

Anaclitic orientation is focussed on themes of loss and abandonment (Blatt, 2008) which may also lead to feelings of emptiness and loneliness. Indeed, loneliness is an explicit concern of anaclitic orientation (Blatt, 2008). Moreover, H. B. Lewis (1987) suggested that the experience of loneliness and emptiness may parallel anaclitic depression (which occurs from a disruption of gratifying interpersonal relationships (Blatt, 2008)). This suggests the Empty/Lonely factor of shame may have an association with anaclitic orientation and its concerns. Introjective orientation appears to be vulnerable to feelings of emptiness in shame because while introjective individuals constantly strive for achievement (Blatt, 2008), their focus on self-criticism and failure may result in a sense of dissatisfaction with their accomplishments and subsequently result in feelings of emptiness throughout the lifespan. In terms of loneliness, introjective individuals place a disproportionate emphasis on separation

from others and often respond to social interactions negatively, resulting in isolation and less social support than anaclitic orientation (Blatt, 2008; Shahar, 2001). Interestingly, Schachter and Zlotogorski (1995) found that introjective depression accounted for twice the variance in loneliness than anaclitic depression. Moreover, introjective orientation may have a stronger link with the Empty/Lonely component of shame than anaclitic orientation because its association with emptiness and loneliness may arise from issues of both failure and rejection, whilst anaclitic orientation's emptiness and loneliness may arise primarily from rejection issues (Zuroff & Mongrain, 1987). Thus, potentially lacking a sense of both fulfilling achievement as well as adequate relationships, introjective orientation may be more highly associated with emptiness and loneliness.

The ISS components may have differential groupings within each personality orientation. Introjective orientation is most characterised by self-criticism and isolation (Blatt, 2008) and these features parallel the Inferiority and Empty/Lonely components. This suggests these components may have stronger relationships with this personality orientation relative to the Fragile/Exposed component. In comparison, anaclitic orientation is primarily concerned about helplessness, weakness and abandonment, which parallels the Fragile/Exposed and Empty/Lonely components. These components may thus have relatively similar associations with anaclitic orientation. The Inferiority component may have a relatively smaller association since it is not a core feature of anaclitic orientation (Blatt, 2008).

The current study sought to firstly replicate the component structure of the ISS found by Del Rosario and White (2006) in a student population and then explore the associations between the components of internalised shame and personality orientation, using personality orientation as a proxy for approach and withdrawal behaviours.

## Method

### Participants

Undergraduate university students from New Zealand (NZ,  $n = 289$ ) and Northern Ireland (NI,  $n = 303$ ) were recruited for this study ( $N = 592$ ). This was the same sample used by Wu et al. (2019).

### Materials

Trait shame was measured using the Internalized Shame Scale (ISS; Cook, 2001), which consists of 24 items on a Likert scale from 0 (Never) to 4 (Almost always) that assess internalised trait shame (e.g., “I feel like I’m never quite good enough”) (Cook, 2001). It has good reliability and validity in both clinical and university samples (Del Rosario & White, 2006; Rybak & Brown, 1996).

Approach and withdrawal behaviours were assessed using the Depressive Experiences Questionnaire-short form (DEQ-SF; Bagby, Parker, Joffe, & Buis, 1994), which is a measure of anaclitic and introjective personality orientations (see Appendix A). The DEQ-SF consists of 19 items on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). Nine items assess introjective orientation (e.g., “I never really feel secure in a close relationship”; DEQ-I) and ten assess anaclitic orientation (e.g., “After a fight with a friend, I must make amends as soon as possible”; DEQ-A). The DEQ-SF has good reliability and validity for university, adult and clinical samples (Bagby et al., 1994).

### Procedure

Participants completed an anonymous online survey advertised through email blasts and administered using Qualtrics software over three weeks. The survey was completed for course credit. A list of support services was provided to participants after completion of the survey. The study was conducted in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) and approved by the local ethics committees.

### **Statistical Analysis**

IBM SPSS 25 and R 3.6.2 were used for statistical analysis. Visual inspection of Q-Q plots was used to assess the normality of the data. Sampling adequacy for the principal components analysis (PCA) was measured using the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO). The methodology used by Del Rosario and White (2006) was replicated to enable a comparison with their ISS component structure. Accordingly, PCA with varimax rotation was used to determine ISS components, and a scree plot (Cattell, 1966) and eigenvalues greater than 1 (Kaiser, 1960) were used to determine the number of components to extract. Varimax rotation was used to force the extraction of components to be independent of each other (Del Rosario & White, 2006). Items with component loadings of .40 or greater were included in the components (Del Rosario & White, 2006).

Partial correlation analyses were performed to find the association between the components of the ISS and personality orientation. For example, partial correlation analyses were performed on the Inferiority component of the ISS and anaclitic personality orientation, controlling for the shared variance of the Fragile/Exposed component, Empty/Lonely component, and introjective personality orientation. This was repeated for each ISS factor and both anaclitic and introjective personality orientations. Partial correlations and their confidence intervals were generated by bootstrapping 1000 samples. Bootstrapping enabled comparisons between pairs of partial correlations to be performed by creating additional confidence intervals around their differences, with a confidence interval that did not overlap zero indicating a significant difference between the two partial correlations. Bonferonni correction for the multiple comparisons between partial correlations was performed.

## Results

### Descriptive Statistics

Ninety one participants were excluded due to incomplete data, resulting in 501 available for analysis (NZ,  $n = 253$ ; 50.5%; NI,  $n = 248$ ; 49.5%). Participant age range spanned from 18 to 74 years ( $M = 22.49$ ;  $SD = 6.76$ ). Most were female ( $n = 412$ ; 82.2%) and studying psychology ( $n = 398$ ; 79.4%). Exploratory analyses detected no extreme outliers and visual inspection of Q-Q plots suggested adequate normality of the data. There were no differences between the New Zealand and Northern Irish samples for age,  $F(1, 499) = 1.33$ ,  $p = .25$ ,  $\eta_p^2 = .003$ , internalised shame,  $F(1, 499) = 1.18$ ,  $p = .28$ ,  $\eta_p^2 = .002$ , anaclitic orientation,  $F(1, 499) = .74$ ,  $p = .39$ ,  $\eta_p^2 = .001$ , and introjective orientation,  $F(1, 499) = .06$ ,  $p = .81$ ,  $\eta_p^2 < .001$ . There were significantly more males in the New Zealand ( $n = 54$ ) than the Northern Irish sample ( $n = 35$ ),  $\chi^2(1, N = 501) = 4.48$ ,  $p = .03$ . Due to their overall similarities, the two samples were merged for the remainder of the analysis. No differences across sex were found for shame,  $F(1, 499) = 3.38$ ,  $p = .07$ ,  $\eta_p^2 = .007$  and introjective orientation,  $F(1, 499) = .13$ ,  $p = .72$ ,  $\eta_p^2 = .000$ . However, females were found to have higher anaclitic functioning,  $F(1, 499) = 25.96$ ,  $p < .001$ ,  $\eta_p^2 = .05$ . Means, standard deviations, reported and possible ranges, and scale reliabilities are presented in Table 1. Internal consistency was acceptable for all scales. Pairwise correlations are shown in Appendix B.

**Table 1**

*Descriptive Statistics for Scales*

Scale	Mean/total	Standard deviation	Reported range	Possible range	Cronbach's alpha
ISS	36.05	19.60	0 - 96	0 - 96	.96
Male	32.60	21.11			
Female	36.79	19.20			
DEQ-A	43.70	11.48	14 - 70	10 - 70	.84
Male	38.21	10.78			
Female	44.89	11.29			

**Table 1***Descriptive Statistics for Scales*

Scale	Mean/total	Standard deviation	Reported range	Possible range	Cronbach's alpha
DEQ-I	33.45	10.82	9 - 63	9 - 63	.85
Male	33.82	11.37			
Female	33.36	10.71			

*Note.* Abbreviations: ISS, Internalised Shame Scale; DEQ-A, Depressive Experiences Scale-Short Form, Anacletic subscale; DEQ-I, Depressive Experiences Scale-Short Form, Introjective subscale.

**Component Structure**

Sampling adequacy for the component analysis was found to be good as assessed by the Kaiser-Meyer-Olkin Test,  $KMO = .96$ . The scree plot from the component analysis indicated a sharp inflexion after component 1 (see Appendix C) prior to component rotation, which according to Cattell's (1966) guidelines indicated the ISS had a unidimensional component structure. In contrast, Kaiser's (1960) rule suggested that three components should be extracted since they had eigenvalues larger than one. Following Kaiser's rule, three components were extracted and were found to account for 61.96% of the total variance. This was nearly identical to the findings by Del Rosario and White (2006), in which three components were found which accounted for 61.76% of the total variance. After rotation, the three components consisted of 12, eight and four items, respectively. Component loadings, eigenvalues, variance accounted for by each component, and Cronbach's alphas are shown in Table 2. Each component was identical in composition to those found by Del Rosario and White (2006) and were therefore labelled in identical fashion, namely Inferiority, Fragile/Exposed, and Empty/Lonely, respectively. There was an overlap for eight of the 24 items, which was noticeably higher than the overlap of three items found by Del Rosario and White (2006). The highest loading on each overlapping item determined the component it was assigned.

**Table 2***Rotated Component Loadings for the ISS Shame Subscale*

Item	Inferiority	Fragile/Exposed	Empty/Lonely
7	.78		
1	.71		
6	.70		
3	.66		
2	.64		.44
8	.63		
12	.62		
5	.61		
10	.60		.43
16	.56		
15	.54		
11	.51	.43	.43
19	.48	.53	
25		.67	
24		.66	
23		.68	
22		.67	
17	.44	.57	
20	.41	.55	
13	.53	.54	
30			.83
26			.80
27			.78
29			.76
Eigenvalue	6.20	4.37	4.30
Variance (%)	25.84	18.19	17.93
Cronbach's $\alpha$	.93	.89	.92

*Note.* Items are listed in descending order of their component loadings and in terms of the component they were assigned to. Component loadings less than the threshold of .40 are not displayed. Items 4, 9, 14, 18, 21, and 28, were excluded from the component analysis because they belong to the self-esteem subscale of the ISS.

**Partial Correlations of ISS Components and Personality Orientation**

Partial correlations between ISS factors and Personality orientation are shown in

Table 3. Differences between partial correlations are shown in Table 4.

**Table 3***Partial Correlations Between ISS Factors and Personality Orientation*

	Inferiority	95% CI	Fragile/ Exposed	95% CI	Empty/ Lonely	95% CI
Anaclitic	.13*	.03, .22	.20***	.12, .29	-.10**	-.19, -.02
Introjective	.41***	.34, .48	.06	-.03, .14	.31***	.23, .39

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Table 4***Differences Between Partial Correlations of ISS Factors and Personality Orientation, with Adjusted Confidence Intervals*

Partial Correlation 1	Partial Correlation 2	Difference [99.44% CI]
Inferiority - Anaclitic	Inferiority - Introjective	<b>.28 [.12, .46]</b>
Fragile/Exposed - Anaclitic	Fragile/Exposed - Introjective	.14 [-.04, .32]
Empty/Lonely - Anaclitic	Empty/Lonely - Introjective	<b>.41 [.24, .57]</b>
Inferiority - Anaclitic	Fragile/Exposed - Anaclitic	.07 [-.13, .29]
Inferiority - Anaclitic	Empty/Lonely - Anaclitic	<b>.23 [.03, .42]</b>
Fragile/Exposed - Anaclitic	Empty/Lonely - Anaclitic	<b>.30 [.14, .49]</b>
Inferiority - Introjective	Fragile/Exposed - Introjective	<b>.35 [.17, .55]</b>
Inferiority - Introjective	Empty/Lonely - Introjective	.10 [-.04, .28]
Fragile/Exposed - Introjective	Empty/Lonely - Introjective	<b>.25 [.08, .42]</b>

Note. 99.44% confidence intervals were used to adjust for nine multiple comparisons via Bonferroni adjustment. Bolded items indicate statistically significant differences at  $\alpha = .0056$ .

**Component Structure After Removing Empty/Lonely Component**

Whilst examining the results, it was noticed that the Empty/Lonely component did not describe a characteristic that is specific to shame but rather assessed more generic aspects of mental health. As such, a decision was made to drop this component by removing the four items associated with it (items 26, 27, 29, and 30) and repeat the analysis to examine the relationship of personality orientation with components unique to shame. This modified version of the ISS (ISS-m) had a mean of 30.90, standard deviation of 16.12 and Cronbach's alpha of .95. Sampling adequacy remained good,  $KMO = .96$ . The scree plot is displayed in Appendix D. Two components were extracted as they had eigenvalues larger than one.

Together, they accounted for 57.23% of the total variance. After rotation, the components consisted of 15 and five items, respectively. Component loadings, eigenvalues, variance accounted for by each component, and Cronbach's alphas are shown in Table 5. Component 1 consisted of all 12 items from the original Inferiority component, along with three new items (13, 17 and 19). As such, this component was named Inferiority (New). Component 2 predominantly consisted of items regarding fragility and was called Fragility. There was an overlap of eight of the 20 items (see Table 5).

**Table 5**

*Rotated Component Loadings for the ISS-m (Empty/Lonely Items Removed)*

Item	Inferiority (New)	Fragility
7	.79	
1	.74	
6	.72	
2	.70	
3	.68	
8	.66	.42
10	.65	.48
12	.64	.47
5	.63	
16	.61	
15	.59	
11	.58	.53
13	.55	.45
19	.52	.40
17	.47	.40
22		.79
24		.78
23		.78
25		.76
20	.47	.55
Eigenvalues	6.71	4.74
Variance (%)	33.53	23.7
Cronbach's $\alpha$	.94	.87

*Note.* Items are listed in descending order of their component loadings and in terms of the component they were assigned to. Component loadings less than the

**Table 5***Rotated Component Loadings for the ISS-m (Empty/Lonely Items Removed)*

threshold of .40 are not displayed. In addition to excluding items loading on the Empty/Lonely component, items 4, 9, 14, 18, 21, and 28, were also excluded from the component analysis because they belong to the self-esteem subscale of the ISS.

**Partial Correlations of ISS Components and Personality Orientation with****Emptiness/Lonely Items Removed from ISS**

Partial correlations between the two new components and two personality orientations are shown in Table 6. Differences between the partial correlations are shown in Table 7.

Bonferroni adjustment produced an alpha of .0125 and 98.75% confidence intervals.

**Table 6***Partial Correlations Between ISS-m Factors and Personality Orientation*

	Inferiority (New)	95% CI	Fragility	95% CI
Anaclitic	.20***	.10, .29	.11*	.02, .20
Introjective	.49***	.42, .56	.18***	.09, .27

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Table 7***Differences Between Partial Correlations of ISS-m Factors and Personality Orientation, with Adjusted Confidence Intervals*

Partial Correlation 1	Partial Correlation 2	Difference [98.75% CI]
Inferiority - Anaclitic	Inferiority - Introjective	<b>.29 [.12, .44]</b>
Fragility - Anaclitic	Fragility - Introjective	.06 [-.09, .23]
Inferiority - Anaclitic	Fragility - Anaclitic	.08 [-.12, .29]
Inferiority - Introjective	Fragility - Introjective	<b>.31 [.15, .48]</b>

Note. 98.75% Confidence interval was used to adjust for four multiple comparisons via Bonferroni adjustment. Bolded items indicate differences that are statistically significant at adjusted alpha = .0125.

**Discussion**

The first part of this study involved analysing the component structure of the ISS. A three-component structure was initially found which was identical to the structure found by

Del Rosario and White (2006) and was also named Inferiority, Fragile/Exposed and Empty/Lonely. Both Del Rosario and White (2006) and the present study used the same methodology and used university samples with a similar mean age and sex-ratio, though the present study had a much larger sample. These results were also similar to the three-component structure found by Vikan et al. (2010) of Inadequacy, Vulnerability and Emptiness, with only two items loading onto different components. Of note, their results were found using an oblique rotation method (Vikan et al., 2010) which assumes components are correlated, in contrast to the orthogonal method in the present study and Del Rosario and White (2006). They also used a non-patient and an outpatient sample. The similarity across these studies considering their variations in sample and method suggests this three-component structure has stability and extends its generalisability. Moreover, whilst Matos et al. (2013) concluded on a unidimensional structure to the ISS, their results nonetheless showed a three-component structure, with each factor accounting for similar variance as the present study and Del Rosario and White (2006). Interestingly, a large scale ( $N = 801$ ) factor analysis of the previous version of the ISS which included four additional shame items also found similar results. The only differences were that three items in the current ISS loaded onto different factors and the Fragile and Exposed constructs were separated into two different factors resulting in a four-factor structure (Cook, 1987). Similarities have also been found with the Other as Shamer Scale (OAS), a measure of external shame which is based on the ISS and was found to have a comparable three-component structure (Del Rosario & White, 2006; Goss et al., 1994).

However, an observation was made during this study that the Empty/Lonely component refers to psychological experiences which are not unique to shame. Emptiness and loneliness are associated with numerous other factors such as depression, shyness, social deficits, pessimism and hostility as well as disorders like clinical depression, borderline

personality disorder and schizophrenia (Ernst & Cacioppo, 1999; Heinrich & Gullone, 2006; Klonsky, 2008). Resultantly, this study repeated the component analysis after removing the four items that loaded onto this component. A two-component structure was found for this modified version of the ISS (ISS-m), in which the original ISS Inferiority component retained its items whilst gaining three more items. Two of these items pertained to exposure (items 13 and 19), whilst the other to self-punitive behaviours (item 17). This new component was named Inferiority (New) to distinguish it from the original Inferiority component.

