

Negative Self Evaluation and Motivational Tendencies: The Role of External Shame and  
Perceived Repairability  
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### **Abstract**

Shame and guilt are self-conscious and moral emotions which influence interpersonal experiences, mental health, and behaviour. Shame has been perceived as a painful and problematic emotion, considering its links to psychopathology, while guilt is often referred to as a useful emotion, guiding individuals towards repair strategies like ethical and prosocial behaviours. However, research has also shown that after a shame inducing experience individuals can engage in prosocial and ethical behaviours. Two possible factors that may influence an individual's attempts to engage in repair strategies or avoidance strategies after experiencing shame are feelings of external shame and the perceived repairability of the situation. The present research assesses the effect of external shame and perceived repairability on the relationship between shame appraisal and repair and avoidance tendencies. One hundred and one healthy adults completed an online survey measuring proneness to shame and guilt, external shame, depression, and repairability. Results showed a positive association between shame appraisal and repair behaviour. External shame was associated with withdrawal behaviour, while perceived repairability was not associated with motivational tendencies. Reliability analysis revealed problematic reliabilities of the subscales measuring shame and guilt. The relationship between shame appraisal and repair behaviours are discussed in light of the moral and functional aspects of shame. External shame, with its direct influence on withdrawal, is discussed with regards to the development of depression.

### Declaration

This thesis contains no material which has been accepted for the award of any other degree of diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.



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### Contribution Statement

In writing this thesis, my supervisor and I collaborated to generate research questions of interest and design the appropriate methodology. I conducted the literature search, ethics application, survey creation, study registration, and uploaded the survey onto the Prolific website. I was responsible for participant recruitment including participation incentives. Statistical output was a collaborative process with my supervisor providing guidance on hierarchical regression and reliability analysis. I generated all figures and tables and wrote this thesis.

### **Negative Self Evaluation and Motivational Tendencies: The Role of External Shame and Perceived Repairability**

Shame and guilt are self-conscious and moral emotions which influence interpersonal experiences, mental health, and behaviour. They require the ability to critically reflect and evaluate the self (Robins & Schriber, 2009; Muris & Meesters, 2014). As moral emotions, shame and guilt are elicited when an individual perceives their actions as inherently wrong or harmful to others (Nelissen, Breugelmans & Zeelenberg, 2013). Social functioning is thought to be the primary motivation of self-conscious emotions (Tracy, Robins & Tangney, 2007). Specifically, the experience of shame and guilt can guide an individual's behaviours and social interactions to maintain social equilibrium.

Shame has been perceived as a painful and problematic emotion as it is linked with withdrawal behaviours and psychopathology (Kim, Thibodeau, & Jorgensen, 2011; Tangney, Stuewig & Mashek, 2007), while guilt is often regarded as a useful emotion which can guide individuals towards repair strategies like ethical and prosocial behaviours. The evidence however is not as clear-cut as this, for at times shame can be associated with repair strategies (Cibich et al., 2016; De Hooge, Zeelenberg & Breugelmans, 2010; 2011; Leach & Cidam, 2015; Lickel, Kushlev, Savalei, Matta & Schmader, 2014). That is, shame can guide individuals to attempt to repair their tattered self-image and use prosocial and ethical behaviours to improve their interpersonal relationships (Brown & Cehajic, 2008; Olthof, 2012). Two possible factors which may influence the likelihood that an individual attempts to repair their self-image following a shameful experience, are external shame, and the perceived repairability of the self (De Hooge et al., 2010; 2011). External shame is shame as a result of perceived negative judgement of others (Gilbert, 1998). The extent to which external shame and perceived repairability influence attempts at repair or withdrawal behaviours has received little empirical investigation. Further understanding of the process by

which shame becomes a functional or problematic emotion can inform clinical interventions targeting the development of psychopathology, such as depression. Next, I discuss competing theoretical views of shame, shame from a functionalist perspective, and the influence of external shame and perceived reparability of self-image.

### **1.1 Distinguishing shame and guilt**

Over the last 30 years research has differentiated shame and guilt, particularly in relation to their unique influences on psychopathology (Tangney, Wagner, & Gramzow, 1992). The centrality of public exposure for transgressions is a cognitive distinction between shame and guilt (Kim et al., 2011). This public versus private assumption stems from the anthropological perspective that certain situations are structured in a way to elicit specific emotions (Benedict, 1946). Shame is said to be felt during situations where public exposure of the transgression occurs, while guilt is likely to occur when personal transgressions occur privately. Shame is said to be the more social or public emotion due to the stronger association with publicly exposed transgressions relative to guilt (Smith, Webster, Parrot & Eyre, 2002; Wolf, Panter, Insko, & Cohen, 2010). Despite the evidence supporting shame as the more public emotion, this view has remained controversial (Tangney & Dearing, 2002; Tangney et al., 2007). Contrasting research has suggested that social reality is not necessarily as influential, but rather perceived awareness of disapproval from others may cause an individual to feel more publicly exposed (Tangney, et al., 2007). That is, in similar situations, the experience of shame or guilt will stem from the individual's perspective of how others view them.

Another cognitive distinction of shame and guilt is the self versus behaviour distinction pioneered by Helen Lewis (1971). She suggested that, after a transgression, what an individual focuses on influences the elicitation of shame or guilt, although both emotions take the self into account. With shame, the focus of negative evaluation is the entire self. An

individual may think, “I am a horrible person”, following a transgression. With guilt, the focus of negative evaluation is the behaviour, and the individual may think “I did a horrible thing”. The self versus behaviour distinction has been refined and validated through the Process Model of Self-conscious Emotions (Tracey & Robins, 2004; 2006). According to this model, shame is characterised by internal, global, and stable attributions, while guilt is generated by internal, specific, and unstable attributions. For shame to arise an individual must cognitively evaluate their entire self (internal and global) as the cause of the transgression and think that they can’t do anything to change the cause (stable). In guilt, an individual cognitively evaluates their behaviour (internal and specific) as the cause, which can be changed (unstable).

Shame and guilt, through their distinct self-evaluation processes and attentional foci, result in different affective and behavioural experiences (Carpenter, Tignor, Tsang, & Willet, 2016). The supposedly more painful and problematic emotion is shame, because of the devaluation of the entire self, which in turn, is associated with feelings of powerlessness and worthlessness (Tangney, et al., 2007). Carpenter and colleagues (2016) showed that high levels of viewing one’s entire self as flawed is linked with lower levels of self-forgiveness. Guilt, however, is usually the less traumatic and less painful emotion, as the focus of evaluation is one’s particular behaviour and not the whole self (Tangney et al., 2007). Individuals experiencing guilt do not necessarily have the need to protect their core identity, so the focus is on their behaviour and consequences, which can lead to feelings of remorse or regret (Tangney et al., 2007). In line with this perspective, guilt has been linked to relationship-enhancing qualities including empathy (Hoffman, 1977; Thompson & Hoffman, 1980) and a greater aptitude to embrace the perspective of another individual (Leith & Baumeister, 1998).

Because shame and guilt differ in self-evaluation and affective experience, they differ in subsequent behavioural tendencies. The prevailing view in earlier literature (Tracey & Robins, 2004; Tangney et al., 1992; 1996) is that the shame experience is so aversive that it directs individuals to avoid their failures and subsequent consequences. That is, shame is presumed to lead to avoidance and withdrawal behaviours (Tangney et al., 2007). However, the evidence that shame only leads to avoidance and withdrawal, and is not associated with repair strategies, is not consistent (Gausel and Leach, 2011; Leach and Cidam, 2015). Alternative evidence suggests that shame can lead to approach and repair behaviours, particularly if an individual's self-image can be restored post-transgression (Leach & Cidam, 2015; Cibich, 2016). Gausel and Leach (2011) revealed links between shame and positive approach orientations, including self-improvement intentions and prosocial interactions with others. Similarly, Lickel et al. (2014) found stronger associations between shame and self-improvement than between guilt and self-improvement.

## **1.2 The Functionalist Perspective and Shame Repair**

Shame is considered problematic in comparison to guilt because it is associated with problematic interpersonal issues such as anger, irritability, lack of empathy, and mental health issues such as social anxiety (Matos, Pinto-Gouveia, & Gilbert, 2013), depression (Kim et al., 2011), narcissistic personality disorder (Ritter et al., 2014), and post-traumatic stress disorder (Oktedalen, Hoffart, & Langkaas, 2015). However, the functionalist perspective states that shame serves an adaptive survival purpose; shame only becomes problematic under certain circumstances (Fessler, 2007). Shame is thought to protect oneself from the threat of social rejection and can indicate the loss of social status or social bonds (Gruenewald, Dickerson, & Kemeny, 2007; De Hooge, 2014). Problematic outcomes have arisen when shame motivates withdrawal, avoidance, or submissive behaviours as a way to protect the threatened social self (Gilbert, 2000, Muris & Meesters, 2014). Withdrawal can

lead to problematic issues such as low empathy, further withdrawal, and psychopathology (De Hooge, 2014). Understanding how the individual responds to a shame experience may provide clarity around when shame becomes problematic.