Interestingly, Vikan et al. (2010) also found item 13 to be associated to their Inadequacy component which is conceptually similar to inferiority. It is curious that whilst exposure is a central concept to shame (H. B. Lewis, 1971; M. D. Lewis, 1992; Wurmser, 2015), the items that corresponded to this construct were subsumed under the Inferiority component after removing the Empty/Lonely items. Perhaps fears of exposure are inextricably linked to feelings of inferiority, with exposure being experienced as problematic only when it is feared to provide confirmation of perceptions by oneself and others that one has failed expectations, is inferior, defective, and/or unattractive (Gilbert, 1997, 1998, 2007). Nathanson (1992) noted that it is only when one feels unloved that a defect becomes perceived as problematic.

Accordingly, it is not exposure of defects per se that is problematic but rather believing those defects make one unlovable perhaps through being inferior and unworthy of others' love.

With the Exposed items of the original ISS subsumed under the Inferiority (New) component, the remaining component was left with items exclusively describing fragility and was accordingly named the Fragility component. It is interesting to note that Cook's (1987) factor analysis of the previous version of the ISS found separate factors called Exposed and Fragility.

An important issue to address is the number of overlapping items between components in this study, in which eight of the 24 items on the original ISS and eight of the

20 items on the ISS-m overlapped onto another component(s). A high number of overlaps have been observed in some previous studies of the ISS and have led some to conclude that the ISS is better described using a unidimensional structure (Cook, 2001; Matos et al., 2013). This view could be supported by the sharp inflexion after one component in the scree plot in the current study. However, in contrast to the current study, both Vikan et al. (2010) and Del Rosario and White (2006) found relatively few overlapping items. Vikan et al. (2010) also noted that the components in their study had only medium inter-correlations which suggested that the ISS may not be unidimensional. Moreover, despite the overlapping items in both analyses in the present study, the respective items had noticeably different loadings on one component compared to the other component and/or compared to other items within the same component that did not overlap onto the other component. For example, item 8 in Table 5 had a component loading of .42 in Component 2, which is noticeably lower than its corresponding component loading of .66 in Component 1. It is also noticeably lower than the component loading of .79 of item 22 in Component 2 which is an item that does not overlap onto Component 1. Thus, despite overlapping items, it is reasonably clear which component the item loads onto. The presence of overlaps is only apparent because they cross an arbitrary threshold of .40 rather than because of any substantive and meaningful difference.

Furthermore, since the present study also found differential associations between ISS/ISS-m components and personality orientation (see below), it suggests that aside from statistical considerations regarding the underlying structure of the ISS/ISS-m, a multi-dimensional structure provides theoretically meaningful information about the characteristics of the two diametrically opposed personality orientations. As such, the present research lends support to the idea that internalised shame is not a unidimensional structure.

The second part of this study examined the associations between these components and personality orientation. The original Inferiority component had a significant medium-

large relationship with introjective orientation that was significantly greater than anaclitic orientation. This was consistent with theory that introjective orientation is characterised by a focus on inferiority (Blatt, 2008). The Inferiority (New) component of the ISS-m had an even stronger relationship with introjective orientation than the original Inferiority component. This was perhaps due to the inclusion of the three additional items which all address additional features characteristic of introjective orientation, namely failure, self-criticalness and withdrawal. Both the original and new Inferiority components had a significant, small association with anaclitic orientation, indicating that perceptions of inferiority are not exclusive to introjective orientation. This suggested that the inferiority aspect of internalised shame can be linked with approach behaviours, which expands on research that state shame can be associated with approach behaviours (De Hooge et al., 2018; Gausel et al., 2012; Leach & Cidam, 2015)

The Fragile/Exposed component was correlated with anaclitic orientation, as was the new Fragility component of the ISS-m. The magnitude of this latter correlation was roughly half that of the original Fragile/Exposed component and anaclitic orientation, suggesting that Fragility and Exposed are constructs that may be linked to anaclitic orientation by a roughly equal amount. The Fragile/Exposed component had a very small non-significant correlation with introjective orientation, though was not significantly different from the correlation between Fragile/Exposed and anaclitic orientation. This suggested that in a strict sense, the relationship of the Fragile/Exposed component with anaclitic orientation is not completely distinct to its relationship with introjective orientation. However, a striking difference was detected when analysing the Fragility component, in which Fragility emerged as having a significant relationship with introjective orientation that was similar in magnitude to that with the anaclitic orientation and not statistically different from it. This was surprising since the Fragility component had three items removed from the original Fragile/Exposed component,

all of which described characteristics of introjective orientation and should have theoretically further weakened the relationship. One explanation for this counterintuitive result could be the increased variance available from the removal of the Empty/Lonely component in the second partial correlation analyses. The relationship of the Fragility component with both personality orientations is consistent with how the items that load onto this component are evenly spread between anaclitic and introjective characteristics. Thus, it seems that fragility may be an aspect of shame that is similarly associated with both approach and withdrawal behaviours, perhaps driving both support-seeking behaviours whilst also the desire to withdraw to protect the self. This is consistent with theory about the ambivalent nature of shame (Kaufman, 1996).

A significant negative relationship was found between the Empty/Lonely factor and anaclitic orientation. The negative relationship could be because anaclitic concerns about loneliness creates a drive to seek out and obtain interpersonal connection, resulting in reduced loneliness (Mongrain, 1998; Shahar, 2001). Perhaps it is only when anaclitic orientation is subjected to interpersonal stress (Priel & Shahar, 2000) and/or leads to anaclitic depression (H. B. Lewis, 1987) that there would be a positive correlation with loneliness. Even so, anaclitic depression has been found to have less association with loneliness than introjective depression, perhaps because self-criticism may lead to isolation, and loneliness may produce self-criticism (Schachter & Zlotogorski, 1995). The Empty/Lonely component had a medium positive association with introjective orientation, which was consistent with theory that this personality orientation is vulnerable to isolation and may feel empty due to chronic dissatisfaction with accomplishments (Blatt, 2008; Shahar, 2001).

Introjective orientation was most strongly characterized by the Inferiority and Empty/Lonely components of the original ISS. These medium associations did not significantly differ from each other, whilst both were significantly larger than the negligible

association between introjective orientation and the Fragile/Exposed component. This configuration is consistent with the central characteristics of introjective orientation of inferiority and isolation (Blatt, 2008). Anaclitic orientation appeared characterized by all the components, being positively associated with the Inferiority and Fragile/Exposed components to a statistically similar degree, and negatively associated with the Empty/Lonely component. This is consistent with the description of anaclitic orientation as focused on weakness, helplessness and abandonment, together with interpersonal relatedness (Blatt, 2008). However, the relatively central involvement of inferiority with anaclitic orientation is somewhat surprising given that it is not theorized to be central to anaclitic personality orientation (Blatt, 2008).

Analyses for the ISS-m found that both personality orientations were characterized by associations with the Inferiority (New) and Fragility components. However, introjective orientation had a significantly larger relationship with the Inferiority (New) component than the Fragility component, whereas no significant difference was found between anaclitic orientation and these two components. This again emphasized the centrality of inferiority for introjective orientation. Nonetheless, it also demonstrated that fragility can be a relevant component of introjective orientation, and this is perhaps an outcome of the chronic self-criticism characteristic of this orientation (Blatt, 2008).

In summary, the initial analyses found the ISS to have three components called Inferiority, Fragile/Exposed and Empty/Lonely, which supported previous findings. Inferiority was associated with introjective orientation (and thus withdrawal behaviours) to a much larger degree than anaclitic orientation, whilst the Fragile/Exposed component was uniquely linked with anaclitic orientation (and thus approach behaviours). The Empty/Lonely component was positively associated with introjective orientation, but negatively associated with anaclitic orientation. A second analyses modified the ISS to examine components

unique to shame and found two components called Inferiority (New) and Fragility. The Inferiority (New) component was associated with introjective orientation to a much larger degree than anaclitic orientation, whilst Fragility was similarly associated to both personality orientations. Both the Inferiority (New) and Fragility components had a similar association with anaclitic orientation, whilst the Inferiority (New) factor had a larger association with introjective orientation than the Fragility component. Study 2 used confirmatory factor analyses to extend the findings of the exploratory research in this area. Partial correlations between the components of the modified ISS and personality orientation were examined using a broader sample to assess the replicability and generalisability of the current results. Specific approach and withdraw responses to shame were also evaluated to clarify the present research that thus far has only used personality orientation as a proxy of these behaviours. Other shame responses were also assessed. Moreover, internalised shame was compared with external shame to explore if differential behavioural patterns would emerge between these two sources of trait shame.

## STUDY 2

This study sought to replicate the findings from Study 1 and further explore other aspects of shame and their associated behavioural patterns. It does so in two broad sections. The first section explored *factors* of internalised shame and their relationship with both personality orientation and specific shame-responses. The second section explored *sources* of shame, namely internalised shame and external shame, and their relationship with personality orientation and specific-shame responses.

### Internalised Shame Factors

#### *Internalised Shame Scale Factors and Personality Orientation*

There is growing evidence that the underlying component structure of the ISS shame-subscale is consistent across student, adult and clinical samples (Study 1; Del Rosario &

White, 2006; Matos et al., 2013; Vikan et al., 2010). These studies all used PCA. However, Vikan et al. (2010) is the only study to have performed a PCA on non-clinical and clinical adult samples. It is also the only study to have performed a confirmatory factor analysis (CFA) and did so only for the clinical sample. Additionally, the component structure of the modified ISS (ISS-m) developed in Study 1 requires further investigation. The current study therefore sought to extend the research by performing a CFA on the ISS-m using an adult community sample.

Based on the theory and results of Study 1, the Inferiority (New) factor of the ISS-m may have a strong positive association with introjective orientation and a weaker positive association with anaclitic orientation. The Fragility factor may have a relatively similar, positive association with both introjective and anaclitic orientations.

### ***Internalised Shame Factors and Specific Shame Responses***

Study 1 and Wu et al. (2019) used personality orientation as a proxy for approach and withdrawal behaviours. However, personality orientation is a much broader construct than specific approach and withdrawal responses to shame. It is unclear how well personality orientation represents these specific shame responses. Some theoretical links between shame and personality orientation may not apply to shame and specific shame responses. For example, a withdrawal response to shame does not necessarily involve or require all the same characteristics as introjective orientation, such as preoccupation with self-definition, self-criticism and low self-esteem (Blatt, 2008).

To clarify this issue, specific approach and withdrawal behaviours needed to be assessed. Moreover, the inclusion of other shame responses would further clarify whether differential behavioural patterns are associated with various aspects of trait shame. The Compass of Shame Scale (CoSS; Elison, Lennon, et al., 2006) measures the four shame responses proposed by Nathanson (1992), namely to withdraw from others, to attack oneself,

to attack others, and to avoid shame through denying the existence of one's feelings of shame. However, the CoSS does not account for approach behaviours, so an additional dimension to this scale needed to be developed. The various shame-responses are not necessarily mutually exclusive, since Elison, Lennon, et al. (2006) found respondents did not perceive the CoSS to be an ipsative measure.

Approach behaviours have been theorised as a means of restoring the damaged self through social belonging (De Hooze et al., 2018). This suggests that approach behaviours could be associated with and used to repair a sense of inferiority. However, when restoration of the self is perceived as too risky or impossible, withdrawal may replace approach behaviours in order to protect the damaged self (De Hooze et al., 2018; De Hooze et al., 2010). Increased feelings of inferiority may be a factor that increases one's perceptions of the riskiness or impossibility of restoration. In addition, Nathanson (1992) proposed that shame-responses tend to be driven by particular categories of shame-related cognitions. Notably, the shame-cognitive category of Issues of Seeing and Being Seen (which pertains to thoughts about being exposed) results primarily in withdrawal to provide space for recovery. As the Inferiority (New) factor incorporated items related to exposure in Study 1, this suggested that there would be a negative relationship between the Inferiority (New) factor and the approach shame-response. It should be noted that this differed from the positive relationship found in Study 1 between the Inferiority (New) factor and anaclitic orientation which was a proxy for approach behaviours. This is because that relationship was based on characteristics of anaclitic orientation such as feeling helpless, weak and dependent, which do not necessarily apply to specific approach shame-responses.

In comparison, the Fragility factor may be more positively related to the approach response to shame. The items that load onto the Fragility factor do not necessarily imply damage to positive self-view, unlike items in the Inferiority (New) factor, and this may

enable approach behaviours to occur more readily (De Hooge et al., 2018; De Hooge et al., 2010). Moreover, feeling fragile could be described as a mental health concern, and such concerns can motivate help-seeking behaviours (Rickwood & Thomas, 2012). Whilst feeling inferior may also elicit a desire for support, it may additionally lead to perceptions that support is unwarranted and unavailable as the self is perceived as unworthy, unattractive and unlovable and this may hinder the help-seeking process (Gilbert, 1998; Gilbert et al., 2010; Gulliver, Griffiths, & Christensen, 2010; Nam et al., 2013; Nam et al., 2010). However, a fragile individual may also be hindered in seeking help, perceiving the potential impact of non-supportive behaviours to be more damaging. This increase in anticipated risk may reduce help-seeking behaviours (Nam et al., 2013). Overall, this may suggest that if a positive relationship exists between fragility and the approach shame-response, it may be relatively modest.

Shame involves a sense of ‘being small’ along with a desire to escape or hide (H. B. Lewis, 1971; Tangney et al., 1996). These characteristics correspond to inferiority and withdrawal, respectively, and suggest a positive relationship between the Inferiority (New) factor and withdrawal. H. B. Lewis (1971) described shame as involving feelings of being overwhelmed, not in control and paralysed by the hostility directed against the self, and that these feelings result in a desire to hide and disappear. Nathanson (1992) suggested that the withdrawal shame-response gives a safer space for an individual to experience the overwhelming feelings of shame. Since feeling fragile appears to overlap with feeling overwhelmed, it may also be positively associated with withdrawal. The Fragility factor may have a similar association with both approach and withdraw behaviours, since Study 1 found that both anaclitic and introjective orientations had similar associations with the Fragility component. As noted, however, these personality orientations may not completely represent specific approach and withdraw shame-responses, and so the same pattern may not occur.

Nathanson (1992) did not make an explicit link between shame cognitions associated with inferiority and the attack-self response to shame. However, others have noted that loss of social rank and status can result in internalised, self-directed aggression (Elison et al., 2014; Gilbert et al., 2010). Gilbert et al. (2010) found that feelings of inadequacy had high correlations with self-persecution. Moreover, both self-criticism and a sense of inferiority coexist as part of the stable introjective personality orientation (Blatt, 2008). Thus, inferiority and the attack-self shame-response may be strongly associated. Nathanson (1992) did not appear to make any explicit links between cognitive categories of shame that relate to fragility and the attack-self shame-response. However, H. B. Lewis (1971) theorised that shame results in the self redirecting hostility at others back onto itself in its vulnerable and overwhelmed state. Fragility can be conceptualised as an aspect of being vulnerable and overwhelmed and this suggests that the Fragility factor could be linked with the attack-self shame-response. A self-perpetuating cycle could also ensue since attacking the self could lead to more feelings of fragility. Additionally, self-harm, which is linked to self-persecution (Gilbert et al., 2010), has been linked with regulating overwhelming negative feelings (Laye-Gindhu & Schonert-Reichl, 2005; Suyemoto, 1998).

Nathanson (1992) theorised that the cognitive-shame category of Matters of Personal Size, Strength, Ability, and Skill, which involves thoughts of being weak, incompetent and stupid, is linked with the attack-other response to shame because it can lead to perceptions that others are threatening and endangering one's fragile identity and self-definition, and subsequently result in retaliatory self-defence. Similarly, Blatt (2008) proposed that aggression and outwardly-directed anger is a way to protect one's vulnerable self-esteem. Moreover, threats to social rank and status and to one's personal and relational value to others can result in aggression (Elison et al., 2014). Thus, a positive relationship may exist between the Inferiority (New) factor and the attack-other response to shame. However, the

attack-other response to shame is costly to one's relationships and such consequences prevent aggression until a threshold of perceived self-endangerment is exceeded (Nathanson, 1992). There is also guilt for desiring to retaliate in shame-activated anger, which acts as a deterrent to attacking others (H. B. Lewis, 1971). This may suggest that the attack-other shame-response has a smaller association with inferiority than the shame-responses of withdrawal and attack-self. An even smaller positive relationship may exist between the attack-other response and the Fragility factor, since feelings of fragility may be an additional disincentive to incur any other losses to oneself. Despite this, a positive relationship may still exist, since feelings of fragility may be so agonising and lead to perceptions of such endangerment to the self that it results in externalisation of blame (Tangney & Dearing, 2003). This would serve to reduce painful self-awareness and regain a sense of potency and agency that has been diminished by shame (Tangney & Dearing, 2003).

Whilst Nathanson (1992) theorised that the Sense of Self cognitive category, which involves perceptions of defectiveness, is linked with the avoidance response to shame, he also argued that this shame response is characterised by avoiding acknowledgement of shame. Thus, those who utilise the avoidance shame-response may not acknowledge feeling inferior to themselves or others. Indeed, this is a noted limitation for self-report measures of shame (Gilbert, 1998) and research has supported this (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). Those endorsing the avoid shame-response may also not acknowledge feelings of fragility for these same reasons.

It is worth noting that the withdrawal, attack-self, and attack-other responses to shame are all core characteristics of introjective orientation (Blatt, 2008). Since Study 1 found that introjective orientation had a strong association with the Inferiority (New) factor, these shame-responses may also have a strong association with this factor, and these associations may be larger than with the Fragility factor. However, the Inferiority (New) factor may have

smaller associations with each shame response than the association found with introjective orientation in Study 1, since each shame response represents only partial aspects of this personality orientation. Moreover, both ISS-m factors may have a similar relationship to both the attack-self and withdraw shame-responses, since both responses are characterised by internalisation and acceptance of shame and have been found to have similar associations with shame (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006).