Conversely, responses to shame are not constrained to avoidance. Research has suggested that shame can motivate an individual towards approach and repair behaviours (Leach & Cidam, 2015; Lickel., et al 2014). De Hooge and colleagues (2010, 2011) demonstrated that individuals were motivated to repair their social self through approach behaviours when they perceived it was possible to repair the threat to self. Perceived reparability also influenced whether withdrawal behaviours were used to protect their damaged self. In their first study, De Hooge et al. (2010) informed individuals that an attempt to repair their induced shame would have either a small or large impact on the end result. Individuals who were told that their attempt would have a larger influence on the end result were more likely to engage in an attempt to repair than individuals who were told the opposite. A follow-up study showed that individuals who experienced greater shame (compared to a control) showed higher approach behaviours and motivations to protect and repair their social self (De Hooge et al, 2011). However, when informed that the difficulty of the approach task was high, individuals were less likely to engage in repair.

A meta-analysis by Leach and Cidam (2015) of 90 studies determined that the perceived reparability of shame was a strong moderator of the relationship between shame and subsequent approach or avoidance tendencies. When perceived reparability of a failure or damaged social image was high, approach aims and behaviours were likely to follow. Low reparability was negatively associated with approach, but positively associated with withdrawal aims and behaviours. Therefore, the perceived reparability of a shame experience may influence an individual's motivation to engage in avoidance or approach behaviours.

The individual's behavioural decision in response to perceived repairability likely affects the propensity of shame to be functional or problematic.

### **1.3 Measuring Shame and Guilt from a Functionalist Perspective**

The dispositional tendencies to experience a heightened sense of shame or guilt (shame-proneness and guilt-proneness) may be differentially associated with psychopathology. Shame and guilt proneness are dispositions that reflect how an individual responds to transgressions emotionally, cognitively, and behaviourally (Tangney & Dearing, 2002). Notably, studies have shown that shame-proneness (compared to guilt-proneness) has demonstrated consistently stronger associations with depression (for review see Kim et al., 2011) and anxiety (Candea & Szentagotai-Tăta, 2018).

The Test of Self-Conscious Affect-3 (TOSCA-3; Tangney & Dearing, 2002) is one of the most commonly used measures of shame and guilt-proneness and may exercise a significant influence on the findings regarding depression and anxiety. It is a self-report measure in which participants are asked to rate cognitions, emotions, and behaviour during blame-eliciting situations. Shame is measured by negative self-evaluation *and* withdrawal behaviour, and guilt is measured by negative behaviour evaluation *and* repair behaviour. However, this measure has received criticism. Measurement of guilt-proneness is seen to be biased towards adaptive responses and shame-proneness towards maladaptive responses, through the lack of distinction between negative self-evaluation and withdrawal behaviour (Cibich, 2016; Dempsey, 2017; Wolf et al., 2010). That is, negative self-evaluation is combined with withdrawal tendencies to measure shame-proneness, and negative behaviour evaluation is combined with repair responses to measure guilt-proneness; these distinct psychological processes are confounded.

A newer measure of guilt- and shame-proneness is the Guilt and Proneness Scale (GASP; Cohen, Wolf, Panter & Insko, 2011). The GASP measures individual differences in

the tendency to feel guilt and shame within a variety of public and private transgressions. Four subscales are used in the GASP: shame-negative self-evaluations (NSE), shame-withdrawal, guilt-negative behaviour evaluations (NBE), and guilt-repair. NSE items assess the tendency to feel bad about oneself after a personal transgression, for example “you would think you are a despicable human being”. Shame-withdrawal items assess tendencies to withdraw from the situation or person involved, for example “you would stop spending time with that friend”. NBE items assess affective responses to behaviour, for example “you would feel terrible about the lies you told”. Guilt-repair items assess how one would respond following a public transgression, for example “you think more carefully before you speak”.

The four GASP (Cohen et al., 2011) subscales were internally reliable in American undergraduate student and general adult populations. An oblique four-factor structure of the GASP was supported by confirmatory factor analyses. Initial analyses of the shame subscales revealed weak correlations with one another, while NSE showed larger positive correlations with NBE and guilt-repair scales. In addition, NSE showed strong *negative* correlations to various measures of unethical and antisocial behaviour, while shame-withdrawal showed strong *positive* correlations. The authors claimed that these results extended the literature on shame as they demonstrate that maladaptive interpersonal consequences of shame result from withdrawal tendencies rather than from negative self-image appraisals following a transgression (Tangney et al., 2007). In support of this view, individuals who reported higher NSE also reported lower levels of anger, physical aggression, engagement of unethical negotiation, and delinquent behaviour; and higher levels of honesty, humility, conscientiousness, and altruism. Cibich et al. (2016) suggest that withdrawal may result in maladaptive consequence following shame, not NSE. Considering withdrawal behaviours are associated with psychopathologies like depression and social dysfunction (Cibich et al.,

2016), negative self-evaluation may not be the problem, but rather withdrawal after NSE may be problematic.

#### **1.4 External and Internal Shame: Contextual Influence on Shame Repair**

Paul Gilbert (1998) established the distinction between external and internal shame, rooted in the evolutionary perspective that shame can be a marker of possible social threat. External shame occurs when an individual evaluates themselves from the perspective of others (Gilbert & Andrews, 1998; Gilbert, 2003). That is, the individual might think “*I think, that others think I am bad*”, even if this is not true. In contrast, internal shame is the individual evaluation of themselves, or “*I think I am bad.*” External shame is focused on elements of the individual that would be rejected if exposed, while internal shame is focused on cognitions and affect that are self-related (Matos et al., 2013). There is evidence that the distinction between external and internal shame is related to psychopathology, that is, external shame may be associated with higher levels of depression (Kim et al, 2011) and social anxiety (Candea & Szentagotai-Táta, 2018) compared to internal shame. Further, external shame, more than internal shame, has been demonstrated as a powerful physiological stimulator of an individual’s threat system (Dickerson, Gruenewald, & Kemeny, 2004; 2009).

External shame has been referred to as stigma consciousness or awareness (Pinel, 1999; Gilbert, 2000). Stigma is felt when an individual believes themselves as unacceptable or unworthy of a group, thus making repair of their social image unattainable (Cibich et al., 2016). However, the perception of acceptance by others versus the perception of being stigmatised fosters acknowledgement of shame and taking responsibility for behaviour. Woodyatt and Wenzel (2013) demonstrated that other people’s responses can influence an individual’s response to their shame. Responses that were not stigmatising encouraged an individual to acknowledge their shame after a transgression. The reduction of stigma can, in turn, influence an individual’s capacity to begin to acknowledge and process their shame, and

to attempt repair behaviours. For example, Ahmed and Braithwaite (2006) demonstrated that parents who embraced forgiveness and reconciliation influenced their child's capacity to recognise their shame, which ultimately reduced bullying behaviours. Considering that shame is associated with social image and stigma awareness, external shame is likely to be an important mechanism that can influence an individual's engagement of shame approach and repair behaviours.