### **Trait Shame Sources**

#### ***Internalised Shame, External Shame and Personality Orientation***

Another aspect which may affect the relationship of shame with approach and withdrawal behaviours is the perceived source from which shame arises. Shame which emerges from negative *self*-evaluation (internalised shame) may relate to approach and withdrawal in a differential pattern to shame which emerges from perceptions that *others* are negatively evaluating oneself (external shame; Gilbert, 1998; Goss et al., 1994).

Anaclitic personality orientation may be associated with external shame because this orientation is focussed on interpersonal connection and is thus concerned with how others evaluate the self (Blatt, 2008). Introjective personality orientation may also be linked to external shame because research has suggested that this orientation is also concerned with rejection and the perception of others, though unlike anaclitic orientation, expresses these concerns via avoidance of others (Blatt, 2008; Reis & Grenyer, 2002; Zuroff & Mongrain, 1987). Moreover, introjective orientation has negative mental representations of others (Blatt, 2008), and this may contribute to beliefs that others are shaming the self. Wyatt and Gilbert (1998) found that external shame was especially associated with socially-prescribed perfectionism rather than self-oriented perfectionism. Reis and Grenyer (2002) found that socially prescribed perfectionism was associated with both the insecure preoccupied and fearful avoidant attachment styles, which correspond to anaclitic and introjective personality

orientations, respectively (Blatt, 2008). Thus, both personality orientations appear to be linked with external shame. Moreover, Gilbert (2003) suggested that when external shame involves rejection fears, then it can lead to increased efforts to be accepted by others. On the other hand, when external shame involves fears of intrusion into one's self-identity, this can lead to withdrawal (Gilbert, 2003). Rejection fears could be linked to anaclitic orientation with its dependency and fears of abandonment, whilst intrusion fears could be linked to introjective orientation because its low levels of confidence may result in feelings of inability to defend oneself from the self-defining powerful other (Blatt, 2008; Gilbert, 2003; Wu et al., 2019). Thus, it seems that that external shame may be similarly associated with both approach and withdrawal behaviours as represented by anaclitic and introjective personality orientations, respectively.

Introjective orientation is fundamentally characterised by self-criticism (Blatt, 2008) and may thus have close associations with internalised shame. Supporting this, Dorahy and Hanna (2012) found that internalised shame was associated with introjective but not anaclitic personality orientation. Wu et al. (2019), found that internalised shame was linked with both personality orientations but was nonetheless more highly associated with introjective orientation. Notably, they used the ISS, which is a broader measure of internalised shame than that used by Dorahy and Hanna (2012) and more extensively accounted for social concerns and comparison and also feelings of fragility (Del Rosario & White, 2006; Study 1). Moreover, internalised shame is associated with lower self-esteem (Cook, 2001) and low self-esteem is in turn associated with introjective orientation (Blatt, 2008). In other words, the lower self-esteem in introjective orientation may in part be the result of a stronger association of this personality orientation with internalised shame. Nonetheless, the findings by Wu et al. (2019) suggest that a relationship between internalised shame and anaclitic orientation may also exist. Gilbert (1998) argued from clinical experience that dependent individuals, who are

not necessarily self-critical, can also be shame-prone. Issues of dependency and helplessness, which are characteristic of anaclitic orientation, have indeed been included in the cognitive-shame scripts theorised by (Nathanson, 1992). However, the results from Study 1 and Wu et al. (2019) suggested that the relationship between internalised shame and anaclitic orientation may be smaller than with introjective orientation.

This study would provide an answer to the question posed by Gilbert (1998) whether self-critical and dependent individuals are shame-prone in different ways. Previous theories have conceptualised shame as a break in the interpersonal bridge that ultimately leads to an internal break within the self (Cook, 1987, 2001; Gilbert, 2003; Kaufman, 1996; Rybak & Brown, 1996; Tomkins, 1963). Taken together, the literature reviewed suggests that introjective orientation may be vulnerable to both interpersonal and internal breakage, while anaclitic orientation may be vulnerable to interpersonal breakage with less subsequent internal breakage. This reflects the idea that introjective orientation represents the more vulnerable of the personality orientations (Blatt, 2008; Shahar, 2001).

### *Internalised Shame, External Shame and Specific Shame Responses*

It was suggested earlier that the Inferiority (New) factor may have a negative relationship with approach behaviours, whilst the Fragility factor may have a positive and smaller relationship. On balance, this suggested that internalised shame as assessed by the ISS-m may have a negative relationship with approach behaviours. However, the strength of this relationship may be weaker than that between the Inferiority (New) factor and approach behaviours since it would be mitigated by the Fragility factor. It is important to note that this may appear to contradict the previous reasoning and evidence that internalised shame may be associated with anaclitic personality orientation, where this orientation was a proxy for approach behaviours. However, this is because specific approach responses do not necessarily involve the same characteristics as anaclitic orientation such as dependency and

helplessness which may be linked with internalised shame. Whilst De Hooge et al. (2018) found that shame led to greater preference for prosocial approach behaviours over withdrawal, these findings were regarding state shame and its applicability to trait shame is unknown.

In contrast, external shame by definition is not internalised into one's personality and identity (Cook, 1987, 2001; Gilbert, 1998, 2003; Kaufman, 1996; Rybak & Brown, 1996). Perhaps this may result in external shame being experienced as relatively more bearable and reparable, leading to a greater possibility of approach behaviours (Cibich et al., 2016; De Hooge et al., 2018; De Hooge et al., 2010; Gausel et al., 2012; Gausel et al., 2016; Gilbert, 1998; Leach & Cidam, 2015; A. P. Morrison, 2011). Moreover, Gilbert (2003) proposed that when external shame involves rejection fears, it leads to increased efforts to get close to others and be accepted. It may only be when approach behaviours for reparation are seen as too risky or impossible that withdrawal occurs (De Hooge et al., 2010; Leach & Cidam, 2015). A contrary theory was proposed and empirically supported by Gausel and Leach (2011) and Gausel et al. (2016) which stated that appraisals of other-condemnation and associated feelings of rejection would lead to concerns of a damaged social image and result in self-defensive, non-prosocial behaviours. However, whilst Gausel and colleagues distinguished between damaged and reparable *self*-image, they did not distinguish damaged and reparable *social* image and theorised only about damaged social image. It may be possible that when social image is perceived as reparable, it could be associated with prosocial behaviours too.

The desire to withdraw, hide or disappear has been frequently described as feature of shame (Gilbert & Andrews, 1998; Haidt, 2003; H. B. Lewis, 1971; Nathanson, 1992; Tangney et al., 1996; Wurmser, 2015). Reasons for withdrawal include hiding after feeling exposed, protecting the damaged-self, preventing further attack from others, and giving space

to be overwhelmed and contemplate (De Hooge et al., 2010; Gilbert, 1998, 2003; Haidt, 2003; Lindsay-Hartz, de Rivera, & Mascolo, 1995; Nathanson, 1992; Tangney et al., 1996).

The deeper the experience of shame, the more withdrawal is required to protect the self (Nathanson, 1992). Since internalised shame involves negative self-perceptions and is experienced at the level of self-identity (Cook, 2001; Velotti, Garofalo, Bottazzi, & Caretti, 2017), it may have relatively more fear of and sensitivity to exposure and more perceived need for self-protection, and thus be more associated with withdrawal than external shame. The relationship between internalised shame and the withdrawal shame-response has been empirically supported (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). Withdrawal may also apply to external shame when it involves fears of intrusion into one's fragile self-identity (Gilbert, 2003). However, the withdrawal response to shame is characterised by greater internalisation of shame (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). By implication, less internalisation of shame such as found in external shame may result in relatively less withdrawal behaviours than internalised shame.

External shame has been found to have large first-order correlations with various measures of self-criticism (Gilbert et al., 2010), suggesting it may be associated with the attack-self response to shame. Self-directed anger and self-persecution have been theorised to be part of an evolutionary mechanism of involuntary subordination to manage external threat (Gilbert 2010, 2017). A shame response of self-blame might be a defensive response to prevent attacks from more powerful others (Gilbert, 2017). Moreover, when external shame involves rejection fears, the resulting desire to get close to others (Gilbert, 2003) could possibly be expressed through using the attack-self response to shame (Nathanson, 1992). This is because attacking the self can be a strategy to pre-empt perceived imminent rejection from others, feel that one is not as rejected as could be, and guarantee future affiliation through showing deference and self-deprecation (Cook, 2001; Nathanson, 1992). Internalised

shame has also had large correlations with self-criticism (Gilbert et al., 2010) and has been associated with the attack-self response to shame (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). However, rather than a strategy to gain affiliation, it may be that individuals with internalised shame view themselves as deserving the self-inflicted hostility. Indeed, internalised shame by definition involves the idea of self-derogation (Cook, 2001; Gilbert, 1998). Internalised shame was also strongly linked with introjective personality orientation which is characterised by self-criticism as a stable trait (Blatt, 2008; Wu et al., 2019). Interestingly, Gilbert et al. (2010) found that self-harm was linked to frequency of internalised shame but was not linked to external shame. This suggested that attack-self shame-responses, to which self-harm is related (Gilbert et al., 2010), may occur to a lesser extent in external shame. In contrast, since internalised shame may create more distress because of its effects on one's self-identity (Cook, 2001; Gilbert, 1998, 2003), it could result in the use of self-attack to regulate these intense and uncomfortable feelings (Gilbert et al., 2010; Laye-Gindhu & Schonert-Reichl, 2005; Suyemoto, 1998).

Shame has been associated with aggression toward others by many theorists (Elison et al., 2014; Gilbert, 1998; Lansky, 2007; H. B. Lewis, 1971; M. D. Lewis, 1992; Scheff, 1988; Tangney & Dearing, 2003; Wurmser, 2015). This association may apply to both internalised and external shame, though potentially to differential degrees. Nathanson (1992) proposed that the attack-other response to shame can result from perceptions that others are threatening one's identity regarding "Matters of Personal Size, Strength, Ability, and Skill". Internalised shame is associated with lower self-esteem (Cook, 2001; Velotti et al., 2017) and may result in relatively more feelings of endangerment to one's personal qualities. This in turn may result in a greater association with attack-other responses compared to external shame. The ISS has been found to be associated with the attack-other response to shame, with medium to large correlations (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). Moreover, the ISS

has been found to have medium to large associations with state anger and trait anger (Rybak & Brown, 1996). However, external shame may also be linked to the attack-other response, since shame-envy or shame-jealousy, which are types of external shame, can lead to aggression (Gilbert, 2003). Moreover, perceptions that others view oneself as shameful when one does not perceive oneself to be shameful can lead to antisocial behaviour (Gilbert, 1998).

As mentioned earlier, the avoid shame-response is characterised by not acknowledging shame (Nathanson, 1992), suggesting that self-report measures may not detect shame from those with this shame-response style. Supporting this, internalised shame was found to have no relationship with the avoid shame-response to shame (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). Moreover, the avoid shame-response does not internalise shame by acknowledging or accepting shame's message (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). Thus, a lack of relationship may not exist merely because of methodological issues but because of incompatible conceptual features between internalised shame and shame-avoidance. The same argument would apply for external shame.

The withdraw and attack-self shame-responses may have similar correlations with external shame and with internalised shame, respectively, since evidence suggests a frequent lack of difference between these shame-responses (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). Since the attack-other response is costly (Nathanson, 1992) and is deterred by guilt (H. B. Lewis, 1971), it may have a smaller correlation than the withdraw and attack-self responses. However, the evidence has been mixed and unclear regarding the correlation magnitude of internalised shame and the attack-other response compared to withdraw and attack-self responses. Elison, Pulos, et al. (2006) found that internalised shame had a large partial correlation with attack-other that appeared similar to the relationship with the attack-self response. In contrast, Elison, Lennon, et al. (2006), reporting only first-order

correlations, found that internalised shame had a noticeably smaller correlation with the attack-other response than the attack-self and withdraw responses. It should be noted that there was a relatively small sample for this latter research. If personality orientation closely parallels specific approach and withdrawal shame-responses, then previous reasoning that external shame would have similar relationships with anaclitic and introjective orientation would suggest that external shame may have a similar correlation with the approach response as the withdraw response. The potentially negative correlation magnitude between internalised shame and approach shame-responses may be less in absolute magnitude than the potential positive correlations between internalised shame and the withdraw and attack-self shame-responses, since it may be mitigated by the Fragility factor. However, it is unclear how the strength of this relationship might compare to the attack-other response.

### **Summary**

This study aimed to integrate and expand on existing research on shame, and built on the results of Study 1. It sought to confirm the factor structure of the ISS-m developed in Study 1 and explored whether these factors, together with internalised shame and external shame, had differential relationships with various behavioural patterns as measured by personality orientation as well as specific shame-responses.

### **Method**

#### **Participants**

Participants were 200 adults (aged 18 or over) randomly selected from the general population of New Zealand and Australia. An equal number of participants and sexes were used from each country. An a priori power analysis determined that this sample size would be sufficient when estimating for a medium effect size.

## Materials

Participants completed a questionnaire battery that consisted of demographic questions (country of residence, age, ethnicity, relationship status, educational attainment, and mental health status) in a forced-choice format (See Appendix E), along with the Internalised Shame Scale (ISS; Cook, 2001), Depressive Experiences Questionnaire Short-Form (DEQ-SF; Bagby et al., 1994), Other As Shamer Scale (OAS; Goss et al., 1994), and a modified form of the Compass of Shame Scale (CoSS; Elison, Lennon, et al., 2006).

Descriptions and psychometric properties of the ISS and DEQ-SF are provided in Study 1. The four items from the ISS that loaded onto the Empty/Lonely factor were removed due their lack of specificity to shame, resulting in the modified version of the ISS (ISS-m) that was developed in Study 1.

The OAS has 18 items assessing external trait shame, rated from 0 (Never) to 4 (Almost always) (See Appendix F; Goss et al., 1994). The scale was developed by modifying items in the ISS so that they explore an individual's perceptions of how *others* judge or see the self (e.g., "I feel other people see me as not good enough"), rather than how the individual judges himself/herself (Goss et al., 1994). Three items from the OAS were not included in the online survey as they are identical to items in the ISS and were thus duplicates. These three items from the ISS were then later used for analyses of the OAS. The OAS has satisfactory psychometric properties (Goss et al., 1994). Two OAS items were removed for the analyses as they were based on two of the ISS items that were removed because they loaded on onto the Empty/Lonely factor. The resulting scale was named the OAS-modified (OAS-m) (See Appendix F).

The CoSS has 12 item stems which describe potentially shame-inducing situations or variations of emotions related to shame, based on Nathanson's (2006) Compass of Shame (Elison, Lennon, et al., 2006). Each item stem contains four responses that correspond to the

four poles of the Compass (Withdraw, Attack-Self, Attack-Other, and Avoid), with each response being rated from 0 (Never) to 4 (Almost always) (Elison, Lennon, et al., 2006). The CoSS has adequate psychometric properties (Elison, Lennon, et al., 2006; Schalkwijk, Stams, Dekker, Peen, & Elison, 2016). The CoSS was expanded to include an “approach” response in addition to the existing four shame-responses in each of the 12 question stems. Thus, a total of 12 additional shame-responses were created in the CoSS, and the resulting scale was named the CoSS-modified (CoSS-m; see Appendix G). These approach responses were created by identifying the potentially shame-inducing situation in each question stem and formulating a response intended to restore and protect the self in that situation (De Hooge et al., 2010). Depending on the focus of the original item stem, the responses involved either approaching a task or approaching others to re-establish relationships (De Hooge et al., 2018; De Hooge et al., 2010). For example, for the item stem, “When an activity makes me feel like my strength or skill is inferior”, an approach response to restore and protect the self *by approaching the task* was formulated (“I keep doing the activity to improve myself and feel less inferior”). For the item stem, “When I feel rejected by someone”, an approach response to restore and protect the self *by re-establishing relationships* was created (“I try to win back their acceptance”). Six of the responses corresponded to approaching a task and the other six responses corresponded to approaching relationships. The order of placement of the new “approach” questions within the existing shame-response questions in each item stem of the CoSS was determined by using an online random number generator (<https://www.random.org/>) with a range of 1-5. This was to account for any potential order effects that might have occurred from introducing the new questions.

### **Research Design**

The scales along were compiled into an anonymous online survey using the Qualtrics software ([www.qualtrics.com](http://www.qualtrics.com)). Several measures were taken to improve data quality. First,

the questionnaire required participants to complete all questions of a scale before progressing further, to minimize missing data. Second, two validity items were included amongst the survey questions, stating “Please do not answer this question” to check if participants were reading the questions properly before answering them. Participants were excluded from subsequent analyses if they answered these questions. Third, a minimum time limit for questionnaire completion was set by calculating half of the median time taken to complete the questionnaire by the first ten percent of the sample. Participants who completed the questionnaire below this time were considered as not answering the questions with adequate care and were excluded from the analyses. Fourth, given the similarity of the items and format of the ISS-m and OAS-m, these two scales were not positioned adjacent to each other in the survey and instead were separated by either the DEQ-SF or CoSS-m. This was done to reduce the likelihood of participants becoming fatigued by over-repetition and subsequently answering in a fixed pattern. Fifth, potential order effects were accounted for by creating eight different sequences of the four scales. An equal number of participants were randomly assigned to each of the eight possible sequences. An ANOVA was carried out to test if there were any differences in the scale totals between the eight sequences. Any sequences that produced unique results were included into subsequent analyses as independent variables. Lastly, the survey was designed to be completed in 20 minutes or less to avoid survey fatigue and increase response validity (Dillman, Smyth, & Christian, 2014; Hugick & Best, 2008). The survey was pilot tested to check that the length of the survey met this criterion.

### **Procedure**

The Qualtrics software company was hired to recruit participants, administer the online questionnaire, perform validity checks and ensure data quality. A brief description of the study was provided to Qualtrics to provide information to potential participants during the recruitment process. Participants completed the survey anonymously. An online summary of

the study was given to participants at the beginning the questionnaire, along with a list of support services (See Appendix H). A consent page was also provided before the questionnaire (See Appendix I). A list of support services was provided again at the end of the questionnaire. The study was approved by the University of Canterbury Ethics Committee (See Appendix J). Since the study included randomly recruited participants from New Zealand and would likely include Māori participants, Māori consultation was sought and the study was approved by the Ngāi Tahu Consultation and Engagement Group (See Appendix K).