### **1.5 Measuring External Shame**

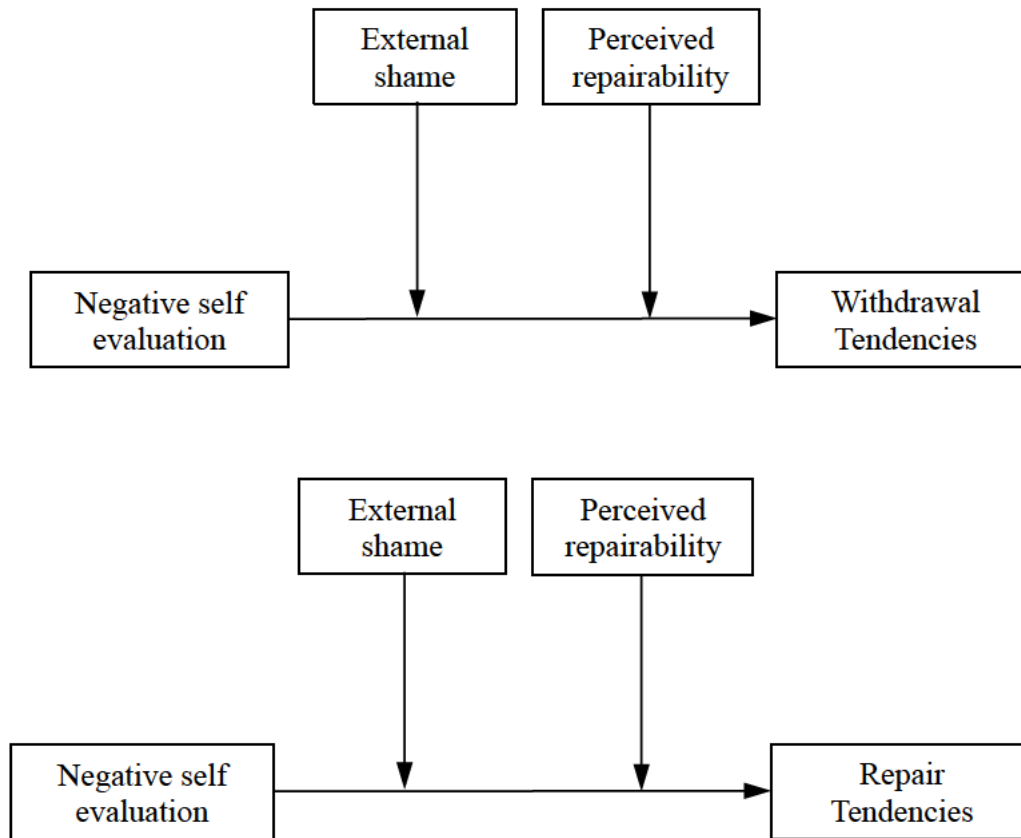
The widely-used measure of external shame is the *Other as Shamer Scale* (OAS; Allan, Gilbert, & Goss, 1994). The OAS was developed from an evolutionary and biopsychosocial perspective as a trait measure of external shame (Gilbert, 2009). The OAS is based on the concept that an individual's perception of what *others* feel about them is centred on what the *individual* feels about themselves (Cook, 1987; Lewis, 1992). The OAS is comprised of 18 items focusing on three dimensions: feeling inferior, feeling empty, and feeling shame because of others' responses to a personal transgressions (Goss, Gilbert, & Allan, 1994). The OAS has been supported as a valid three-factor measure of external shame in the original British adult samples (Goss et al., 1994). Balsamo and colleagues (2015) affirm a three-factor structure and found that the dimension that measures shame felt because of others' responses to personal transgressions was linked to a fear or being judged harshly and to motivations to withdraw. Inferiority as measured in the OAS played a central role in external shame, and the motivation to seek acceptance. Nevertheless, the OAS is predominantly used as a single factor measure that examines external shame as a global concept. External shame measured through the OAS is associated with depression, anxiety, and stress related symptomatology (Matos, Pinto-Gouveia, Gilbert, Duarte, & Figueiredo, 2015), experiential avoidance (Pinto-Gouveia, Gregorio, Dinis, & Xavier, 2012), anger (Matos et al., 2015) and eating psychopathology (Ferreira, Pinto-Gouveia, & Duarte, 2013).

These studies have demonstrated the relationship of external shame to mental health problems (Gilbert, 2009). The OAS as a measure of stigma consciousness may be a variable that contributes to perceived irreparability of self-image.

### **1.6 The Present Study**

Shame and guilt are two self-conscious emotions which have been distinguished in literature according to their appraisal, behaviours, and context. According to the self-versus behaviour distinction the experience of shame occurs from negative self-evaluations (Lewis, 1971; Tracy & Robins, 2004; Tracey & Robins, 2006). Negative-self evaluations subsequently show strong links to withdrawal/avoidance motivations (Gilbert, 2000; Muris & Meesters 2014) and ultimately depressive symptoms (Tangney et al., 1992; Tangney, 1995), while guilt is linked to negative behavioural evaluations, and subsequently linked to approach and repair motivations (Tangney, 1992; Tangney et al., 1996; Kim et al., 2011). Despite these findings, there is contrasting evidence that shame can lead to approach and repair motivations (Lickel et al., 2014; Leach and Cidam, 2015, Cibich, 2016). The relationship between negative-self evaluations and withdrawal may be moderated by perceived reparability of self-image (Leach and Cidam, 2015; Cibich, 2016). External shame has also been theorised to impede an individual's engagement in repair behaviour for fear of being stigmatised and criticised harshly (Balsamo et al., 2014, Cibich, 2016; Gilbert, 2000; Kadir et al, 2017 Matos et al., 2015; Saggino et al., 2017). Being stigmatised may reduce an individual's perception of being able to repair their situation or behaviour and subsequently may lead the individual to withdrawal and avoidance.

This study aims to test the proposed models (see Figure 1) of how perceived reparability and external shame influence the relationship between negative self-evaluation and subsequent behaviours.



*Figure 1.* Predicted moderating patterns of perceived repairability and external shame on motivational tendencies following negative self-evaluation.

The following hypotheses can be derived from the above models and were tested in the current study.

*Hypothesis 1:* In agreement with Cohen and colleagues (2011) negative self-evaluation will have a small positive direct relationship with withdrawal tendencies.

*Hypothesis 2:* External shame will have a positive direct relationship with withdrawal tendencies.

*Hypothesis 3:* There will be a significant interaction between negative self-evaluation and external shame, such that when external shame is high there will be a greater positive relationship of NSE with withdrawal.

*Hypothesis 4:* Perceived repairability will have a significant negative direct relationship with withdrawal tendencies.

*Hypothesis 5:* There will be a significant interaction between negative self-evaluation and perceived repairability, such that when perceived repairability is low there will be a greater positive direct effect of NSE with withdrawal.

*Hypothesis 6:* In agreement with Cohen and colleagues (2011) there will be a moderate positive direct relationship between negative self-evaluation and repair tendencies.

*Hypothesis 7:* There will be a significant interaction between negative self-evaluation and external shame, such that when external shame is low there will be a greater positive relationship of NSE with repair tendencies.

*Hypothesis 8:* There will be a significant interaction between negative self-evaluation and perceived repairability, such that when perceived repairability is high there will be a greater positive relationship of NSE with repair tendencies.

*Hypothesis 9:* Based on Cohen et al. (2011), there will be a positive correlation between shame-withdrawal and depressive symptoms.

## Method

### 2.1 Participants

An estimated sample size was obtained through statistical power analysis with G\*power (Version 3.1.9.4; Faul, Erdfelder, Buchner, & Lang, 2009). No comparable regression analyses using the GASP were available to obtain an effect size for power analysis. The effect size used was based on Kim and colleagues (2011) meta-analysis of shame and depression, which are variables of interest for the present study. Based on Kim and colleagues (2011) study where a correlation was found between shame and depressive symptoms, an effect size of .35 and power of .80 indicated the required sample size was approximately 63. Given the expected unusable responses for online data I aimed to collect 100 participants. Inclusion criteria were that participants were aged 18 and above and were fluent in English. Participants were 106 adults registered as members on the crowd sourcing platform Prolific. Of the 106 respondents, five revoked consent or did not complete the survey and were excluded from analysis bringing the total to  $N = 101$  participants. The age range was between 18–76 years with a mean age of 32.49 ( $SD=10.6$ ). Participants were 67% female ( $n=68$ ), 31% male ( $n=31$ ), 1% transgender ( $n=1$ ) and 1% preferred not to answer ( $n=1$ ). The predominant nationalities included 69 British participants (68%) and 10 Australian participants (10%), other nationalities included US (7%), Canadian (4%), New Zealander (3%), Filipino (1%), Sri Lankan (1%), Scottish (1%), Chinese (1%), Indian (1%), Irish (1%) and Other (2%). Of the 101 adults, 42% ( $n=42$ ) had full-time employment, 38% ( $n=38$ ) part-time employment, 8% ( $n=8$ ) not in paid work “e.g. homemaker, retired, or disabled”, 5% ( $n=5$ ) unemployed and 8% ( $n=8$ ) other.

### 2.2 Procedure

The study was approved by the Human Research Ethics Sub-Committee of the School of Psychology (20/40). The study was advertised on the crowd sourcing website Prolific with

a requested sample of 100 participants. Participants self-selected to participate in the study for £1.25 (\$2.44 AUD). The study remained open on Prolific until 100 applicants successfully completed the study, Prolific oversampled to account for missing data resulting in 106 participants. The study consisted of a survey created via the platform Qualtrics, which took approximately 10 minutes to complete. Participation was voluntary, so that individuals could withdraw at any time throughout the study for whatever reason with no adverse consequences. Upon completion participants were thanked for participation and directed to appropriate services in the case of possible distress as result of completing the survey.