### **Statistical Analyses**

IBM SPSS Statistics 25, Jamovi 1.0.5 and R 3.6.2 were used for statistical analyses. Visual inspection of Q-Q plots was used to assess the normality of the data. Descriptive statistics were calculated for the demographic variables and scale outcomes. ANOVAs and chi-square tests were performed to detect differences between the two countries on pertinent demographic variables (those that could potentially affect the results, such as age and mental health status). ANOVAs were also performed to assess if there were differences in scale outcomes between the two countries, between sexes, and between the eight different sequences of scale presentation. Reliability analyses were performed on each of the scales and subscales.

A CFA was performed on the two-component structure of the ISS-m derived from Study 1. Sampling adequacy was tested using the Kaiser-Meyer-Olkin (KMO) test. Factors were specified and identified, and full information maximum likelihood method was used for estimation. Factor variances were set as 1 to impose constraints on the model. Model fit was assessed using the chi-squared test, the root mean square of approximation (RMSEA), the standardised root mean square residual (SRMR), the Tucker Lewis Index (TLI), and the Comparative Fit Index (CFI). Indicators of a desirable model fit were a non-significant chi-

square test, an RMSEA close to or below .06, an SRMR close to or below .08, a TLI and CFI close to or above .95 (Hu & Bentler, 1999). A 90% confidence interval was provided for the RMSEA (Herzog & Boomsma, 2009). Since chi-squared tests are sensitive to sample size and are often statistically significant with large samples, the relative chi-squared value was calculated by dividing the chi-square value by the degrees of freedom, with a quotient of 3 or less indicating acceptable model fit (Carmines & McIver, 1983). Another CFA was performed on a one-factor model of the ISS-m to provide a comparison model and test for unidimensionality.

Four main partial correlation analyses were performed on 1) ISS-m shame factors and DEQ-SF personality orientation, 2) ISS-m shame factors and CoSS-m shame-responses, 3) ISS-m shame, OAS-m shame and DEQ-SF personality orientation, and 4) ISS-m shame, OAS-m shame and CoSS-m shame-responses. In the first analyses, for example, the correlation between the Inferiority (New) factor and DEQ-SF anaclitic orientation was calculated whilst controlling for the shared variance of the Fragility factor and introjective personality orientation. Comparisons between pairs of partial correlations were performed within each of the four main analyses, using the significance tests described in Study 1. Bonferroni corrections were performed for each set of multiple comparisons. Additional partial correlational analyses were also performed between anaclitic orientation and the CoSS-m approach shame-response, and between introjective orientation and CoSS-m withdraw shame-response, to explore the overlap between these variables. The other CoSS-m shame-responses were included as covariates. A supplementary partial correlational analysis was performed between CoSS-m shame-responses, controlling for the ISS-m and OAS-m.

## Results

### Descriptive Statistics

Two participants completed the questionnaire battery under the minimum time limit of 431 seconds and were excluded from further analyses. Thus, 198 participants were included in the final analyses. Exploratory analyses detected no extreme outliers and visual inspection of Q-Q plots suggested adequate normality of the data. Analyses showed no difference between the New Zealand and Australian samples on age,  $F(1, 196) = 0.98, p = .32, \eta_p^2 = .01$ , sex,  $\chi^2(1, N = 196) = .02, p = .89$ , mental health difficulties,  $\chi^2(1, N = 192) = .09, p = .76$ , internalised shame (ISS-m),  $F(1, 196) = 0.29, p = .59, \eta_p^2 = 0.001$ , external shame (OAS-m),  $F(1, 196) = 2.49, p = .12, \eta_p^2 = 0.01$ , anaclitic orientation (DEQ-A),  $F(1, 196) = 1.75, p = .19, \eta_p^2 = 0.01$ , introjective orientation (DEQ-I),  $F(1, 196) = 0.40, p = .53, \eta_p^2 = 0.002$ , and the shame responses (CoSS-m) of withdrawal,  $F(1, 196) = 0.01, p = .93, \eta_p^2 < 0.001$ , attack-self,  $F(1, 196) = 0.49, p = .49, \eta_p^2 = 0.002$ , attack other,  $F(1, 196) = 2.87, p = .09, \eta_p^2 = 0.01$ , avoid,  $F(1, 196) = 0.81, p = .37, \eta_p^2 = 0.004$ , and approach,  $F(1, 196) = 0.004, p = .95, \eta_p^2 < 0.001$ . As such, the results for each country were merged for the remainder of the analyses. Demographic information (age, sex, ethnicity, mental health status, relationship status, education level) is summarised in Appendix L. Whilst over a third of participants reported they had mental health difficulties, subsequent analyses produced nearly identical results whether mental health was or was not included as a covariate. As such, all analyses are reported without including mental health as a covariate.

Analyses found no difference across scale presentation order on internalised shame (ISS-m),  $F(7, 190) = 1.25, p = .28, \eta_p^2 = 0.04$ , anaclitic orientation,  $F(7, 190) = 0.66, p = .71, \eta_p^2 = 0.02$ , introjective orientation,  $F(7, 190) = 1.07, p = .39, \eta_p^2 = 0.04$ , and the shame responses (CoSS-m) of withdrawal,  $F(7, 190) = 1.33, p = .24, \eta_p^2 = 0.05$ , attack-self,  $F(7, 190) = 1.00, p = .43, \eta_p^2 = 0.04$ , attack-other,  $F(7, 190) = 0.82, p = .57, \eta_p^2 = 0.03$ , avoid,  $F(7, 190)$

= 0.40,  $p = .90$ ,  $\eta_p^2 = 0.01$ , approach,  $F(7,190) = 0.77$ ,  $p = .61$ ,  $\eta_p^2 = 0.03$ . External shame (OAS-m) showed a trend toward significance,  $F(7, 190) = 1.99$ ,  $p = .06$ ,  $\eta_p^2 = 0.07$ . Given the overall lack of difference between scale presentation order, it was not used as a discrete independent variable.

There were no differences across sex on external shame (OAS-m),  $F(1, 194) = 1.44$ ,  $p = .23$ ,  $\eta_p^2 = 0.01$ , introjective orientation,  $F(1, 194) = 0.51$ ,  $p = .48$ ,  $\eta_p^2 = 0.003$ , and the shame responses (CoSS-m) of attack-self,  $F(1,194) = 1.82$ ,  $p = .18$ ,  $\eta_p^2 = 0.009$ , attack-other,  $F(1, 194) = 0.26$ ,  $p = .614$ ,  $\eta_p^2 = 0.001$ , avoid,  $F(1, 194) = 0.01$ ,  $p = .94$ ,  $\eta_p^2 < 0.001$ , and approach  $F(1, 194) = 0.03$ ,  $p = .87$ ,  $\eta_p^2 < 0.001$ . Females scored higher than males on internalised shame (ISS-m),  $F(1, 194) = 4.70$ ,  $p = .03$ ,  $\eta_p^2 = 0.02$ , anaclitic orientation (DEQ-A),  $F(1, 194) = 5.95$ ,  $p = .016$ ,  $\eta_p^2 = 0.03$  and in the shame response of withdrawal,  $F(1, 194) = 8.25$ ,  $p = .005$ ,  $\eta_p^2 = 0.04$  (See Table 8).

Scale means, standard deviations, reported and possible ranges, and reliabilities are shown in Table 8. Internal consistencies were acceptable for all scales. Pairwise correlations of scale means are shown in Appendix M.

**Table 8**

*Descriptive Statistics for Each Scale*

Scale	Sex	Mean	SD	Reported Range	Possible Range	Cronbach's alpha
ISS		39.38	25.09	0 - 96	0 - 96	.98
	Male	36.19	23.6			
	Female	42.86	26.33			
ISS-m		33.04	20.98	0 - 80	0 - 80	.98
	Male	29.97	19.43			
	Female	36.42	22.15			
OAS		27.75	16.29	0 - 72	0 - 72	.96
	Male	26.51	15.58			
	Female	29.15	17.03			
OAS-m		25.18	14.50	0 - 64	0 - 64	.96
	Male	24.03	13.96			
	Female	26.52	15.06			

**Table 8***Descriptive Statistics for Each Scale*

Scale	Sex	Mean	SD	Reported Range	Possible Range	Cronbach's alpha
DEQ-A		45.91	10.44	15 - 70	10 - 70	.83
	Male	44.36	9.55			
DEQ-I	Female	47.88	10.63	11 - 63	9 - 63	.87
	Male	37.69	10.68			
CoSS-m Withdraw	Female	37.16	10.35	0 - 48	0 - 48	.93
	Male	38.26	11.12			
Attack-Self	Female	22.58	10.99	0 - 48	0 - 48	.96
	Male	20.36	10.67			
Attack-Other	Female	24.81	11.01	0 - 48	0 - 48	.90
	Male	22.19	12.46			
Avoid	Female	21.09	11.59	0 - 46	0 - 48	.84
	Male	23.49	13.24			
Approach	Female	14.7	9.17	0 - 44	0 - 48	.88
	Male	15.03	9.66			
	Female	14.37	8.68	0 - 48	0 - 48	
	Male	20.82	8.01			
	Female	20.98	8.7	0 - 48	0 - 48	
	Male	20.9	7.19			
	Female	22.37	8.58	0 - 48	0 - 48	
	Male	22.57	9.06			
	Female	22.38	8.06			
	Male					

*Note.* Abbreviations: ISS, Internalised Shame Scale; ISS-m, Internalised Shame Scale-modified; OAS, Other As Shamer Scale; OAS-m, Other As Shamer Scale-modified; DEQ-A, Depressive Experiences Scale-Short Form, Anaclitic subscale; DEQ-I, Depressive Experiences Scale-Short Form, Introjective subscale; CoSS-m, Compass of Shame Scale-modified.

**Internalised Shame Factors***Internalised Shame Factors and Personality Orientation*

Sampling adequacy for the CFA performed on the two-factor model of the ISS-m was good, KMO = .97. The CFA produced a significant chi-square,  $\chi^2 (169, N = 198) = 489, p <$

.001. However, the chi-square/degrees of freedom quotient was acceptable,  $\chi^2/df = 2.89$ , as was the SRMR of .04. The CFI of .92 and TLI of .91 did not meet the threshold of .95 set by Hu and Bentler (1999). However, Hu and Bentler (1999) noted that leniency can be given to lower the .95 threshold with sample sizes less than 250 due to the tendency of this threshold to over-reject acceptable models in smaller sample sizes. This suggested that the CFI and TLI in this study may be acceptable. The RMSEA of 0.10 was not within an acceptable range, 90% CI [0.08, 0.11]. However, Hu and Bentler (1999) noted that their proposed cutoff criteria for the RMSEA tended to over-reject acceptable models in sample sizes less than 250, and recommended an alternative two-index presentation involving the SRMR and CFI for small samples. Using this two-index presentation, the current model meets requirements for an acceptable fit. The alternate one-factor model had poorer fit than the two-factor model of the ISS-m,  $\chi^2 (170, N = 198) = 573, p < .001, \chi^2/df = 3.37, SRMR = .04, CFI = .90, TLI = .89, RMSEA = .11, 90\% CI [0.10, 0.12]$ .

Partial correlations between ISS-m factors and personality orientation are shown in Table 9. The Inferiority (New) factor had a significantly greater association with introjective orientation than anaclitic orientation,  $r_{\text{difference}} = .41, 98.75\% CI [.17, .63]$ . Introjective orientation had a significantly greater association with the Inferiority (New) factor than with the Fragility factor,  $r_{\text{difference}} = .41, 98.75\% CI [.16, .67]$ . No other significant differences were found between ISS-m factors and personality orientation (see Appendix N).

**Table 9**

*Partial Correlations between ISS-m Factors and Personality Orientation*

	Inferiority (New)	95% CI	Fragility	95% CI
Anaclitic	.09	-.07, .24	0.06	-.07, .21
Introjective	.50***	.39, .59	0.09	-.04, .21

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

***Internalised Shame Factors and Specific Shame Responses***

Partial correlations between ISS-m factors and CoSS-m shame-responses are shown in Table 10. Note that the association between the Inferiority (New) factor and the attack-other shame-response approached significance. The Inferiority (New) factor had a medium association with attack-self shame-response that was significantly greater than the approach shame-response,  $r_{\text{difference}} = .41$ , 99.8% CI [.17, .67], and greater than the avoid shame-response,  $r_{\text{difference}} = .43$ , 99.8% CI [.12, .70] No other significant differences were found (see Appendix O for tables displaying all the comparisons performed).

**Table 10*****Partial Correlations Between ISS-m Factors and CoSS-m Shame-Responses***

	Inferiority (New)	95% CI	Fragility	95% CI
Approach	-.008	-.15, .13	.02	-.12, .17
Withdraw	.16*	.02, .32	.19*	.05, .33
Attack-self	.40***	.26, .51	.08	-.07, .23
Attack-other	.12	-.01, .25	-.02	-.18, .14
Avoid	-.03	-.17, .10	-.10	-.24, .04

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Trait Shame Sources*****Internalised Shame, External Shame and Personality Orientation***

Partial correlations between sources of shame and personality orientation are shown in Table 11. Note that the association between external shame and anaclitic orientation approached significance. The ISS-m had a significantly greater association with introjective orientation than with anaclitic orientation,  $r_{\text{difference}} = .49$ , 98.75% CI [.24, .75]. Introjective orientation had a significantly greater association with the ISS-m than with the OAS-m,  $r_{\text{difference}} = .50$ , 98.75% CI [.26, .76]. No other significant differences were found (see Appendix P).

**Table 11***Partial Correlations Between Sources of Shame and Personality Orientation*

	Internalised shame (ISS-m)	95% CI	External shame (OAS-m)	95% CI
Analectic	.07	-.10, .23	.12	-.001, .26
Introjective	.56***	.47, .64	.05	-.10, .19

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

*Internalised Shame, External shame, and Specific Shame Responses*

Partial correlations between sources of shame and specific shame-responses are shown in Table 12. Note that the association between external shame and the attack-other shame-response approached significance. The ISS-m had a small-medium association with the withdrawal shame-response that was significantly larger than its associations with the shame-responses of approach,  $r_{\text{difference}} = .36$ , 99.8% CI [.09, .61], attack-other,  $r_{\text{difference}} = .26$ , 99.8% CI [.001, .55], and avoid,  $r_{\text{difference}} = .39$ , 99.8% CI [.01, .72]. The ISS-m had a medium-large association with the attack-self shame-response that was also significantly larger than its associations with the shame responses of approach,  $r_{\text{difference}} = .55$ , 99.8% CI [.27, .82], attack-other,  $r_{\text{difference}} = .46$ , 99.8% CI [.11, .75], and avoid,  $r_{\text{difference}} = .59$ , 99.8% CI [.36, .83]. Attack-self had a significantly larger association with the ISS-m than with the OAS-m,  $r_{\text{difference}} = .56$ , 99.8% CI [.24, .85]. No other significant differences were found (see Appendix Q for tables displaying all the comparisons performed).

**Table 12***Partial Correlations Between Sources of Shame and CoSS Shame-Responses*

	Internalised shame (ISS-m)	95% CI	External shame (OAS-m)	95% CI
Approach	-.08	-.22, .06	.15*	.001, .30
Withdraw	.28***	.13, .40	.03	-.12, .18
Attack-self	.47***	.35, .58	-.09	-.22, .05
Attack-other	.02	-.13, .16	.15	-.002, .29

**Table 12***Partial Correlations Between Sources of Shame and CoSS Shame-Responses*

	Internalised shame (ISS-m)	95% CI	External shame (OAS-m)	95% CI
Avoid	-.12	-.25, .03	.02	-.14, .18

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Partial Correlations between Personality Orientation and Shame Responses**

Introjective orientation had a small partial correlation with withdraw ( $r = .19, p = .008$ ), while anaclitic orientation had a medium partial correlation with approach ( $r = .38, p < .001$ ) with the other shame-responses and personality orientation as covariates.

**Exploration of Possible Quadratic Relationships**

One possibility for the non-significant, small partial correlations between trait shame and specific shame-responses could have been that they were masked by curvilinear relationships. Such relationships could have been indicated, for example, since approach behaviours have been theorised to occur up to a threshold before diminishing and being increasingly substituted by withdrawal behaviours (see introduction to the present study). Such patterns could possibly also extend to other shame-responses. To explore this, partial correlation analyses were performed on CoSS-m shame-responses and quadratic terms for the ISS-m factors, ISS-m and OAS-m variables, as these trait shame variables could be assumed to predict shame-responses. Linear terms for trait shame variables were included as covariates. Significant associations emerged between the squared Fragility factor and attack-other shame-response,  $r = -.18, p < .05, 95\% \text{ CI } [-.35, -.01]$ , and the squared OAS-m and avoid shame-response,  $r = -.20, p < .05, 95\% \text{ CI } [-.38, -.003]$ . The aforementioned p-values were obtained through analysing whether the 95, 99, and 99.9 percent confidence intervals had values that overlapped zero. Full results are shown in Appendix R.

## **Supplementary Analyses**

Partial correlations between CoSS-m shame-responses, controlling for the ISS-m and OAS-m are displayed in Appendix S.

## **Discussion**

### **Internalised Shame Factors**

#### *Internalised Shame Factors and Personality Orientation*

This study firstly performed a CFA on a modified version of the ISS (ISS-m) which excluded a previously identified component called Empty/Lonely due to its non-specificity to shame. Results supported a two-factor structure of the ISS-m composed of factors named Inferiority (New) and Fragility. This model had a superior fit compared to a one-factor model, providing evidence against recommendations that the ISS should be conceptualised as having a unidimensional structure (Cook, 2001; Matos et al., 2013).