### 2.3 Measures

*Demographic information.* Participants provided information about their gender, age, nationality, English proficiency, and employment.

*Guilt and Shame-Proneness Scale (GASP; Cohen, et al., 2011).* The GASP measures the tendency to experience guilt and shame following public or private transgressions. Four sub-scales containing four items each were used. They include shame-negative self-evaluations (NSEs), shame-withdrawal, guilt-negative behaviour-evaluations (NBEs), and guilt-repair. Participants report the likelihood of the given response for 16 scenarios on a Likert scale ranging from 1 (*very unlikely*) to 7 (*very likely*). The NSE subscale ( $\alpha = .63, .67$ ) measured individual proneness to feeling bad about oneself following a personal transgression, an example item, “You rip an article out of a journal in the library and take it with you. Your teacher discovers what you did and tells the librarian and the entire class. What is the likelihood that this would make you feel like a bad person?” The Shame-withdrawal subscale ( $\alpha = .66, .63$ ) measured withdrawal tendencies from situations or involved persons, an example item is, “After making a big mistake on an important project at work in which people were depending on you, your boss criticises you in front of your coworkers. What is the likelihood that you would feign sickness and leave work?”, The NBE

sub-scale ( $\alpha = .69, .71$ ) measured individual proneness to feel bad about one's behaviour, an example item being, "After realizing you have received too much change at a store, you decide to keep it because the salesclerk doesn't notice. What is the likelihood that you would feel uncomfortable about keeping the money?", The Guilt-repair subscale ( $\alpha = .61, .62$ ) measured individual responses following a public transgression, for example, "You are privately informed that you are the only one in your group that did not make the honour society because you skipped too many days of school. What is the likelihood that this would lead you to become more responsible about attending school?", Given that the GASP subscales are scenario-based, alpha values of .60 were considered acceptable (Tangney & Dearing, 2002). Internal consistency of GASP sub-scales has been supported by other studies reporting alpha values between .60 and .80 (Bottera, 2019; Porter, Zelkowitz, Gist, & Cole, 2019). Construct validity for NSE and shame-withdraw sub-scales includes positive correlations with personal distress ( $r = .13$  and  $r = .31$ ), neuroticism ( $r = .18$  and  $r = .23$ ), and negative correlations to self-esteem ( $r = -.08$  and  $r = -.27$ ) and self-compassion ( $r = -.15$  and  $r = -.19$ ). Construct validity for NBE and guilt-repair included positive correlations to empathetic concern ( $r = .37$  and  $r = .33$ ), perspective taking ( $r = .29, r = .29$ ), conventional morality ( $r = .57, .43$ ), and promotion focus ( $r = .12$  and  $r = .28$ ). Guilt subscales were also positively correlated with other related measures on ethics and prosociality, and negatively correlated measures of antisocial behaviour and unethical behaviour (Cohen, et al., 2011).

*Repairability of Negative Self-Evaluation and Negative Behaviour Evaluation.* To measure perceived repairability, the researcher and supervisor created eight items adopting the seven-point Likert scale used for the GASP. The GASP was modified to include perceived repairability items following the four NSE items and four NBE items. For example, the NBE item, "After realizing you have received too much change at a store, you decide to keep it because the salesclerk doesn't notice. What is the likelihood that you would feel

uncomfortable about keeping the money?”, was followed by the perceived repairability item “How likely is it you could repair this situation?”. An example NSE item, “You secretly commit a felony”, was followed by the perceived repairability item, “How likely is it you could repair this situation?”.

*Other As Shamer Scale (OAS; Goss et al., 1994).* The OAS is a measure of external shame where the focus is on global judgements about how oneself is evaluated by others (Goss et al., 1994). It is comprised of 18 items with three dimensions including feelings of inferiority, emptiness, and shame because of others’ responses to personal transgressions. Participants rate the frequency of when they have made appraisals like, “I feel other people see me as not good enough”, on a Likert scale ranging from 1 (*never*) to 5 (*almost always*). The item scores are then summed to calculate a total OAS score ranging between 0 to 72 where higher scores suggest greater external shame. Internal consistency has been demonstrated with an alpha range of .87 to .92 (Balsamo et al 2015; Goss et al., 1994 & Matos et al, 2015). For the present study good internal consistency was found for the OAS,  $\alpha = .92$ . The OAS has significant correlations with other measures of shame such as the Internalized Shame Scale, Dimensions of Conscience Questionnaire, and The Adapted Dimensions of Conscience Questionnaire (Goss et al, 1994). The hierarchical model consisting of three first-order factors and one high-order factor has received empirical support (Balsamo et al., 2013; Matos, et al., 2013; Matos et al., 2015; Saggino et al., 2017).

*Center for Epidemiologic Studies-Depression scale (CES-D; Radloff, 1977).* The CES-D scale is a screening measurement for depression where the frequency of ideas and events over the past week are reported. A 20-item measure, each item is rated on a four-point scale from 0 (*rarely or none of the time, less than one day*) to 3 (*most or all of the time, 5-7 days*). Four categories exist in the scale: somatic symptoms, interpersonal issues, negative affect, and positive affect. Four positively stated items are inversely scored before summing

all the items to calculate the total score. Total scores range between 0 to 60 with higher scores indicating an increased risk of depression. Good internal consistency has been supported with an alpha range of .85 to .95 (Atkins, 2014; Heo, Choi, Yu, & Nam, 2018; Jiang et al., 2019 & Vilagut, Forero, Barbaglia, & Alonso, 2016). The CES-D also displays good convergent validity to similar tests including the Beck Hopelessness Scale and Trait Anxiety Inventory (Zhang, Jia, Hu, Qiu, & Liu, 2015; Yang, Jia, & Qin, 2015). Numerous studies have supported the four-factor model through confirmatory factor analysis (Cosco, Prina, Stubbs, & Wu, 2017; Jiang et al., 2019; Sarachino, Cham, Rosenfeld, & Nelson, 2018).

## Results

### 3.1 Data Screening

Data analysis in this study was completed using the statistical package, IBM SPSS Statistics 26.0 for Windows. Preliminary analyses were conducted on continuous measures used in the study to check for accuracy of data entry, missing values, and fit between their distributions and the assumptions of multivariate analysis. No missing data were identified. The assumptions of normality, linearity, and homoscedasticity were examined in the data. Normality of study variables was assessed through visual inspection of histograms and Q-Q plots. Normally distributed variables were found for most scales with the exceptions of negatively skewed NSE and NBE scales, and positively skewed CES-D scale. Shapiro-Wilks tests confirmed normality for the perceived repairability scales, and the OAS, however, violations were reported for the four GASP subscales and the CES-D. Violations of the assumptions weaken, rather than nullify the analysis (Tabachnick & Fidell, 2007). Also, considering the CES-D is measure of emotional disturbance and is related to a pathological condition it is expected to be positively skewed when used within a normal population (Radloff, 1977). Variables which are naturally skewed are not recommended for transformations, also they may pose problems when translating results (Tabachnick & Fidell, 2007), as such transformations were not applied.

Outliers were identified based on the outlier labelling rule (Tukey, 1977; Hoaglin & Iglewics, 1987) where the interquartile range is multiplied by a factor of 1.5 and added to the upper quartile and subtracted from the lower quartile. Deemed outliers are scores above the upper value and scores below the lower value. A total of eight outliers were identified within NBE, NSE, Shame-withdraw and OAS scales. However, removal of outliers did not result in significant change to subsequent regression analysis and therefore were retained. The assumption of linearity was inspected through analysis of scatterplots. Scatterplots showed

weak, linear associations between the GASP subscales, perceived repairability scales, OAS, and CES-D.

### **3.2 Descriptive Statistics.**

Descriptive statistics and internal consistencies measured through Cronbach's alpha for scales for all variables are presented in Table 1. T-tests were used to compare the effect of gender on all measures used in the study. Male and female participants were only considered due to the small number of participants for transgender and other. No significant differences in mean values of genders were found for most of the GASP scales, with the exception of NBE where significantly higher mean values were found for females  $t(97) = -2.34, p < .005$ . External shame, perceived repairability and depression showed no significant differences.