Partial correlation analyses revealed that the Inferiority (New) factor had a strong relationship with introjective personality orientation. Interestingly, this relationship was nearly identical in magnitude to the result found in Study 1, providing evidence that introjective orientation and inferiority have a robust and stable association. However, all other relationships between personality orientation and ISS-m factors were non-significant and small, being roughly half the magnitude of the corresponding significant relationships in Study 1. These results suggest that approach behaviours as measured by anaclitic orientation are not associated with factors of internalised shame for adult community populations. The differences between Study 1 and 2 indicate that student populations have notable differences compared to adult community populations. Perhaps students tend to be at a more vulnerable life stage (Nietzel & Harris, 1990) and personality orientation may more strongly moderate the expression of inferiority and/or fragility in this context and/or this stage of life. Moreover, it seems that in the adult community population, the experience of fragility in internalised

shame does not appear to correspond highly with the perceptions of weakness and helplessness characteristic of anaclitic orientation. Despite these differences, the same pattern of statistically significant differences between the correlations was found between the two studies. Specifically, the Inferiority (New) factor had a statistically larger relationship with introjective orientation than with anaclitic orientation. In addition, the relationship between the Inferiority (New) factor and introjective orientation was also statistically stronger than the relationship between the Fragility factor and introjective orientation. As with Study 1, no significant differences were found between the other partial correlations. This demonstrated some stability of results between these two populations.

### *Internalised Shame Factors and Specific Shame Responses*

The withdraw shame-response was significantly associated with both the Inferiority (New) and Fragility factors. This supports theory that feelings of being small as well as feeling overwhelmed, not in control, and paralysed by self-directed hostility can result in a desire to escape, hide or disappear (H. B. Lewis, 1971; Tangney et al., 1996). The relationship between the Fragility factor and withdraw shame-response occurred despite the Fragility factor not having a significant correlation with introjective orientation. It therefore appears that introjective orientation, whilst characterised by withdrawal, may not fully encapsulate the withdrawal shame-response. Consistent with this, only a small partial correlation between introjective orientation and the withdrawal shame-response was found.

In contrast, the approach shame-response did not have a significant relationship with either ISS-m factor. Thus, the approach shame-response may not necessarily represent the opposite of withdrawal or hiding when one feels inferior and may instead have other motivations or functions. It also suggests that fragility experienced from internalised shame may not be linked with help-seeking behaviours (Rickwood & Thomas, 2012) even when controlling for a negative self-view which could hinder the help-seeking process (Gilbert,

1998; Gilbert et al., 2010; Gulliver et al., 2010; Nam et al., 2013; Nam et al., 2010). Perhaps help-seeking is hindered by other factors, such as perceiving the potential impact of non-supportive behaviours on the fragile self to be more damaging (Nam et al., 2013). Thus, the need to protect the fragile self in internalised shame may take precedence over seeking help or reparation, at least in adult community populations.

The attack-self shame-response had a significant, medium association with the Inferiority (New) factor. This was consistent with theory and research which has found that perceived inferiority and decreased social rank is linked with self-criticism and self-directed aggression (Blatt, 2008; Elison et al., 2014; Gilbert et al., 2010). However, the attack-self shame-response was not associated with the Fragility factor. This did not support theories that shame-related fragility may result in the self redirecting hostility at others back onto itself (H. B. Lewis, 1971) or result in self-attack to regulate overwhelming feelings (Laye-Gindhu & Schonert-Reichl, 2005; Suyemoto, 1998). Perhaps fragility renders an individual unable or unwilling to further engage in self-attacking behaviours.

The attack-other shame-response had a small relationship with the Inferiority (New) factor that approached significance. This provided some support that perceived endangerment to one's identity and self-definition, as well as to one's social rank can lead to aggression (Elison et al., 2014; Nathanson, 1992). Whilst the attack-other shame-response had a non-significant linear relationship with the Fragility factor, follow-up analyses found a significant, small negative curvilinear relationship. This suggests that it is moderate levels of fragility that lead to externalisation of shame rather than the agonizingly intense amounts suggested by Tangney and Dearing (2003). At high levels, fragility may make attacking others seem too costly for the self (Nathanson, 1992), and at low levels this response may not be triggered. This may also help clarify why shame-proneness has been linked with both increased and

decreased risk of recidivism (Tangney et al., 2014). Specifically, moderate levels of fragility in shame-proneness may increase recidivism whilst higher levels may reduce it.

The avoid shame-response had a non-significant, small negative correlation with both ISS-m factors. Interestingly, an analysis of regression scatterplots of the linear terms of the ISS-m factors revealed that moderate levels of both ISS-m factors could coexist with above-average levels of the avoid shame-response, suggesting that participants who used avoidance could also acknowledge perceptions of inferiority and fragility in internalised shame (see Appendix T for scatterplots of the ISS-m factors and the avoid-shame-response). This suggested that the avoid shame-response is not necessarily associated with a lack of conscious awareness or acknowledgment of shame (Elison, Lennon, et al., 2006; H. B. Lewis, 1971; Nathanson, 1992).

The positive linear relationships of the withdraw, attack-self and attack-other shame-responses with the Inferiority (New) factor seemed to group together to share striking similarities with introjective personality orientation (Blatt, 2008), supporting the validity of this construct. Amongst these shame-responses, attacking oneself appeared to be the strongest characteristic of inferiority in internalised shame, and was significantly larger than the linear relationships of approach and avoid shame-responses with inferiority. The Fragility factor was characterized by a small positive linear relationship with the withdraw shame-response and a negative curvilinear relationship with the attack-other shame-response. Its association with the withdraw shame-response was significantly larger than its association with the avoid response. Strictly speaking, however, the lack of other significant differences between correlations, both between and within each ISS-m factor, limits the extent to which conclusions about unique and differential shame-response patterns can be made regarding each ISS-m factor.

## **Trait Shame Sources**

### ***Internalised Shame, External Shame and Personality Orientation***

Internalised shame had a significant large relationship with introjective orientation, which is consistent with the self-critical nature of this personality orientation and supports previous research (Dorahy & Hanna, 2012; Wu et al., 2019). However, a non-significant negligible relationship between internalised shame and anaclitic orientation was found, which was not consistent with the findings from Wu et al. (2019), but was consistent with findings from Dorahy and Hanna (2012). Moreover, internalised shame had a significantly larger relationship with introjective orientation than with anaclitic orientation. There was a small relationship between external shame and anaclitic orientation that approached significance, which is consistent with the idea that preoccupation with interpersonal relatedness, which is characteristic of anaclitic orientation (Blatt, 2008), would be linked with concern about how others evaluate the self in external shame. However, this association was not significantly different to the association between internalised shame and anaclitic orientation. In a strict sense, this limits the conclusions that can be drawn about the distinctness of the relationship between external shame and anaclitic orientation, despite this correlation falling just short of significance and the correlation between internalised shame and anaclitic orientation showing no significant relationship. External shame and introjective orientation had a non-significant relationship, and this relationship was significantly smaller than that between internalised shame and introjective orientation. This does not seem consistent with theory and evidence that introjective orientation also has social concerns and fears (Reis & Grenyer, 2002; Zuroff & Mongrain, 1987). Notably, the research by Zuroff and Mongrain (1987) and Reis and Grenyer (2002) used university samples, which may produce results that are not reflective of adult community populations, as mentioned previously. Perhaps introjective university students have more social concerns relative to adult introjective individuals in the community

population. This non-significant result may not support the conceptualisation that introjective orientation is characterised by external shame which subsequently becomes internalised, as it does not seem likely that external shame would subsequently dissipate after becoming internalised. Indeed, introjective orientation has negative representations of others (Blatt, 2008) which would likely maintain any perceptions of others' criticalness of the self. Perhaps external shame is not equivalent to what Kaufman (1996) described as the breach in the interpersonal bridge, and subsequently does not follow the same pattern of becoming internalised. This could be because external shame refers to a trait whereas breaches in the interpersonal bridge describe episodic events.

These results suggest a specificity of relationship between personality orientation and sources of trait shame. Introjective orientation, with its self-focus, is associated with trait shame that arises from the self. Anaclitic orientation, with its focus on others, is associated with trait shame that arises from others. Dorahy and Hanna (2012), using a student sample and a briefer measure of shame, also found an exclusive relationship between introjective orientation and shame. However, Wu et al. (2019), also using a student sample, found that the ISS was linked with both introjective and anaclitic orientations. Exploratory analyses of the data used by Wu et al. (2019) found that anaclitic orientation loaded higher on ISS items regarding social comparison and fragility. Thus, it seems that at least two factors are involved when there is an association between internalised shame and anaclitic orientation: firstly, a measure of internalised shame that assesses a sense of fragility and social comparison, such as the ISS, and secondly, a university context. As mentioned earlier, results from university students may reflect a unique developmental period and/or frequency of certain events in university life that increases an association with internalised shame (Nietzel & Harris, 1990).

In addition, the results may also provide a resolution to an apparent contradiction in the literature on personality orientation and shame. H. B. Lewis (1971) found that shame was

linked with field dependence, a cognitive style that is associated with anaclitic orientation (Blatt, 2008). In contrast, Blatt (2008) conceptualised introjective orientation as exclusively linked with shame. This apparent inconsistency between Blatt and Lewis can perhaps be reconciled by distinguishing between internalised and external shame as done in the present study. Lewis' (1971) findings appear to correspond to external shame, since field dependence describes the tendency for perception to be dominated by the surrounding contextual field (H. B. Lewis, 1987; Witkin, 1965), a characteristic that would likely increase focus on one's social environment and social evaluation. Whilst Lewis theorised that shame has its source from both others and the self (Goss et al., 1994; H. B. Lewis, 1971; Tangney et al., 1996), she acknowledged that the Gottschalk method of verbal thematic analyses that she used explicitly did not distinguish between internal and external triggers of shame (H. B. Lewis, 1971). This raises the possibility that her conclusions regarding shame and its association with field dependence could have been based on a detection of verbal content skewed toward external shame. In contrast, Blatt (2008) described introjective orientation to be linked with shame due to its focus on self-definition, which corresponds to the shame-based identity of internalised shame (Cook, 2001). Overall, this issue demonstrates the importance and utility of distinguishing sources of trait shame (Gilbert, 1998).

### ***Internalised Shame, External Shame, and Specific Shame Responses***

The approach response to shame had a significant, small relationship with external shame, but was not significantly associated with internalised shame. This is consistent with the idea that external shame is experienced as more bearable and reparable than internalised shame because it has not become part of one's identity, and can therefore respond pro-socially (Cibich et al., 2016; De Hooge et al., 2018; Gilbert, 1998; Leach & Cidam, 2015; A. P. Morrison, 2011).

The withdrawal shame-response had a significant small-medium correlation with internalised shame, whilst no significant relationship was found with external shame. This supports theory that the negative self-image characteristic of internalised shame may result in more fear of exposure and subsequently a greater shame-response of withdrawal (Nathanson, 1992). External shame may not lead to withdrawal out of fears of intrusion into a fragile self-identity as proposed by Gilbert (2003) because it has less internalisation of shame (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006) and thus may not have strong links with fragile self-identity. Perhaps internalised shame has stronger associations with intrusion fears. Future research could examine the differential relationship between internalised and external shame with intrusion fears, such as measured in the Self and Other Scale (SOS) (Dagnan, Trower, & Gilbert, 2002).

The attack-self response had a significant, medium-large relationship with internalised shame. This is consistent with the associations between internalised shame and the self-critical introjective orientation found in the present study and in other research (Dorahy & Hanna, 2012; Wu et al., 2019). Internalised shame may be associated with perceptions that the self is deserving of self-inflicted hostility and subsequent self-punitive actions (Gilbert et al., 2010). It may also result in self-harm to regulate strong distressing feelings (Gilbert et al., 2010; Laye-Gindhu & Schonert-Reichl, 2005; Suyemoto, 1998). The attack-self shame-response had a non-significant association with external shame, which did not support theory that perceived external criticism can lead to self-directed anger and self-persecution as an evolutionary mechanism of involuntary subordination (Gilbert et al., 2010). It also did not support the idea that attacking the self can be used to pre-empt rejection (Nathanson, 1992). These results parallel those from Gilbert et al. (2010), who found that self-harm was associated with internalised shame but not external shame.

The associations between internalised shame and the withdraw and attack-self shame-responses were not significantly different from each other. Moreover, these two associations were significantly larger than the associations between internalised shame and the other shame-responses. Additionally, the withdraw and attack-self shame-responses had the second-highest partial correlation when the shame-responses were correlated with each other. Together, these results supported previous research that there is frequently a lack of difference between the withdraw and attack-self shame-responses (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006).

There was a small relationship between external shame and attack-other that approached significance, which provides some support for theory that jealousy and envy arising from external shame can lead to aggression (Gilbert, 2003) and that anti-social behaviours can arise from perceptions that others view the self as shameful when the self does not share the same view (Gilbert, 1998). The linear relationship between internalised shame and attack-other was non-significant. It is likely the non-significant linear association between the Fragility factor of internalised shame and the attack-other shame-response may have reduced the overall relationship between internalised shame and the attack-other shame-response. This is supported by how the quadratic term for the ISS-m resulted in an association with the attack-other shame-response that began to approach significance.

Avoidance of shame did not have a significant linear association with either internalised or external shame. However, the quadratic term for external shame resulted in a significant, small negative association between external shame and the avoid shame-response. This suggested that moderate rather than unbearable levels of external shame are linked with avoidance of shame, perhaps because intense levels of external shame limit the ability to avoid it. In addition, follow-up analyses of regression scatterplots of the linear term for the ISS-m and OAS-m found that moderate levels of internalised and external shame

could coexist with above-average levels of avoidance (See Appendix U), suggesting that those who use the avoid shame-response can still acknowledge shame. Similar to the results between the ISS-m factors and the avoid shame-response, this suggested that the avoid shame-response is not necessarily associated with a lack of conscious awareness or acknowledgement of shame (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006; H. B. Lewis, 1971; Nathanson, 1992).

An overall pattern emerged where shame-responses corresponded to the source from which shame arose. When shame was triggered from negative self-evaluations, shame-responses were directed inwardly, specifically through attacking the self or protecting the self through withdrawal from others (De Hooge et al., 2010; Elison, Lennon, et al., 2006). This is consistent with theory that shame-responses may be linked to the level of internalization of shame, with withdrawal and attack-self shame-responses representing high levels of internalised shame (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). When shame was triggered from perceived negative evaluations by others, shame-responses were directed outwardly, by either prosocial approach or attacking others. Interestingly, the correlation magnitudes of these responses were essentially identical. Thus, external shame appears paradoxically equally associated with both prosocial and antisocial responses. This finding has parallels with evidence that shame-proneness can both increase and decrease risk of recidivism (Tangney et al., 2014). It is unclear what determines whether prosocial approach or attack-other shame-responses are chosen. Perhaps it involves one's evaluations of the social rank of the perceived shamers. Nathanson (1992) theorised that one is more likely to attack those who are of a perceived proximal social status and who's apparent insults appear to be authentically threatening to the existing balance of power. However, the attack-other shame-response could occur regardless of whether social threats are perceived to come from above or below the social hierarchy, because this shame-response could be triggered both if

one perceives one's projected dominance is not being respected by subordinates or if one is resentful about one's inferiority compared to the apparent shamer (Bushman & Baumeister, 1998; D. Morrison & Gilbert, 2001; Nathanson, 1992). Perhaps the attack-other response depends on whether one perceives the shaming by others is deserved or unjust (D. Morrison & Gilbert, 2001). Moreover, the extent to which an individual perceives that his or her identity is threatened may affect whether this shame response is triggered (Elison et al., 2014; Nathanson, 1992). A higher likelihood of attacking others may also be associated with higher rejection sensitivity (Elison et al., 2014), less empathy (D. Morrison & Gilbert, 2001) and greater instability of self-esteem (Bushman & Baumeister, 1998), whilst the inverse may hold for prosocial approach behaviours. Whilst avoidance and disavowal of shame could theoretically be argued to influence attack-other behaviours (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006; Lansky, 2007; Nathanson, 1992; Scheff, 1988), the partial correlation between these two responses was small. In contrast, the avoid and approach shame-responses had a large partial correlation that was the strongest amongst the shame-responses. This could suggest that avoidance of shame perhaps influences prosocial behaviours more than antisocial behaviours. Interestingly, Tangney et al. (2014) also found that avoidance can produce both prosocial and antisocial outcomes. Moreover, the findings by Tangney et al. (2014) could be further explained by whether an individual's shame-proneness is more characterised by internalised or external shame, with the former linked with withdrawal and the latter linked with aggression and recidivism.

However, it is important to note that the relationship between internalised shame and the various shame-responses was not significantly different to the relationship between external shame and the corresponding shame-responses, except for the attack-self shame response which had significantly larger association with internalised shame than external

shame. In a strict sense, this limits the conclusions that can be drawn regarding the unique and differential behaviour patterns between internalised and external shame.

It should be noted that the opposite directionality of some of these relationships could also be conceptualised. For example, a pattern of attacking others in response to shame may lead to situations in which one subsequently perceives being further shamed from external sources, which in turn leads to and/or maintains external shame. In addition, a tendency to seek reparation with others after perceived shame may result in further experiences of shame if others do not accept reparative efforts, leading to and/or maintaining external shame. Proneness to attacking the self after potentially shaming incidents could produce and maintain internalised shame. Tending to withdraw after potentially shaming experiences may lead to a lack of opportunity for reparation or clarification, and instead foster rumination which may produce and maintain internalised shame. However, conclusions regarding directionality are not possible with this study given its cross-sectional design.

### **Overall Comments**

Some overall patterns between trait shame and shame-responses emerged from this study. First, internalised shame and its factors consistently did not have a relationship with prosocial approach behaviours. Perhaps it is because the self-shaming characteristic of internalised shame (Cook, 2001) limits perceptions of reparability of the self and social-image and thus prevents a relationship with approach that is otherwise possible in state shame (De Hooge et al., 2018; Leach & Cidam, 2015). In contrast, external shame was associated with prosocial approach behaviours, both in terms of anaclitic personality orientation and specific approach shame-responses. These findings present further preliminary evidence (Wu et al., 2019) that trait shame can be linked with prosocial approach behaviours. Second, internalised shame and its inferiority dimension were consistently associated with withdrawal, as measured by both introjective personality orientation and specific shame-

responses, reflecting theory on the centrality of withdrawal in shame (Gilbert & Andrews, 1998; Haidt, 2003; H. B. Lewis, 1971; Tangney et al., 1996; Wurmser, 2015). However, the link between withdrawal and the fragility aspect of internalised shame had more limited support, holding only when measured by the specific withdrawal shame-response. External shame, in contrast, did not have an association with withdrawal, either via personality orientation or specific shame response. Third, internalised shame and its inferiority dimension were consistently linked with attacking the self, via both introjective personality orientation and the attack-self shame-response, which is consistent with chronic and engrained negative self-evaluation characteristic of internalised shame (Cook, 2001; Kaufman, 1996). It is interesting that despite the limited correlational magnitude between personality orientation and specific approach and withdraw shame-responses, there was a surprisingly similar pattern of results using these two different measures to compare internalised and external shame. This suggested the ability to generalize conclusions regarding approach and withdraw behaviours. Ultimately, this study provided preliminary evidence of distinct differential behavioural patterns associated with various aspects of trait shame.

This study extended findings from Study 1 and other research on internalised shame and personality orientation (Dorahy & Hanna, 2012; Wu et al., 2019) by sampling a balanced gender ratio from the general adult population, as well as measuring external shame and specific shame-responses. By assessing specific approach and withdraw shame-responses along with a broader measure via personality orientation, it facilitated the generalization of conclusions regarding trait shame and these behavioural tendencies. This study also developed the first trait measure of prosocial approach as a shame-response and implemented it on various aspects of trait shame. Curvilinear relationships were also explored, which have been lacking in the research on shame. Future research could explore moderators of prosocial

and antisocial behaviours in external shame. Research could also examine whether fragility in state shame also has a curvilinear influence on attacking others.

### **General Discussion**

This paper consisted of two studies that explored different aspects of trait shame and the differential behavioural patterns with which they may be associated. Approach and withdraw behaviours were explored, using both a broad measurement via personality orientation together with specific shame-responses.

Differences were found between the student and adult community samples. For the adult community sample, the Inferiority (New) factor of internalised shame was only associated with withdrawal behaviours, in terms of both introjective orientation and specific withdrawal shame-responses. In contrast, the student sample had associations between the Inferiority (New) factor and both approach and withdrawal behaviours, as measured by introjective and anaclitic personality orientations. Moreover, only in the student sample was the Fragility factor associated with both personality orientations. One reason that students have a larger number of significant associations between personality orientation and ISS-m factors could be due to the developmental issues of university students (e.g., exploration and consolidation of independence, identity and intimacy) and/or a higher frequency of certain types of events in student life (Nietzel & Harris, 1990).

It also appears that personality orientations have less specificity to their respective definitions in student contexts. The lack of association between introjective orientation and external shame in the adult community sample, in contrast with previous findings in student samples that have linked introjective orientation with social concerns (Reis & Grenyer, 2002; Zuroff & Mongrain, 1987) may indicate that introjective students have more social concerns than introjective adults in the general community. Moreover, the association of anaclitic orientation with the Inferiority factor only in the student sample also suggests that this

orientation is shame-prone only in the student context. It thus appears that in student contexts, introjective orientation may have associations similar to anaclitic orientation and vice versa, suggesting less specificity of these constructs in students.

Nonetheless, similar phenomena were found across both student and community samples. First, both internalised shame and its Inferiority (New) factor were consistently associated with withdrawal behaviours, in terms of both personality orientation and specific shame responses. In contrast, the Fragility factor was less consistently associated with withdrawal within both studies. Second, the association between the Inferiority (New) factor and introjective orientation was consistently larger than the association between the Inferiority (New) factor and anaclitic orientation, and larger than the association between the Fragility factor and introjective orientation. Third, the relationship between the Fragility factor and approach behaviours was not statistically different from Fragility and withdrawal behaviours, as measured by both personality orientation and specific shame responses. Similarly, the relationship between the Fragility factor and approach behaviours had no statistical difference from the relationship between the Inferiority factor and approach behaviours. Fourth, trait shame was linked to approach behaviours, albeit in different ways. The inferiority aspect of internalised shame linked with anaclitic orientation in the student sample, and external shame linked with both anaclitic orientation and specific approach shame-responses in the adult community sample. This finding extends recent research on the possibility of approach behaviours in state shame (De Hooge et al., 2018; Leach & Cidam, 2015). However, since the student sample was not assessed regarding specific shame responses nor with external shame, it could not be compared with the adult community sample in these aspects.

The results have implications for clinical practice. First, there appears to be utility in implementing the ISS as a non-unidimensional tool despite often overlapping factors (Cook,

2001; Matos et al., 2013), since these factors had differential associations with various behavioural patterns. Second, using both the ISS and the OAS in conjunction may better facilitate the formulation of presenting behavioural patterns. Moreover, the modified versions of the ISS and OAS that excluded relatively non-shame-specific items relating to emptiness and loneliness had the same reliability as the original scales, and their validity appeared supported by their theoretically meaningful configurations with various shame-responses. This suggests they may be viable to use in clinical assessment. Lastly, this study suggests that trait shame may present differently between different subpopulations, such as students and adults in the community.

This study had some limitations. Directionality or causal effects could not be ascertained due to its cross-sectional and correlational nature. Also, this study used questionnaires for data-collection which makes it susceptible to self-reporting bias. Social-desirability bias may be especially pertinent to shame with its concerns about exposure and inferiority. Moreover, shame can often be difficult to consciously access and be disavowed from consciousness (Gilbert, 1998; Nathanson, 1992). However, Study 2 found that above-average levels of self-reported avoidance could co-occur with moderate levels of self-reported shame, suggesting that some level of accessibility and acknowledgement of shame was possible. Regarding the measurement tools, the item-composition of the original ISS is heavily skewed toward the attack-self and withdraw shame-responses (14 and 7 items, respectively), with the avoid and attack other responses having only 3 and 0 items respectively (Cook, 2001). However, whilst this could have affected the results, associations were still able to be found between the ISS-m and attack-other responses. Moreover, this was the first time the newly developed approach shame-response subscale of the CoSS-m was used, though testing found it consistent with the existing validated subscales of the CoSS (Elison, Lennon, et al., 2006; Elison, Pulos, et al., 2006). Regarding statistical methods, the

Bonferroni corrections used to adjust for multiple comparisons are very conservative and may have resulted in Type II errors. Moreover, the number of partial correlations performed in some of the analyses may have reduced the amount of variance available to detect real associations. Lastly, as this is the first time that direct comparisons have been made between both internalised and external shame with differential behavioural responses, including approach behaviours, further research is needed to replicate and confirm the results.

Future research could explore external shame and specific shame responses in university contexts. It could also explore possible moderating variables between shame and approach behaviours such as student context or developmental stage. Replication with larger sample sizes may provide further clarity regarding the unique and differential behavioural configurations of various trait shame aspects.

Overall, this research provides a valuable contribution to the literature on shame, especially given the dearth of research on shame and personality orientation (Gilbert, 1998) and on approach behaviours in trait shame (De Hooge et al., 2018). It highlighted aspects of trait shame that are particularly linked with the withdrawal behaviours commonly theorized to be associated with shame, as well as the aspects that can be linked with prosocial approach behaviours. It also demonstrated differential configurations of other behavioural patterns associated with various aspects of trait shame. Ultimately, this paper further demonstrated the complexity that characterises the emotion of shame.

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## APPENDIX A

## Depressive Experiences Questionnaire, Short Form (DEQ-SF)

Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent. If you strongly agree, circle 7; if you strongly disagree, circle 1; The midpoint, if you are neutral or undecided, is 4.

	<b>Strongly Disagree</b>						<b>Strongly Agree</b>
I often find that I don't live up to my own standards or ideals.	1	2	3	4	5	6	7
I tend not to be satisfied with what I have.	1	2	3	4	5	6	7
I become frightened when I feel alone.	1	2	3	4	5	6	7
I would feel like I'd be losing an important part of myself if I lost a very close friend.	1	2	3	4	5	6	7
I have difficulty breaking off a relationship that is making me unhappy.	1	2	3	4	5	6	7
After a fight with a friend, I must make amends as soon as possible.	1	2	3	4	5	6	7

No matter how close a relationship between two people is,  
there is always a large amount of uncertainty and conflict. 1 2 3 4 5 6 7

I often think about the danger of losing someone  
who is close to me. 1 2 3 4 5 6 7

Often, I feel I have disappointed others. 1 2 3 4 5 6 7

I constantly try, and very often go out of my way,  
to please or help people I am close to. 1 2 3 4 5 6 7

I find it very difficult to say "No" to the requests of friends. 1 2 3 4 5 6 7

I never really feel secure in a close relationship. 1 2 3 4 5 6 7

Often, I feel threatened by change. 1 2 3 4 5 6 7

I worry a lot about offending or hurting someone  
who is close to me. 1 2 3 4 5 6 7

There is a considerable difference between how I  
am now and how I would like to be. 1 2 3 4 5 6 7

Anger frightens me 1 2 3 4 5 6 7

Many times I feel helpless 1 2 3 4 5 6 7

After an argument, I feel very lonely. 1 2 3 4 5 6 7

I am very satisfied with myself and my  
accomplishments. 1 2 3 4 5 6 7

## APPENDIX B

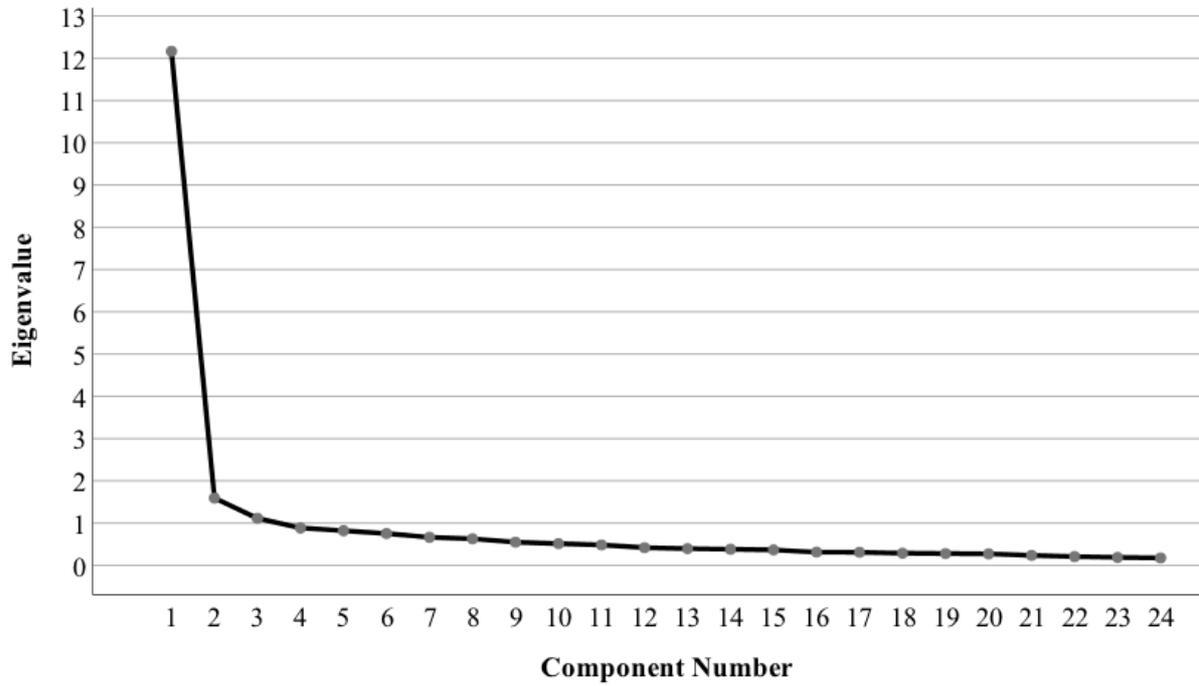
Pairwise Correlations Between Internalised Shame, Anaclitic Personality Orientation and  
Introjective Personality Orientation**Table**

	1	2	3
1. Internalised Shame (ISS)	-		
2. Anaclitic Orientation (DEQ-A)	.61**	-	
3. Introjective Orientation (DEQ-I)	.82**	.58**	-

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

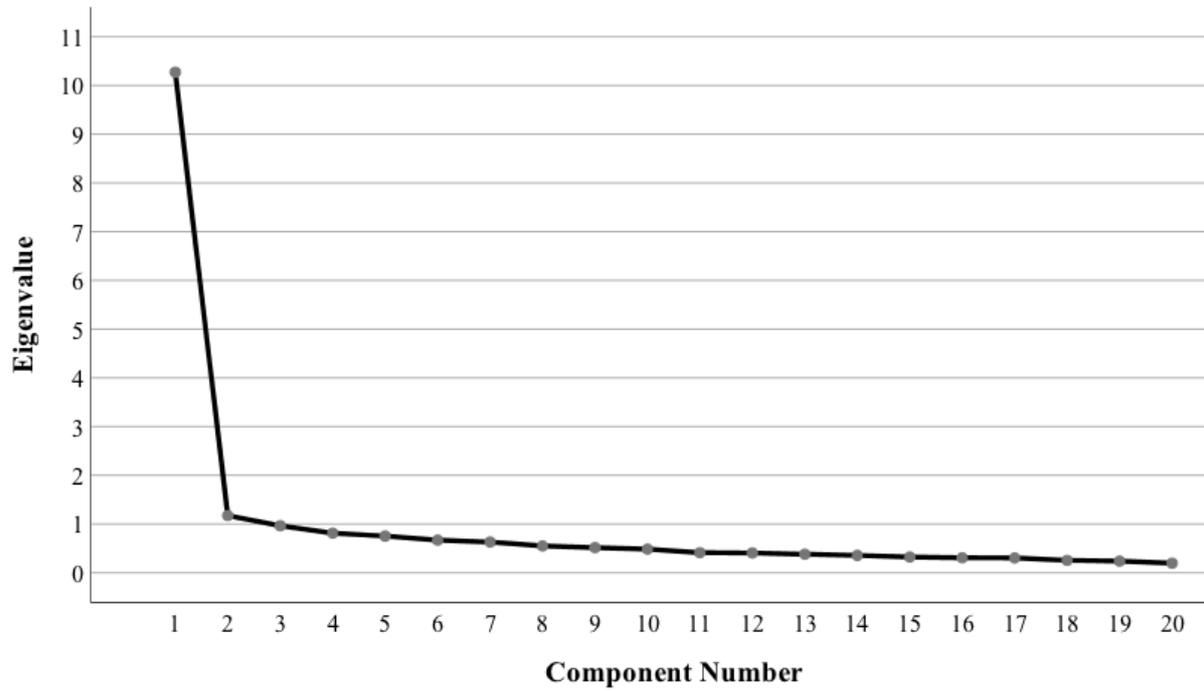
## APPENDIX C

Scree Plot for Principal Components Analysis of the Internalised Shame Scale (ISS)



## APPENDIX D

Scree Plot for Principal Components Analysis of the Internalised Shame Scale-modified  
(ISS-m)



## APPENDIX E

## Demographic Questions for Participants Completing Qualtrics Online Questionnaire

- Sex (Male / Female / Other / Prefer not to say)
- Age
- Ethnicity (NZ European, Australian European, Māori, Indigenous Australian, Chinese, Indian, Samoan, Other, Prefer not to say)
- Relationship Status (Single and never married / In a relationship or Married or De facto / Divorced / Widowed / Prefer not to say)
- Education Status (Less than high school / High school graduate / Trade or Technical or Vocational / Bachelors / Bachelors with Honours / Postgraduate Certificate or Diploma / Masters / Doctorate)
- Do you have any mental health difficulties (Yes / No / Prefer not to say)
- Do you have a formal psychiatric diagnosis? (Yes / No / Prefer not to say).
- If Yes, what is the diagnosis / diagnoses? (Enter diagnosis / Prefer not to say)
- Country of residence (New Zealand / Australia)

## APPENDIX F

Other As Shamer Scale (OAS), with items that were removed to form the OAS-m indicated by an asterisk (\*).

Below is a list of statements describing feelings or experiences that you may have. Read each statement carefully and circle the number to the right of each item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below. Try to be as honest as you can when responding. Please answer all of the items.

Never	Seldom	Sometimes	Often	Almost Always	
0	1	2	3	4	
I feel other people see me as not good enough.					0 1 2 3 4
Other people put me down a lot.					0 1 2 3 4
Other people see me as not measuring up to them.					0 1 2 3 4
Other people see me as small and insignificant.					0 1 2 3 4
Other people see me as defective as a person.					0 1 2 3 4
People see me as unimportant compared to others.					0 1 2 3 4
Other people look for my faults.					0 1 2 3 4
People see me as striving for perfection but being unable to reach my own standards.					0 1 2 3 4
Others are critical or punishing when I make a mistake.					0 1 2 3 4
People distance themselves from me when I make mistakes.					0 1 2 3 4

Other people always remember my mistakes.	0 1 2 3 4
Others see me as fragile.	0 1 2 3 4
Others see me as empty and unfulfilled.*	0 1 2 3 4
Others think there is something missing in me.*	0 1 2 3 4
Other people think I have lost control over my body and feelings.	0 1 2 3 4

## APPENDIX G

## Compass of Shame Scale-modified (CoSS-m)

Directions: Below is a list of statements describing situations you may experience from time to time. Following each situation are four statements describing possible reactions to the situation. Read each statement carefully and circle the number to the left of the item that indicates the frequency with which you find yourself reacting in that way. Use the scale below. Please respond to all FIVE items for each situation.