Table 1

*Descriptive Statistics*

Variables	Total		Male		Female		$\alpha$
	(n=101)		(n=31)		(n=68)		
	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	<i>M</i>	( <i>SD</i> )	
GASP-NSE	6.00	(1.15)	5.73	(0.90)	6.10	(0.91)	.64
GASP-NBE	5.29	(0.92)	4.90	(1.78)	5.47	(1.09)	.66
GASP-W	3.20	(1.16)	2.90	(1.04)	3.35	(1.21)	.58
GASP-R	5.57	(0.85)	5.34	(0.89)	5.68	(0.83)	.28
NSE-PR	4.17	(1.26)	4.19	(1.45)	4.18	(1.33)	.68
NBE-PR	4.73	(1.04)	4.52	(0.95)	4.80	(1.08)	.39
OAS	25.67	(11.58)	24.68	(11.50)	25.93	(11.79)	.92
CES-D	25.51	(10.47)	19.42	(9.09)	23.60	(10.81)	.91

*Note.* GASP = Guilt and Shame Proneness scale; NSE = negative self evaluation; NBE = negative behavioural evaluation; W = withdrawal scale; R = repair scale; PR = perceived repairability scale; OAS = Other As Shamer Scale; CES-D = Center for Epidemiologic Studies Depression Scale, breakdowns for Transgender ( $n=1$ ) and Other ( $n=1$ ) are not included in this table.

### 3.3 Correlations and Hypothesis Testing

Correlations amongst the GASP subscales, OAS, CES-D, and age of participants in the study were examined. These are presented in Table 2.

In support of hypothesis 1 a small positive correlation was found between NSE and withdrawal tendencies, however this was not statistically significant. A moderate positive correlation between external shame and withdrawal tendencies was found in support of hypothesis 2. Hypothesis 4, that perceived repairability would have a significant negative

Table 2

*Correlations between GASP, OAS, CES-D scales and age*

	1	2	3	4	5	6	7	8
1. GASP-NSE								
2. GASP-NBE	.61*							
3. GASP-W	.16	.14						
4. GASP-R	.58**	.46**	.03					
5. NSE-PR	.03	.10	-.06	.07				
6. NBE-PR	.25*	.37**	.05	.28**	.32**			
7. OAS	.02	.01	.31**	.05	.01	-.07		
8. CES-D	.03	-.02	.41**	.03	.09	-.06	.62**	
9. Age	.08	.09	-.09	.03	-.14	-.00	-.23*	-.29**

*Note.* \*\* $p < .01$ , \*  $p < .05$ ; *GASP* = Guilt and Shame Proneness scale; *NSE* = negative self evaluation; *NBE* = negative behavioural evaluation; *W* = withdrawal scale; *R* = repair scale; *PR* = perceived repairability scale; *OAS* = Other As Shamer Scale; *CES-D* = Center for Epidemiologic Studies Depression Scale

association with withdrawal tendencies, was not supported, while a negative correlation was observed this association was weak and not significant for the present sample. There was a positive and moderate correlation between NSE and repair tendencies supporting hypothesis 6, that a direct relationship would exist between the NSE and repair. Additionally, a positive correlation between withdrawal tendencies and depressive symptoms supported hypothesis 9, indicating a moderate direct relationship existed between withdrawal and depressive symptoms. Age also correlated with external shame and depression. No correlations above

.90 were identified indicating that there was no multicollinearity between variables (Tabachnick & Fidell, 2007).

### 3.4 Multiple Regression Analysis

Examination of the predictor variables NSE and external shame on withdrawal and repair tendencies was conducted using two multiple linear regressions. Considering violations of normality were present, the robust method of bootstrapping was employed as it is less reliant on normal and symmetrical distributions (Field, 2013). Regression parameters and bootstrapped coefficients with 95% confidence intervals were estimated (bias-corrected; 1000 iterations) for both the linear models of predictors of withdrawal and repair. The main effect of coefficients with confidence intervals for both models are presented in Tables 3 and 4. Age was controlled for considering the significant negative association with external shame ( $r = -.26, p < .05$ ). In each hierarchical regression, age was entered in step 1, NSE at step 2, and OAS for step 3. To consider an interaction both variables NSE and OAS must demonstrate significant beta values on the outcome variable. Table 3 shows that a positive direct relationship between OAS and withdrawal tendencies exist, but no significant relationship was found between negative self-evaluation and withdrawal tendencies. Therefore, an interaction term was not entered after step 3. It was not possible to test hypothesis 3 that external shame would moderate the relationships between NSE and withdrawal tendencies. Table 4 indicates that, as expected, a positive direct relationship exists between NSE and repair tendencies, but no direct relationship existed between OAS and repair. Therefore, an interaction term was not entered after step 3. It was not possible to test Hypothesis 7 that external shame would moderate NSE and repair tendencies.

Table 3

*Linear model of predictors of withdrawal with 95% bias corrected and accelerate confidence intervals reported in parentheses. Confidence intervals and standard errors based on 1000 bootstrap samples.*

		<i>b (CI<sub>95%</sub>)</i>	<i>SE B</i>	$\beta$	<i>p</i>
Step 1	Constant	3.50 (2.88, 4.02)	0.32		.000
	Age	-0.01 (-0.03, 0.01)	0.01	-.09	.397
Step 2	Constant	2.27 (0.98, 3.68)	0.72		.006
	Age	-0.01 (-0.03, 0.01)	0.01	-.10	.315
	GASP-NSE	0.22 (-0.01, 0.44)	0.12	.17	.090
Step 3	Constant	1.34 (0.11, 2.78)	0.70		.112
	Age	-0.01 (-0.02, 0.02)	0.01	-.03	.749
	GASP-NSE	0.20 (-0.03, 0.42)	0.11	.16	.102
	OAS	0.03 (0.01, 0.05)	0.01	.30	.003

*Note.*  $R^2 = .01$  ( $p = .397$ ) for Step 1;  $\Delta R^2 = .33$  ( $p < .001$ ) for Step 2;  $\Delta R^2 = .00$  ( $p < .001$ ) for Step 3; *GASP* = Guilt and Shame Proneness scale; *NSE* = negative self evaluation; *OAS* = Other As Shamer scale

Perceived repairability was excluded from further analysis as it did not demonstrate linear associations with NSE, repair, or withdrawal tendencies. Therefore, results were inconclusive for hypothesis 5 that perceived repairability would moderate the relationships between NSE and withdrawal. Hypothesis 8 that perceived repairability would moderate the relationships between NSE and repair was also inconclusive.

Table 4

*Linear model of predictors of repair with 95% bias corrected and accelerate confidence intervals reported in parentheses. Confidence intervals and standard errors based on 1000 bootstrap samples.*

		<i>b</i> ( <i>CI</i> <sub>95%</sub> )	<i>SE B</i>	$\beta$	<i>p</i>
Step 1	Constant	5.49 (4.94, 6.14)	0.30		.001
	Age	0.00 (-0.02, 0.02)	0.01	.03	.754
Step 3	Constant	2.38 (1.36, 3.26)	0.52		.001
	Age	-0.00 (-0.02, 0.02)	0.01	-.02	.823
	GASP-NSE	0.54 (0.40, 0.71)	0.07	.59	.001
Step 3	Constant	2.31 (1.34, 3.16)	0.52		.001
	Age	-0.00 (-0.02, 0.02)	0.01	-.01	.891
	GASP-NSE	0.54 (0.40, 0.73)	0.07	.58	.001
	OAS	0.00 (-0.01, 0.02)	0.01	.03	.713

*Note.*  $R^2 = .00$  ( $p = .747$ ) for Step 1;  $\Delta R^2 = .33$  ( $p < .001$ ) for Step 2;  $\Delta R^2 = .00$  ( $p < .001$ ) for Step 3; *GASP* = Guilt and Shame Proneness scale; *NSE* = negative self evaluation; *OAS* = Other As Shamer scale

### 3.5 Scale Reliabilities Analysis

In the present study Cronbach's alpha for NBE, ( $\alpha = 0.66$ ) and NSE ( $\alpha = 0.64$ ) showed that these subscales had acceptable reliability. For the subscale shame-withdrawal Cronbach's alpha showed the subscale to have borderline but unacceptable reliability,  $\alpha =$

0.58. Cronbach's alpha for the Guilt Repair subscale showed poor reliability,  $\alpha = 0.28$ .

Internal consistency of the GASP subscales Guilt-repair and Shame-withdraw were deemed unacceptable, based on alphas below .60 for scenario-based measures (Tangney & Dearing, 2002). For NSE perceived repairability items, acceptable internal consistency was found suggesting good reliability,  $\alpha = .68$ . NBE perceived repairability internal consistency was found to be unacceptable,  $\alpha = .39$ . To explore further the poor internal consistency of the three aforementioned scales, reliability analysis was conducted through inspection of item-total correlations and Cronbach's alpha if deleted (Field, 2013). Results are presented in Table 5. For CES-D good internal consistency was found with an alpha of .91.

Table 5

*Item- total correlations and Cronbach's alpha if item deleted for GASP-R and NBE-R*

Scale		Corrected item total correlations	Cronbach's alpha if item deleted
GASP-R	Item 1	.100	.296
	Item 2	.108	.269
	Item 3	.212	.151
	Item 4	.172	.195
GASP-W	Item 1	.461	.420
	Item 2	.308	.547
	Item 3	.302	.557
	Item 4	.382	.493
NBE-R	Item 1	.174	.361
	Item 2	.030	.502
	Item 3	.274	.253
	Item 4	.400	.101

*Note.* Cronbach's alpha for GASP-R is .28, for GASP-W is .58, and for NBE-R is .39; *GASP* = Guilt and Shame Proneness scale; *NBE-R* = negative behaviour evaluation perceived repairability scale; *R* = repair scale

For the GASP-repair subscale most items resulted in a decrease of alpha if deleted with the exception of item 1 which would increase alpha to .296. Corrected item total correlations below .30 are considered problematic as it indicates the particular item does not correlate well with the scale (Field, 2013). All of the corrected item total correlations were below .30 for the repair subscale, indicating possible problems with construct representation. Considering the poor reliability for this subscale, caution was exercised when interpreting results from this scale. For the GASP withdraw subscale, all items resulted in a decrease of alpha if deleted and were retained. Further inspection revealed all items were above the recommended .30 item total correlation benchmark (Field, 2013), however, it should be noted items 2 ( $r = .308$ ) and 3 ( $r = .302$ ) were borderline acceptable. Given that leaving items out would not have greatly improved reliabilities, additional analyses were not run with altered versions of the GASP subscales repair and withdraw.

For the NBE perceived repairability scale most items resulted in a decrease of alpha if deleted, with the exception of item 2 which would increase alpha to .502. Analysis of corrected item total correlations revealed that item 4 was acceptable and demonstrated reasonable correlation to the scale. However, items 1, 2, and 3 with an item total correlation range of .03 to .27 were unacceptable. Considering the poor reliability of the NBE perceived repairability, the scale was not used for analysis in the present study.

### Discussion

The present study aimed to evaluate the influence of external shame and perceived repairability on motivational tendencies following negative self-evaluation. Results supported hypothesis 1, that there would be a positive association between negative self-evaluation and withdrawal tendencies. The weak association found between negative self-evaluation and withdrawal was similar to Cohen et al. (2011) studies. Negative self-evaluation positively associated with repair tendencies, in support of hypothesis 6. Similar to Cohen et al. (2011) the association between negative self-evaluation and repair was moderate in strength. Furthermore, results support hypothesis 9, that withdrawal motivations are positively associated with depressive symptoms. This is in line with earlier studies (Allan et al., 1994; Cohen et al., 2011) where withdrawal behaviours may indicate the maladaptive response to shame. External shame was positively linked with withdrawal tendencies (in support of hypothesis 2), but not the tendency to make negative self-evaluations. External shame was not supported as a moderating variable between negative self-evaluation and withdrawal tendencies, contrasting with hypothesis 3. Likewise, external shame was not supported as a moderating variable between negative self-evaluation and repair tendencies, also contrasting with hypothesis 7. The notion of withdrawal as a representative of felt stigma may explain why external shame is not associated with negative self-evaluation (Pinel, 1999; Gilbert, 2000). Perceived repairability following negative self-evaluation did demonstrate a negative association with withdrawal tendencies, not supporting hypothesis 4. Consequently, evidence to support hypothesis 5, that perceived repairability would moderate the relationship between negative self-evaluation and withdrawal tendencies was not found. Likewise support for hypothesis 8 that perceived repairability would moderate the relationship between negative self-evaluation and repair tendencies was not established. Measurement characteristics of the GASP may provide clarity to the weak associations of perceived repairability to shame.

#### **4.1 Negative Self-Evaluation, Withdrawal Tendencies, and Depression**

Results supported hypothesis 1 that negative self-evaluation has a small positive association with withdrawal tendencies. The small association between negative self-evaluation and withdrawal tendencies indicates a weak relationship exist between these variables. This positive association with withdrawal tendencies is similar to Cohen et al.,(2011), where weak correlations were found between negative self-evaluation and withdrawal tendencies. Despite the weak association between negative self-evaluation and withdrawal tendencies the relationship was not significant in the present sample. These findings may indicate that shame, when measured by a behaviour, is not best represented by a tendency to withdraw.

Results also supported hypothesis 9, that withdrawal tendencies would be positively associated with depression. The association between withdrawal and depression may indicate the maladaptive component of shame. De Hooze et al., (2010) proposed that habitual avoidance may lead to problematic outcomes. The present study provides further support for the relationship between withdrawal tendencies and depression. Negative self-evaluation was not associated with depression in the present study. This supports earlier studies which found shame, as measured separate to behavioural avoidance, was not correlated with psychopathologies such as social dysfunction and depression (Allan et al., 1994; Cohen et al., 2011). Shame measured through negative self-evaluation does not appear to be associated with maladaptive consequences. Shame measured through withdrawing does appear to have an association with maladaptive consequences.

#### **4.2 Negative Self-Evaluation and Repair Tendencies**

Hypothesis 6 was supported as negative self-evaluation was positively associated with repair tendencies. The association between negative self-evaluation and repair was moderate in strength and significant for the present sample. This finding is comparable with Cohen et

al., (2011) study, where moderate correlations were found between negative self-evaluation and repair. The relationship that exist between negative self-evaluation and repair supports a functional perspective of shame (Cibich et al., 2016). The functionalist perspective argues that the positive relationship between negative self-evaluation and repair tendencies could be explained by the idea that shame acts as a catalyst to focus on sources of threat to the social self. Shame in this case can lead individuals to attempt to repair their moral-social status and relational bonds (Ahmed & Braithwaite, 2006; Lickel et al., 2014).

Further, the present study found that negative self-evaluation significantly predicted repair motivations. This finding contrasts with the perspective that shame only leads to avoidance (Tangney, Stuewig, & Mashek, 2007). Rather the relationship between negative self-evaluation and repair indicates that shame, when examined as a behaviour, may be represented by a tendency to engage in repair. That is, individuals who experience shame are likely to engage in repair and approach behaviours resembling prosocial interactions and self-improvement (Gausel & Leach, 2011; Lickel et al., 2014).

#### **4.3 External Shame, Withdrawal Tendencies, and Stigma**

Hypothesis 2 was supported as external shame was positively and moderately associated with withdrawal tendencies. This finding aligns with an earlier study Balsamo et al. (2015), who found that shame felt as a result of others' responses to personal transgressions was linked to a fear of being judged harshly and motivations to withdraw. Withdrawal tendencies measured by the GASP may reflect an individual's response to shame associated with the fear of feeling judged by others. Moreover, external shame demonstrated a moderate positive association with depressive symptoms. This aligns with the findings of a meta-analysis by Kim et al.(2011) who identified that external shame is associated with depression, as it engages the acute awareness that an individual has lost the approval of significant others and reveals primitive anxieties of abandonment or rejection. Such dire

threat could be so distressing it results in maladaptive consequence like anxiety and depression.

Hypothesis 3 predicted external shame would moderate the relationship between negative self-evaluation and withdrawal tendencies, this was not supported. Likewise, hypothesis 7 that external shame would moderate the relationship between negative self-evaluation and repair tendencies was not supported. However, the pattern of results between external shame and withdrawal tendencies, and negative self-evaluation and withdrawal tendencies may indicate that there is a multidimensional component to withdrawal tendencies. Withdrawal tendencies are associated with negative self-evaluation; similarly withdrawal tendencies are associated with external shame. It should be noted that the relationship between negative self-evaluation was weak and not significant. While external shame showed a moderate association with withdrawal tendencies, which was significant. The moderate relationship of external shame with withdrawal may reflect the impact of felt rejection or stigma (Candea & Szentagotai-Tăta, 2018). That is, the motivation to withdraw may be a coping strategy to avoid possible felt stigma and protect ones self-image.

Internalised stigma is a form of stigma that results when an individual believes that negative stereotypes about their identity applies to them (Quinn & Earnshaw, 2013). Internalised stigma has numerous links with declined mental health, psychological distress and, depression (Mak, Poon, Pun, & Cheung, 2007; Ritsher, Otilingam, & Grajales, 2003; Ritsher & Phelan, 2004). A study by Chronister, Chou, and Liao (2013) demonstrated that higher levels of internalised stigma have been identified in individuals who withdraw or become secretive regarding their mental health illness. While this particular example is limited to individuals with mental illness, it is notable that withdrawal could indicate a level of internalised stigma. Given that internalised stigma is the application of negative

stereotypes to the self, if an individual commits a transgression which causes them to feel part of a certain stereotype, they may then internalise the stigma associated with it.