0	1	2	3	4
NEVER	SELDOM	SOMETIMES	OFTEN	ALMOST ALWAYS

When an activity makes me feel like my strength or skill is inferior:

- 0 1 2 3 4      I act as if it isn't so.
- 0 1 2 3 4      I get mad at myself for not being good enough.
- 0 1 2 3 4      I withdraw from the activity.
- 0 1 2 3 4      I get irritated with other people.
- 0 1 2 3 4      I see the activity as an opportunity to develop my strength and skill.

In competitive situations where I compare myself with others:

- 0 1 2 3 4      I criticize myself.
- 0 1 2 3 4      I try not to be noticed.
- 0 1 2 3 4      I feel ill will toward the others.
- 0 1 2 3 4      I exaggerate my accomplishments.
- 0 1 2 3 4      I try to make connections with the others

In situations where I feel insecure or doubt myself:

- 0 1 2 3 4 I shrink away from others.
- 0 1 2 3 4 I feel others are to blame for making me feel that way.
- 0 1 2 3 4 I act more confident than I am.
- 0 1 2 3 4 I feel irritated with myself.
- 0 1 2 3 4 I acknowledge my insecurity and self-doubt and try to improve it.

At times when I am unhappy with how I look:

- 0 1 2 3 4 I take it out on other people.
- 0 1 2 3 4 I pretend I don't care.
- 0 1 2 3 4 I feel annoyed at myself.
- 0 1 2 3 4 I keep away from other people.
- 0 1 2 3 4 I try to improve my appearance.

When I make an embarrassing mistake in public:

- 0 1 2 3 4 I hide my embarrassment with a joke.
- 0 1 2 3 4 I feel like kicking myself.
- 0 1 2 3 4 I wish I could become invisible.
- 0 1 2 3 4 I feel annoyed at people for noticing.
- 0 1 2 3 4 I go to others for support.

When I feel lonely or left out:

- 0 1 2 3 4 I blame myself.
- 0 1 2 3 4 I pull away from others.

- 0 1 2 3 4 I blame other people.
- 0 1 2 3 4 I don't let it show.
- 0 1 2 3 4 I try to find others to keep me company.

When I feel others think poorly of me:

- 0 1 2 3 4 I want to escape their view.
- 0 1 2 3 4 I want to point out their faults.
- 0 1 2 3 4 I deny there is any reason for me to feel bad.
- 0 1 2 3 4 I dwell on my shortcomings.
- 0 1 2 3 4 I want to improve my relationship with them.

When I think I have disappointed other people:

- 0 1 2 3 4 I get mad at them for expecting so much from me.
- 0 1 2 3 4 I cover my feelings with a joke.
- 0 1 2 3 4 I get down on myself.
- 0 1 2 3 4 I remove myself from the situation.
- 0 1 2 3 4 I try to make it up to them.

When I feel rejected by someone:

- 0 1 2 3 4 I soothe myself with distractions.
- 0 1 2 3 4 I brood over my flaws.
- 0 1 2 3 4 I avoid them.
- 0 1 2 3 4 I get angry with them.
- 0 1 2 3 4 I try to win back their acceptance.

When other people point out my faults:

0 1 2 3 4 I feel like I can't do anything right.

0 1 2 3 4 I want to run away.

0 1 2 3 4 I point out their faults.

0 1 2 3 4 I refuse to acknowledge those faults.

0 1 2 3 4 I ask them to help me fix my faults.

When I feel humiliated:

0 1 2 3 4 I isolate myself from other people.

0 1 2 3 4 I get mad at people for making me feel this way.

0 1 2 3 4 I cover up the humiliation by keeping busy.

0 1 2 3 4 I get angry with myself.

0 1 2 3 4 I go to others for comfort.

When I feel guilty:

0 1 2 3 4 I push the feeling back on those who make me feel this way.

0 1 2 3 4 I disown the feeling.

0 1 2 3 4 I put myself down.

0 1 2 3 4 I want to disappear.

0 1 2 3 4 I seek to make restoration to those I have wronged.

## APPENDIX H

## Information Sheet for Participants Completing Qualtrics Online Questionnaire



Department of Psychology

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HEC ref: 2019/40

## Shame, Personality and Shame-Response Style

My name is Chris Wu and I am a postgraduate student at the University of Canterbury, New Zealand. I am carrying out this research as part of the requirements for a Master of Science in Psychology. My research will investigate the relationship between personality, the frequency of experiencing the emotion of shame, and the tendency to respond to this feeling in certain ways.

If you choose to take part in this study, your involvement in this project will be to complete the online questionnaire, which consists of a series of questions that are answered using rating scales. The questionnaire should take no longer than 20 minutes to complete. Data will be anonymous and will be recorded and stored electronically on password protected computers.

There may be a risk of experiencing distress from answering questions about the frequency of shame-related experiences and shame-responses. As such, a list of psychological services will be provided below and again at the end of the survey should you need support. However, the questions in this survey have frequently been used in research and have typically not been associated with significant distress.

Participation is voluntary and you have the right to withdraw from the questionnaire at any point without penalty. Withdrawal from the questionnaire can be done by closing the browser window. However, once the survey is submitted (by clicking on the 'Submit' button at the end), it will not be possible to withdraw your data. This is because identifying information will not be collected and so it will not be possible to identify and withdraw your data.

The results of the project may be published, but you may be assured of the complete anonymity of data gathered in this investigation: information about your identity will not be gathered. Data will be stored electronically on password protected computers. Only the researcher and his supervisor will have access to the information. Anonymous electronic raw data will be retained indefinitely by the research supervisor on a password protected computer for potential future research purposes. A thesis is a public document and will be available through the UC Library.

Please indicate at the end of the survey if you would like to receive a summary of the results of the project by clicking on the link provided and entering your email address. Your email

address can in no way be linked to your survey responses.

If you have any questions or concerns about this project, you may contact me (chris.wu@pg.canterbury.ac.nz) or my supervisor, Professor Martin Dorahy (martin.dorahy@canterbury.ac.nz or +64 3 3694337). Either of us will be pleased to discuss any concerns you may have about participation in the project. Neither I nor my supervisor will be able to link you to your data from any contact that you make with us.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (humanethics@canterbury.ac.nz).

**Support Services:**

**Online resources:**

[www.beatingtheblues.co.nz](http://www.beatingtheblues.co.nz)

[www.depression.org.nz](http://www.depression.org.nz)

[www.beyondblue.org.au](http://www.beyondblue.org.au)

[bluepages.anu.edu.au](http://bluepages.anu.edu.au)

[ecouch.anu.edu.au](http://ecouch.anu.edu.au)

[moodgym.com.au](http://moodgym.com.au)

[www.itmatters.org.nz/more\\_information#dep](http://www.itmatters.org.nz/more_information#dep)

[www.healthnavigator.org.nz/services/](http://www.healthnavigator.org.nz/services/)

**New Zealand helplines:**

Lifeline – 0800 543 354 or free text 4357 (HELP)

Samaritans – 0800 726 666

“Need to talk?” – 1737 (call or text)

The Depression Helpline – 0800 111 757 or text 4202

**Australian helplines:**

Lifeline – 13 11 14

The Samaritans Crisis Line - 08 9381 5555 (main line) or 1800 198 313 (Country Toll Free)

SANE Australia – 1800 187 263

Beyond Blue – 1300 224 636

## APPENDIX I

## Consent Form for Participants Completing Qualtrics Online Questionnaire

**Consent**

- I have been given a full explanation of this project and have had the opportunity to ask questions.
- I understand what is required of me if I agree to take part in the research.
- I understand that participation is voluntary and I may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I have provided. I understand that withdrawal from the questionnaire can be done by closing the browser window. I understand that once the survey is submitted, it will not be possible to withdraw my data.
- I understand that any information I provide will be anonymous and will not be able to be linked to myself or any other participants.
- I understand that a thesis is a public document and will be available through the UC Library.
- I understand that all data collected for the study will be kept in locked and secure facilities and/or in password protected electronic form. Anonymous electronic raw data will be retained indefinitely by the research supervisor on a password protected computer for potential future research purposes.
- I understand the risks associated with taking part and how they will be managed.

- I understand that I can receive a summary of the results of this project by clicking on the link provided at the end of the survey and entering my email address. I understand that my email address can in no way be linked to my survey responses.
- I understand that I can contact the researcher, Chris Wu (chris.wu@pg.canterbury.ac.nz) or supervisor, Martin Dorahy (martin.dorahy@canterbury.ac.nz or +64 3 3694337) for further information. I understand that neither the researcher nor his supervisor will be able to link me to my data from any contact that I might make with them.
- If I have any complaints, I can contact the Chair of the University of Canterbury Human Ethics Committee, Private Bag 4800, Christchurch (humanethics@canterbury.ac.nz)

By clicking on the "Submit" button at the end of the survey, I consent to my data being anonymously used for research purposes.

## APPENDIX J

Letter of Approval for Research from University of Canterbury Human Ethics Committee



HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson  
Telephone: +64 03 369 4588, Extn 94588  
Email: [human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)

Ref: HEC 2019/40

6 June 2019

Christopher Wu  
Psychology  
UNIVERSITY OF CANTERBURY

Dear Christopher

The Human Ethics Committee advises that your research proposal “Shame, Personality Orientation and Shame Response” has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 22<sup>nd</sup> May 2019.

Best wishes for your project.

Yours sincerely

A handwritten signature in black ink, appearing to be 'DS' followed by a flourish.

Dr Dean Sutherland  
*Chair*  
*University of Canterbury Human Ethics Committee*

## APPENDIX K

Letter of Approval for Research from Ngāi Tahu Consultation and Engagement Group

## Ngāi Tahu Consultation and Engagement Group

Tuesday 21 May 2019

Tēnā koe Chris Wu

RE: Shame, Personality Orientation, and Shame response.

This letter is on behalf of the Ngāi Tahu Consultation and Engagement Group (NTCEG). I have considered your proposal and acknowledge it is a worthwhile and interesting project and you are clear about how you ought to take participants' (cultural) needs into account if and when applicable.

Given the scope of your project, no issues have been identified and further consultation with Māori is not required.

Thank you for engaging with the Māori consultation process. This will strengthen your research proposal, support the University's Strategy for Māori Development, and increase the likelihood of success with external engagement. It will also increase the likelihood that the outcomes of your research will be of benefit to Māori communities. We wish you all the best with your current project and look forward to hearing about future research plans.

The Ngāi Tahu Consultation and Engagement Group would appreciate a summary of your findings on completion of the current project. Please feel free to contact me if you have any questions.

Ngā mihi whakawhetai ki a koe

Henrietta Carroll (on behalf of the NTCEG)



Kaiarāhi Maori Research  
Research & Innovation | Te Rōpū Rangahau  
University of Canterbury | Te Whare Wānanga o Waitaha  
Phone +64 3 369 0143, Private Bag 4800, Christchurch | Ōtautahi  
[henrietta.carroll@canterbury.ac.nz](mailto:henrietta.carroll@canterbury.ac.nz)  
<http://www.research.canterbury.ac.nz>

## APPENDIX L

Demographic Information for Australian and New Zealand Samples Combined ( $N = 198$ )**Table**

<b>Age (combined)</b>	
Mean (SD)	41.78 (16.25)
Minimum	18
Maximum	80
<b>Sex</b>	
Male	98
Female	98
Prefer not to say	2
<b>Ethnicity</b>	
NZ European	81 (40.9%)
Australian European	76 (38.4%)
Maori	7 (3.5%)
Indigenous Australian	3 (1.5%)
Chinese	3 (1.5%)
Indian	8 (4%)
Samoan	4 (2%)
Other	22 (11.1%)
Prefer not to say	6 (3%)
<b>Mental health difficulties</b>	
Yes	68 (34.3%)
No	124 (62.6%)
Prefer not to say	6 (3%)
<b>Mental health diagnosis</b>	
Yes	41 (20.7%)
No	25 (12.6%)
Prefer not to say	2 (1%)
<b>Relationship status</b>	
Single, never married	59 (29.8%)
In a relationship / Married / De facto	115 (58.1%)
Divorced	16 (8.1%)
Widowed	5 (2.5%)
Prefer not to say	3 (1.5%)
<b>Education status</b>	
Less than high school	15 (7.6%)
High school graduate	52 (26.3%)
Trade / Technical / Vocational	58 (29.3%)
Bachelors (with and without Honours)	46 (23.2%)
Postgraduate Cert/Diploma	18 (9.1%)
Masters	4 (2%)
Doctorate	5 (2.5%)

## APPENDIX M

## Pairwise Correlations Between Scale Totals

**Table**

	1	2	3	4	5	6	7	8	9
1. ISS-m	-								
2. OAS-m	.85**	-							
3. DEQ-A	.61**	.58**	-						
4. DEQ-I	.84**	.74**	.63**	-					
5. Withdraw	.85**	.73**	.50**	.72**	-				
6. Attack-Self	.88**	.75**	.62**	.77**	.87**	-			
7. Attack-Other	.61**	.59**	.40**	.52**	.61**	.64**	-		
8. Avoid	.44**	.47**	.38**	.36**	.55**	.50**	.54**	-	
9. Approach	.22**	.31**	.45**	.18*	.24**	.29**	.31**	.65**	-

*Note.* Withdraw, Attack-Self, Attack-Other, Avoid, and Approach refer to the five shame-responses of the Compass of Shame-modified. Abbreviations: ISS-m, Internalised Shame Scale-modified; OAS-m, Other As Shamer Scale-modified; DEQ-A, Depressive Experiences Scale-Short Form, Anaclitic subscale; DEQ-I, Depressive Experiences Scale-Short Form, Introjective subscale.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

## APPENDIX N

Differences Between Partial Correlations of ISS-m Factors and Personality Orientation, with  
98.75% Confidence Intervals

**Table**

Partial Correlation 1	Partial Correlation 2	Difference [98.75% CI]
Inf - Ana	Inf - Introj	<b>.41 [.17, .63]</b>
Frag - Ana	Frag - Introj	.02 [-.23, .26]
Inf - Ana	Frag - Ana	.02 [-.30, .25]
Inf - Introj	Frag - Introj	<b>.41 [.16, .67]</b>

*Note.* 98.75% confidence interval was used to adjust for four multiple comparisons via

Bonferonni adjustment. Bolded items indicate differences that are statistically significant at alpha = .0125. Bolded items indicate differences that are statistically significant. Bolded italicised items indicate differences that approach statistical significance. Abbreviations: ISS-m, Internalised Shame Scale-modified; Inf, ISS-m Inferiority (New) factor; Frag, ISS-m Fragility factor; Ana, Anaclitic personality orientation; Introj, Introjective personality orientation.

## APPENDIX O

Differences Between Partial Correlations of ISS-m Factors and CoSS-m Shame-Responses

**Table O1**

*Differences Between Partial Correlations of ISS-m Inferiority (New) Factor and CoSS-m Shame Responses, with 99.8% Confidence Intervals*

	Inf - AP	Inf - WD	Inf - AS	Inf - AO	Inf - AV
Inf - AP	-	-			
Inf - WD	.17 [-.11, .49]	-			
Inf - AS	<b>.41 [.17, .67]</b>	.23 [-.18, .55]	-		
Inf - AO	.13 [-.14, .43]	.04 [-.26, .37]	.27 [-.04, .51]	-	
Inf - AV	-.03 [-.39, .39]	.20 [-.12, .52]	<b>.43 [.12, .70]</b>	.16 [-.20, .48]	-

*Note.* Values indicate differences between partial correlations [99.8% confidence interval].

99.8% confidence intervals were used to adjust for 25 multiple comparisons via Bonferonni adjustment. Bolded items indicate differences that are statistically significant at alpha = .002.

Abbreviations: ISS-m, Internalised Shame Scale-modified; Inf, ISS-m Inferiority (New)

Factor; AP, CoSS-modified Approach; WD, CoSS-modified Withdraw; AS, CoSS-modified

Attack-self; AO, CoSS-modified Attack-other; AV, CoSS-modified Avoid.

## APPENDIX O (continued)

**Table O2**

*Differences Between Partial Correlations of ISS-m Fragility Factor and CoSS-m responses, with 99.8% Confidence Intervals*

	Frag - AP	Frag - WD	Frag - AS	Frag - AO	Frag- AV
Frag- AP	-	-			
Frag- WD	.17 [-.14, .46]	-			
Frag- AS	.05 [-.25, .38]	.12 [-.34, .55]	-		
Frag- AO	.04 [-.27, .34]	.21 [.11, .55]	.10 [-.29, .50]	-	
Frag- AV	.12 [-.26, .53]	.29 [-.03, .63]	.17 [-.14, .47]	.08 [-.27 .56]	-

*Note.* Values indicate differences between partial correlations [99.8% confidence interval].

99.8% confidence intervals were used to adjust for 25 multiple comparisons via Bonferonni adjustment. Bolded items indicate differences that are statistically significant at alpha = .002.

Bolded italicised items indicate differences that approach statistical significance. Abbreviations:

ISS-m, Internalised Shame Scale-modified; Frag, ISS-modified Fragility factor; CoSS-m,

Compass of Shame Scale-modified; CoSS-m Approach; WD, CoSS-m Withdraw; AS, CoSS-m

Attack-self; AO, CoSS-m Attack-other; AV, CoSS-m Avoid.