Similarly, anticipated stigma is another form of stigma that occurs when individual believes that they may receive negative treatment if others come to know of their stereotyped identity (Quinn & Earnshaw, 2013). That is, awareness of societal negative stereotypes and beliefs about an identity they relate too, may shape their expectation to a point where they feel devalued even if they have never previously been discriminated against. Anticipation of stigma during incarceration has been linked to increased social withdrawal post the release of offenders (Moore & Tangney, 2017). Withdrawal in this case is limited to a sample of offenders and may be different for other populations, however, demonstrates social withdrawal is a negative coping response to expected discrimination (Winnick & Bodkin, 2008). In line with Modified Labeling Theory (MLT; Link, Cullen, Struening, ShROUT & Dohrenwend, 1989) avoidance is a negative coping mechanism which enables stigma to deplete mental health and social interaction. That is, individuals who anticipate unfair treatment post incarceration, withdraw from situations where they may be discriminated against, which over time results in lower social support and self-efficacy, increasing anxiety and depression (Quinn & Earnshaw, 2013).

Internalised stigma and anticipated stigma are both associated with withdrawal as a negative coping style. Shame as characterised by the GASP is a negative self-evaluation which can be followed by repair or withdrawal tendencies. Results did not indicate that external shame is a moderator of negative self-evaluation and withdrawal. However, the association between external shame and withdrawal along with external shame and depression may be related to internalised or anticipated stigma. That is the GASP subscale withdrawal may in fact be measuring felt stigma. This would then also explain why negative self-evaluation does not have strong associations with withdrawal. Negative self- evaluation

is a cognitive appraisal of one entire self as flawed following a transgression (Lewis, 1971). While external shame is characterised as a negative evaluation of self, based on the perception that others see them negatively (Candea & Szentagotai-Tăta, 2018; Cibich, 2016). Withdrawal tendencies may reflect an individual's desire protect their social image, rather than an individual's own view of themselves.

#### **4.4 Perceived Reparability**

Hypothesis 4, that perceived reparability would have a negative relationship with withdrawal tendencies, was not supported. The associations between perceived reparability and the GASP subscales of negative self-evaluation, repair, and withdrawal tendencies were weak and not significant. The lack of association between negative self-evaluation, perceived reparability, and the motivation tendencies of withdraw and repair indicated that perceived reparability, following negative self-evaluation, was not likely an influential predictor of withdrawal or repair tendencies (Field, 2013).

Results did not establish evidence to support hypothesis 5, that perceived reparability would moderate the relationship between negative self-evaluation and withdrawal tendencies. Further, evidence was not established for hypothesis 8, that perceived reparability would moderate the relationship between negative self-evaluation and repair tendencies. The pattern of results for perceived reparability contrast with previous studies (De Hooge et al., 2010; 2011; Leach & Cidam, 2015). De Hooge et al., (2010; 2011) found that, after an induced shame experience, perceived reparability influenced the likelihood that participants would engage in repair behaviours. A possible influence that contributed to the findings in the present study regards the use of shame measurement. A scenario-based measure, the GASP uses hypothetical scenarios which capture proneness to shame or guilt. Luoma (2017) presents evidence that experience-based measures of shame are distinct from shame proneness measures when examining the association with alcohol consumption and related

problems. The difference between experienced shame and shame-proneness may explain the distinct relationship between perceived repairability and shame observed in the present study. Also, it should be noted the reliability of the perceived repairability items in the present study was poor. This may have also influenced the accuracy of my observations of the relationships between perceived repairability and the GASP subscales.

#### **4.5 Limitations and Future Directions**

The present study had several limitations. First the data were correlational and cross-sectional and such causality cannot be inferred. While theoretically shame appraisal, external shame, and perceived shame repairability may occur prior to motivational tendencies, this cannot discount a bi-directional or reversed relationship between these variables. While external shame may influence withdrawal and the development of depression, depression and withdrawal may also influence each other and external shame. Ethically it may not be possible to manipulate such variables, however, utilising clinical samples and comparing them with typical participants may provide further clarity regarding the directionality of these variables.

Another possible limitation relates to the use of the online survey platform Prolific to collect participants. Prolific adopts convenience sampling meaning participation is on a first-come, first serve basis. This form of sampling may increase the chances of rapid-responder bias where a considerable number of individuals who participate are likely to be online at the time the study is launched. The Prolific Team (2019) does outline that certain mechanisms are in place to reduce rapid-responding through fair distribution of the study amongst active participants, however, taking into account sampling efficiency, rapid-response bias may still be an issue. Another form of bias that may occur through Prolific samples includes satisficing, where participants select answers without careful thought and even at random just to finish the survey as quickly as possible and obtain the financial compensation. Attention

checks are a tool to combat possible satisficing by including items that identify if a participant is paying attention to the study questions (Oppenheimer, Meyvis, & Davidenko, 2009). The present study did not include attention checks and so satisficing may be present and limit the accuracy of the data collection. Despite these limitations Prolific (2019) does provide participants from a more demographically representative sample than single university or lab-based samples with participants from a wider age range, education level, and employment status.

A third limitation pertains to the power of the present study. Study power refers to the accuracy of detecting associations and differences which may be present in the population (Wilson Van Voorhis & Morgan, 2007). Prior to participant collection, power analysis was conducted to determine appropriate sample size with a power level of .80. A sample size of 63 participants was estimated using an effect size of .35, which was derived from Kim et al. (2011) meta-analysis between shame, guilt, and depressive symptoms. . The effect size taken from Kim et al.(2011) study was based on the substantive examination of the variables shame and depression. Further, research using the GASP is limited and no comparable regression analyses were found. However the predominant measure of shame and guilt in the meta-analysis was the TOSCA-3 (Tangengy & Dearing, 2002). The present study used the GASP (Cohen et al., 2011) to measure shame and guilt. Shame measured through the GASP did not demonstrate significant associations with depression (Cohen et al., 2011). This contrasts Kim et al.'s (2011) findings where shame was found to have a significant and moderate association with depression. To calculate an adequate sample size using an effect based on a contrasting scale to the GASP may be problematic. A larger sample may be needed to increase the power of the study considering the lack of association between shame and depression observed when using the GASP. That is, larger samples can increase study power through provision of closer representations of population characteristics from which they are

derived (Cronbach, Gleser, Nanda, & Rajaratnam, 1972; Marcoulides, 1993). The GASP was originally validated with a large sample size of approximately 800 participants (Cohen et al., 2011). A recent study (Bujang, Sa'at & Sidik, 2017) reported minimum sample sizes for multiple linear regression in observational studies should be at least 300 to obtain sample estimates that are truer estimates for the population parameters. A sample size of 101 may not be adequate to find accurate associations between GASP subscales and depression. Increased sample size would benefit future studies investigating the association between the GASP and depression.

Finally, a notable limitation concerns the reliability of the GASP withdraw and repair subscales in the present sample. Scale reliability analysis demonstrated poor internal consistency for these subscales. The GASP withdrawal tendencies subscale demonstrated poor internal consistency and may indicate unreliable measurement of withdrawal after a negative self-evaluation. Likewise, the GASP repair tendencies subscale demonstrated poor internal consistency and may indicate unreliable measurement of repair tendencies after a negative self-evaluation or negative behavioural evaluation. Internal consistency can be understood as the extent to which all items in a test measure the same construct and thus how they inter-relate (Cronbach, 1951). Poor internal consistency indicates a re-examination of the construct being measured is needed. Clark and Watson (2019) advise the use of factor analysis along with critical examination of theory to accurately identify dimensional aspects of scales. Confirmatory Factor Analysis is used to assess accuracy of item loadings to a construct, and it is recommended that examination of theory and careful thought should accompany this process (Clark & Watson, 2019). For example, if items that theoretically reflect a particular construct do not correlate strongly with it or other items in the scale, simply eliminating the items without considering why they behaved in an unexpected way would be limiting. Possible variables that may influence an items loading could relate to

inadequate theory, poorly worded items, extreme base rates for items, too few items embodying the core construct, or a sample that is nonrepresentative in a significant way. In the present study reliability analysis was used to address the poor reliability of the GASP. Future studies would benefit from re-evaluating the GASP subscales particularly the motivation tendencies through factor analysis and careful consideration of theory.