## APPENDIX O (continued)

**Table O3**

*Differences Between Partial Correlations of ISS-m Inferiority (New) Factor, ISS-m Fragility Factor and CoSS-m shame-responses, with 99.8% Confidence Intervals*

Partial Correlation 1	Partial Correlation 2	Difference [99.8% CI]
Inf - AP	Frag- AP	.03 [-.34, .45]
Inf - WD	Frag- WD	.03 [-.38, .47]
Inf - AS	Frag- AS	.32 [-.08, .63]
Inf - AO	Frag- AO	.15 [-.26, .50]
Inf - AV	Frag- AV	.06 [-.29, .42]

*Note.* 99.8% confidence intervals were used to adjust for multiple comparisons via

Bonferonni adjustment. Bolded items indicate differences that are statistically significant

at alpha = .002. Abbreviations: ISS-m, Internalised Shame Scale-modified; Inf, ISS-m

Inferiority (New) factor; Frag, ISS-m Fragility factor; CoSS-m, Compass of Shame Scale-

modified; AP, CoSS-m Approach; WD, CoSS-m Withdraw; AS, CoSS-m Attack-self; AO,

CoSS-m Attack-other; AV, CoSS-m Avoid.

## APPENDIX P

Differences between Partial Correlations of Trait Shame Sources and Personality Orientation,  
with 98.75% Confidence Intervals

**Table**

Partial Correlation 1	Partial Correlation 2	Difference [98.75% CI]
ISSm - Ana	ISSm - Introj	<b>.49 [.24, .75]</b>
OASm - Ana	OASm - Introj	.07 [-.19, .36]
ISSm - Ana	OASm - Ana	.06 [-.27 .40]
ISSm - Introj	OASm - Introj	<b>.50 [.26, .76]</b>

*Note.* 98.75% confidence intervals were used to adjust for four multiple comparisons via

Bonferonni adjustment. Bolded items indicate differences that are statistically significant at alpha = .0125. Abbreviations: ISSm, Internalised Shame Scale-modified; OASm, Other-As-Shamer Scale-modified; Ana, Anaclitic personality orientation; Introj, Introjective personality orientation.

## APPENDIX Q

## Differences Between Partial Correlations of Trait Shame Sources and Specific Shame Responses

**Table Q1**

*Differences Between Partial Correlations of Internalised Shame and CoSS-m responses, with 99.8% Confidence Intervals*

	ISSm - AP	ISSm - WD	ISSm - AS	ISSm - AO	ISSm - AV
ISSm - AP	-	-			
ISSm - WD	<b>.36 [.09, .61]</b>	-			
ISSm - AS	<b>.55 [.27, .82]</b>	.20 [-.13, .48]	-		
ISSm - AO	.09 [-.17, .34]	<b>.26 [.001, .55]</b>	<b>.46 [.11, .75]</b>	-	
ISSm - AV	.03 [-.32, .39]	<b>.39 [.01, .72]</b>	<b>.59 [.36, .83]</b>	.13 [-.21, .47]	-

*Note.* Values indicate differences between partial correlations [99.8% Confidence Interval].

99.8% confidence intervals were used to adjust for 25 multiple comparisons via Bonferonni adjustment. Bolded items indicate differences that are statistically significant at alpha = .002.

Abbreviations: ISSm, Internalised Shame Scale-modified; CoSS-m, Compass of Shame Scale-modified; AP, CoSS-m Approach; WD, CoSS-m Withdraw; AS, CoSS-m Attack-self; AO, CoSS-m Attack-other; AV, CoSS-m Avoid.

## APPENDIX Q (continued)

**Table Q2**

*Differences Between Partial Correlations of External Shame and CoSS-m shame-responses, with 99.8% Confidence Intervals*

	OASm - AP	OASm - WD	OASm - AS	OASm - AO	OASm- AV
OASm - AP	-	-			
OASm - WD	.12 [-.14, .40]	-			
OASm - AS	.24 [-.06, .57]	.12 [-.21, .45]	-		
OASm - AO	.01 [-.31, .28]	.12 [-.20, .42]	.23 [-.16, .53]	-	
OASm- AV	.13 [-.27, .53]	.01 [-.36, .40]	.11 [-.18, .42]	.12 [-.26, .49]	-

*Note.* Values indicate differences between partial correlations [99.8% Confidence Interval].

99.8% confidence intervals were used to adjust for 25 multiple comparisons via Bonferonni adjustment. Bolded items indicate differences that are statistically significant at alpha = .002.

Abbreviations: OASm, Other-As-Shamer Scale-modified; CoSS-m, Compass of Shame Scale-modified; AP, CoSS-m Approach; WD, CoSS-m Withdraw; AS, CoSS-m Attack-self; AO, CoSS-m Attack-other; AV, CoSS-m Avoid.

## APPENDIX Q (continued)

**Table Q3**

*Differences Between Partial Correlations of Internalised Shame, External Shame and CoSS-m shame-responses, with 99.8% Confidence Intervals*

Partial Correlation 1	Partial Correlation 2	Difference [99.8% CI]
ISSm- AP	OASm - AP	.23 [-.16, .58]
ISSm - WD	OASm - WD	.25 [-.11, .58]
ISSm - AS	OASm - AS	<b>.56 [.24, .85]</b>
ISSm - AO	OASm - AO	.13 [-.23, .46]
ISSm - AV	OASm- AV	.13 [-.26, .48]

*Note.* 99.8% confidence intervals were used to adjust for 25 multiple comparisons via

Bonferonni adjustment. Bolded items indicate differences that are statistically significant at alpha = .002. Abbreviations: ISSm, Internalised Shame Scale-modified; OASm, Other-As-Shamer Scale-modified; CoSS-m, Compass of Shame Scale-modified; AP, CoSS-m Approach; WD, CoSS-m Withdraw; AS, CoSS-m Attack-self; AO, CoSS-m Attack-other; AV, CoSS-m Avoid.

## APPENDIX R

Partial Correlations Between Quadratic Terms for Trait Shame Aspects and CoSS-m Shame-Responses

**Table R1**

*Partial Correlations Between Quadratic Terms for ISS-modified Factors and CoSS-m Shame-Responses*

	Inferiority (New) Squared	95% CI	Fragility Squared	95% CI
Approach	-.03	-.17, .12	-.05	-.21, .12
Withdraw	-.08	-.24, .07	-.04	-.19, .12
Attack-self	-.02	-.14, .11	.06	-.07, .18
Attack-other	-.10	-.25, .06	-.18*	-.35, -.01
Avoid	-.14	-.32, .04	-.07	-.27, .14

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## APPENDIX R (continued)

**Table R2**

*Partial Correlations Between Quadratic Terms for Trait Shame Sources with CoSS-m Shame-Responses*

	Internalised shame (ISS-m) Squared	95% CI	External shame (OAS-m) Squared	95% CI
Approach	-.05	-.21, .12	-.01	-.17, .16
Withdraw	-.05	-.22, .10	-.04	-.19, .11
Attack-self	.0003	-.12, .12	-.08	-.22, .04
Attack-other	-.15	-.31, .02	-.06	-.23, .10
Avoid	-.15	-.34, .04	-.20*	-.38, -.003

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## APPENDIX S

Partial Correlations Between CoSS-m Shame-Responses, Controlling for Other CoSS-m  
Shame-Responses, ISS-m and OAS-m

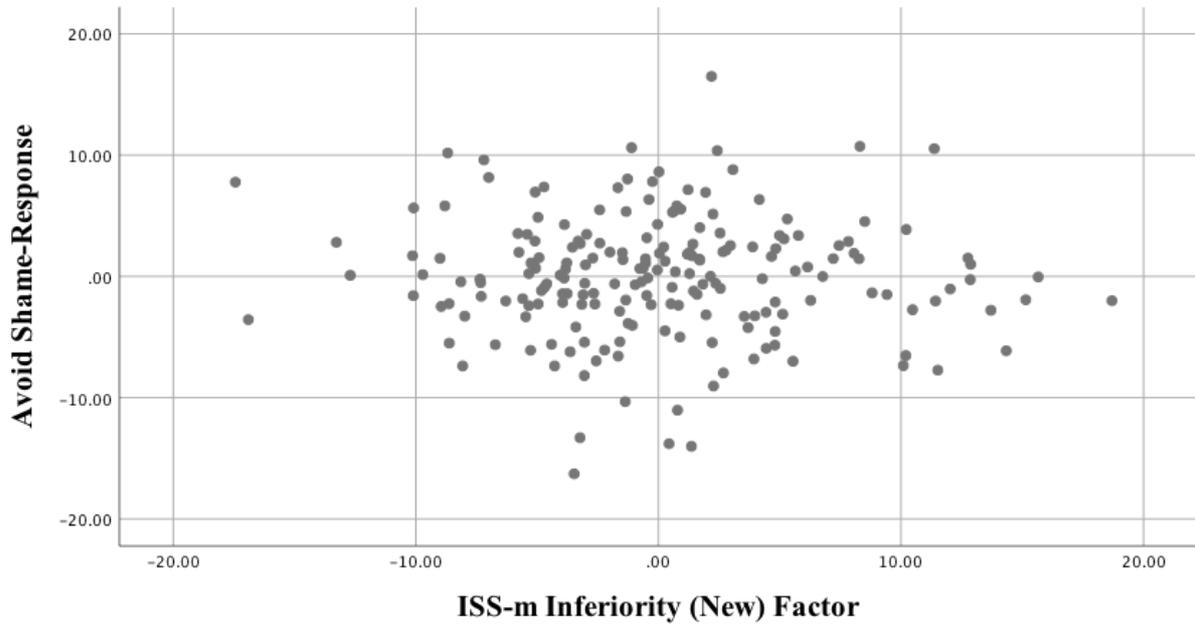
**Table**

	Approach	Withdraw	Attack-self	Attack-other	Avoid
Approach	-				
Withdraw	-.22**	-			
Attack-self	.15*	.43***	-		
Attack-other	-.06	-.006	.18*	-	
Avoid	.61***	.34***	-.04	.27***	-

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

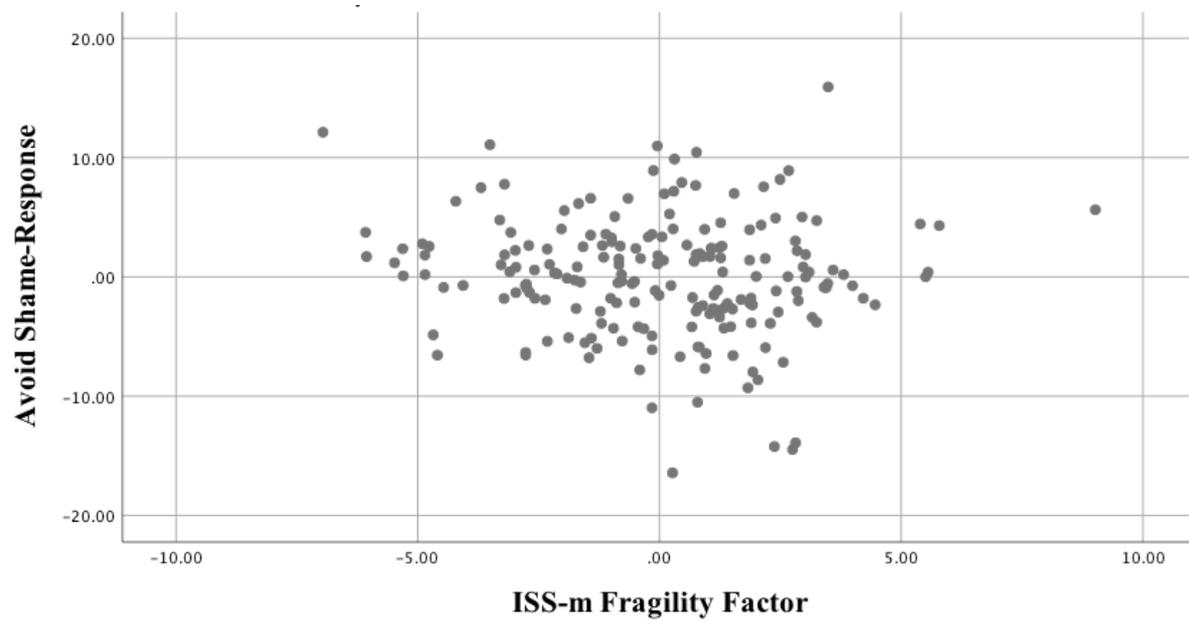
## APPENDIX T

## Scatterplots of Avoid Shame-Response Regressed onto ISS-m Factors



*Figure T1.* Scatterplot of avoid shame-response regressed onto ISS-m Inferiority (New) Factor. ISS-m Fragility Factor and other CoSS-m shame-responses are covariates.

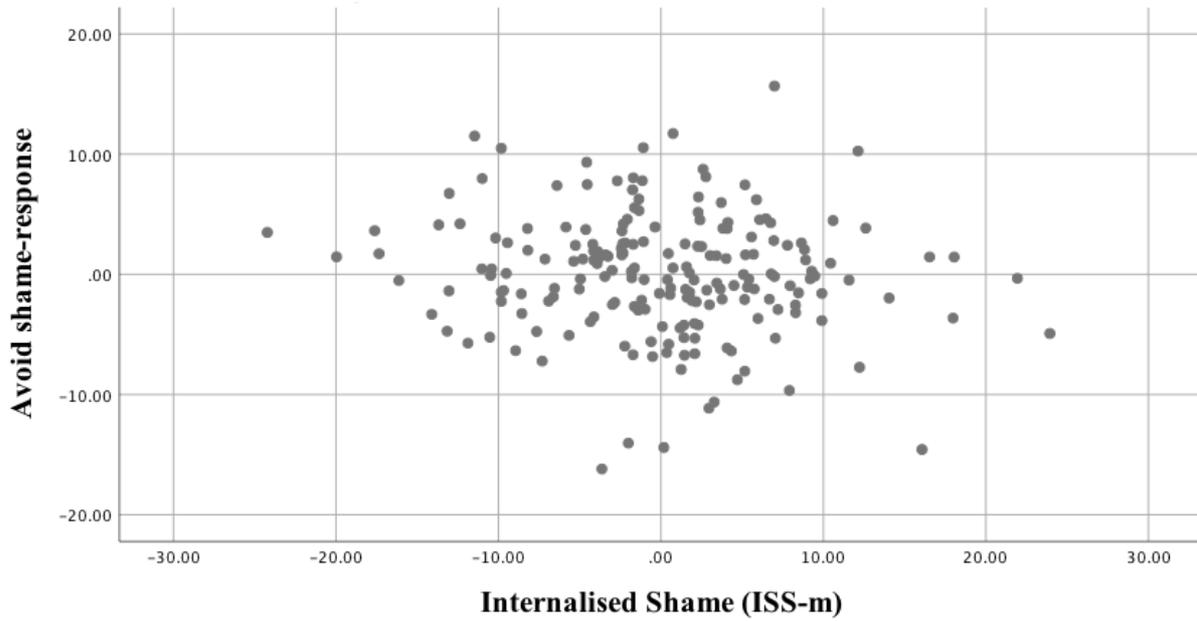
## APPENDIX T (continued)



*Figure T2.* Scatterplot of avoid shame-response regressed onto ISS-m Fragility Factor. ISS-m Inferiority (New) Factor, and other CoSS-m shame-responses are covariates.

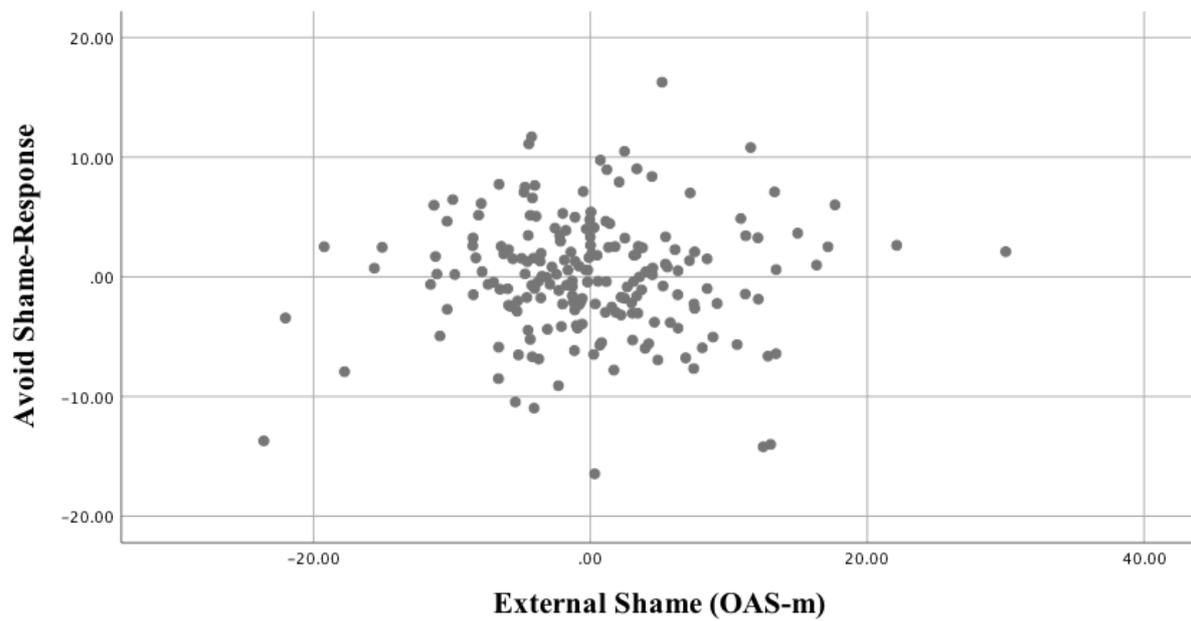
## APPENDIX U

## Scatterplots of Avoid Shame-Response Regressed onto Trait Shame Sources



*Figure U1.* Scatterplot of avoid shame-response regressed onto ISS-m. OAS-m and other CoSS-m shame-responses are covariates.

## APPENDIX U (continued)



*Figure U2.* Scatterplot of avoid shame-response regressed onto OAS-m. ISS-m and other CoSS-m shame-responses are covariates.