While factor analysis was not conducted in the present study, examination of the influences on scale reliability was presented. The initial GASP (Cohen et al., 2011) was validated using an entirely American sample. Participants in the present study identified from over 13 different nationalities with the predominant nationality being British (68%). Homogeneity in the sample can reflect in alpha, with less homogenous groups contributing to a lower alpha (Streiner, 2003). An earlier study by Poles, Torstveit, Lugo, Andreassen, and Sutterline (2018) which consisted of participants from 18 countries reported low alpha values for the GASP repair and withdraw subscales. Low interpretability of items may also contribute to the poor reliabilities of the GASP subscales. An Australian study (Min, 2019) also found noticeably lower internal consistency to that of the original GASP. Considering the GASP was validated with an entirely American sample low internal consistency as measured by Cronbach's alpha may indicate that the GASP scales, particularly withdraw and repair subscales, may need to be adapted according to the culture it is used for.

Scale length may be another variable which may influence the reliability of construct measurement. Alpha is affected by scale length, with scales over 20 items generally pushing alpha into acceptable values (Streiner, 2003). A recent study (Abraham et al., 2020) added a total of 19 items to the GASP subscales to adapt the measure for a corporate context, they reported an alpha range of .71 to .84 for the adapted scales. The original GASP scale contains 4 items per subscale totalling 16 items. Nevertheless, this is not to say that the subscales

should be increased to above 20 items but rather to highlight that there may be too few items related the constructs of withdrawal or repair.

Item-total correlations provide further evidence of how well individual items correlate to the whole scale, items are generally eliminated if they do not correlate strongly to the whole scale (Clark & Watson, 1995). In the present study the GASP repair scale corrected item total correlations ranged between .10 to .21 indicating issues with item accuracy when measuring the construct repair tendencies. GASP withdrawal corrected item total correlations were slightly higher with a range of .30 to .46, regardless this still demonstrates issues in the accuracy of items measuring withdrawal tendencies in the current sample.

The perceived reparability items following negative self-evaluation also demonstrated poor internal consistency. Perceived reparability for the present study was measured through four items following negative self-evaluation items in the GASP. The four items all asked “How repairable is this situation?” Negative self-evaluation is an evaluation of the entire self after a transgression (Lewis, 1971). The “self” through this distinction is a global construct, so being able to measure how repairable the self is through perceived reparability of a specific situation is limiting.

#### **4.6 Conclusions**

Overall, the findings from the present study did not support the moderating influence of external shame and perceived reparability on subsequent motivation tendencies following a negative self-evaluation. However, support was given for the functional aspect of shame as demonstrated by the positive association between negative self-evaluation and repair tendencies. Shame was also found to associate with withdrawal tendencies, however this relationship was weak in comparison to repair tendencies; it appears shame measurement through negative self-evaluations is associated more with repair than withdrawal. External shame was also found as an influence in the outworking of withdrawal tendencies. This

relationship alongside the weak relationship between negative self-evaluation and withdrawal, and external shame and depression could indicate withdrawal may represent a response to felt stigma. Perceived repairability was not supported as a moderator between the relationships of negative self-evaluation and subsequent motivational tendencies. That is, no association was found between perceived repairability following negative self-evaluation and either repair or withdrawal tendencies. Scale reliability analysis showed that the GASP subscales of repair and withdrawal demonstrated poor reliability in the present sample, highlighting possible measurement issues with the shame withdrawal construct and guilt repair construct. Further validation of GASP subscales is needed to clarify the findings in the present study. Nevertheless, the present paper provides further evidence that shame does not always result in withdrawal tendencies and maladaptive consequences but can lead to repair tendencies. Further the tendency to withdraw after a transgression may be a response to felt stigma, more so than a response to shame.

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## Appendices

### Appendix A

#### Guilt and Shame Proneness Scale (GASP) & Perceived Repairability Items

In this questionnaire you will read about situations that people are likely to encounter in day-to-day life, followed by common reactions to those situations. As you read each scenario, try to imagine yourself in that situation. Then indicate the likelihood that you would react in the way described.

**After realising you have received too much change at a store, you decide to keep it because the salesclerk doesn't notice.**

	Very Unlikely	Unlikely	Slightly Unlikely	About 50%	Likely Slightly	Likely	Very Likely
What is the likelihood that you would feel uncomfortable about keeping the money?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely is it you could repair this situation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**You are privately informed that you are the only one in your group that did not make the honor society because you skipped too many days of school.**

	Very Unlikely	Unlikely	Slightly Unlikely	About 50%	Likely Slightly	Likely	Very Likely
What is the likelihood that this would lead you to become more responsible about attending school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**You rip an article out of a journal in the library and take it with you. Your teacher discovers what you did and tells the librarian and your entire class.**

	Very Unlikely	Unlikely	Slightly Unlikely	About 50%	Likely Slightly	Likely	Very Likely
What is the likelihood that this would make you feel like a bad person?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely is it you could repair this situation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**After making a big mistake on an important project at work in which people were depending on you, your boss criticises you in front of your coworkers.**

	Very Unlikely	Unlikely	Slightly Unlikely	About 50%	Likely Slightly	Likely	Very Likely
What is the likelihood that you would feign sickness and leave work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**You reveal a friend's secret, though your friend never finds out.**

	Very Unlikely	Unlikely	Slightly Unlikely	About 50%	Likely Slightly	Likely	Very Likely
What is the likelihood that your failure to keep the secret would lead you to exert extra effort to keep secrets in the future?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**You give a bad presentation at work. Afterwards your boss tells your coworkers it was your fault that your company lost the contract.**



**You make a mistake at work and find out a coworker is blamed for the error. Later, your coworker confronts you about your mistake.**

	Very Unlikely	Unlikely	Slightly Unlikely	About 50%	Likely Slightly	Likely	Very Likely
What is the likelihood that you would feel like a coward?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely is it you could repair this situation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**At a coworker's housewarming party, you spill red wine on their new cream-colored carpet. You cover the stain with a chair so that nobody notices your mess.**

	Very Unlikely	Unlikely	Slightly Unlikely	About 50%	Likely Slightly	Likely	Very Likely
What is the likelihood that you would feel that the way you acted was pathetic?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely is it you could repair this situation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**While discussing a heated subject with friends, you suddenly realise you are shouting though nobody seems to notice.**

	Very Unlikely	Unlikely	Slightly Unlikely	About 50%	Likely Slightly	Likely	Very Likely
What is the likelihood that you would try to act more considerately toward your friends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**You lie to people but they never find out about it.**

	Very Unlikely	Unlikely	Slightly Unlikely	About 50%	Likely Slightly	Likely	Very Likely
What is the likelihood that you would feel terrible about the lies you told?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How likely is it you could repair this situation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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**Appendix B**

**The Other As Shamer Scale (OAS)**

We are also interested in how people think others see them. Below is a list of statements describing feelings or experiences about how you may feel other people see you. Read each statement carefully and indicate the frequency with which you find yourself feeling or experiencing what is described in the statement.

	Never	Seldom	Sometimes	Frequently	Almost Always
I feel other people see me as not good enough	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that other people look down on me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other people put me down alot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel insecure about others opinions of me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other people see me as not measuring up to them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other people see me as small and insignificant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other people see me as a defective as a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People see me as unimportant compared to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other people look for my faults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People see me as striving for perfection but unable to reach my own standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think others are able to see my defects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others are critical or punishing when I make a mistake	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People distance themselves from me when I make mistakes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other people always remember my mistakes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others see me as fragile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others see me as empty and unfulfilled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others think their is something missing in me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other people think I have lost control over my body and feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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**Appendix C**

**Center for Epidemiologic Studies Depression Scale (CES-D)**

Below is a list of statements of how you may have felt or behaved. Please tell us how often you have felt this way during the past week.

	Rarely or none of the time (Less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of the time (3-4 days)	Most or all of the time (5-7 days)
I was bothered by things that usually don't bother me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I did not feel like eating; my appetite was poor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that I could not shake off the blues even with help from my family or friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I was just as good as other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had trouble keeping my mind on what I was doing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt depressed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that everything I did was an effort.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt hopeful about the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I thought my life had been a failure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt fearful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My sleep was restless.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I talked less than usual.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt lonely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People were unfriendly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had crying spells.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt sad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that people dislike me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not get "going".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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## Appendix D

### Demographics

Thank you for your responses. Please provide your demographic information below.

Please select your gender

- Male
- Female
- Transgender
- Prefer not to answer

How old are you?

What nationality do you identify with?

In what language do you speak most often?

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