

Shame and guilt on depressive mood: Testing for the mediation role of self-esteem and rumination

Ву

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DECLARATION

Initials & Surname	Date
execution, and that all material contained here	ein has heen duly acknowledged
me for a degree at this or any other univers	ity; that it is my work in design and in
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DEDICATION

I dedicate this dissertation to my late parents: Richard Makhanya (1958-2008) and Koki Selinah Khambule (1965-2014).

...... the song is ended but the melody you left lingers on We are connected by heartstrings into infinity. I am immensely grateful for every sacrifice you've both made for me.



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The Lord God, my tower of refuge and strength. In You I am totally depended. I am infinitely grateful for the gift of life.

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ABSTRACT

The role of self-conscious emotions of shame and guilt on depression is ambiguous, while studies simultaneously investigating shame and guilt suggest that both emotions have strong unique effects on depression, it is however not yet clear which psychological processes cause shame and / or guilt to be related to depression. This study tested the hypothesis that shame but not guilt will be associated with depression, and that this relationship will be fully mediated by self-esteem and rumination. A sample of 246 university students (mean age = 20.39 years; SD = 1.89), completed a survey questionnaire with measures of shame, guilt, self-esteem, rumination and depression. Path analysis was used to analyse the data. The results indicated that shame but not guilt had a strong unique effect on depression, and that self-esteem and rumination fully mediated this relationship. However, guilt had a significant but weaker relationship with depression, and self-esteem and rumination did not mediate the relationship. Recommendations for future research and limitations of this study are also presented.

Key words: shame, guilt, self-esteem, rumination, depression



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CHAPTER 1 OVERVIEW OF THE STUDY

1. General Introduction

1.1 Introduction

Depression is one of the major mental health problems that is characterised by dysregulations of cognition and emotion. This disabling psychological condition comprise of recurrent and prolonged periods of markedly low affect (i.e. anhedonia, avolition, pessimism), cognitive difficulties (i.e. hopelessness, sadness, suicidality) and notable somatic changes (i.e. significant decrease/increase in weight, too much/too little sleep, psychomotor agitation/retardation) (DSM-5; American Psychiatric Association, 2013). These fluctuations can range from brief periods as in two weeks to years (APA, 2013). Among clinical populations, these depressive symptomatology leads to significant impairment in important areas of functioning (i.e. academic, occupational, personal and interpersonal relationships) and warrant clinical attention (Gotlib, & Hammen, 2014). Research also notes the growing prevalence rates of depression among non-clinical populations (Cuijpers & Smit, 2008; Schneider, Kruse, Nehen, Senf, & Heuft, 2000).

Depression is reported to affect about 350 million people worldwide (Marcus, Yasamy, van Ommeren, Chisholm, & Saxena, 2012). According to the World Health Organization (WHO; 2004), depression and suicide are among the leading causes of death worldwide (Gotlib & Hammen, 2014; Marcus et al., 2012). It is also rated as one of the major contributing factors to disability and disease burden due to its relation to cardiovascular diseases, stroke, and diabetes (Hare, Toukhsati, Johansson, & Jaaarsma, 2013; Golden et al., 2008; Marcus et al., 2012; Ohira et al., 2001). Lopez and Murray (1998) estimated that by the year 2020 depression would be a leading cause of death after cardiovascular diseases.



In sub-Saharan Africa, it has been estimated that depression along other psychological disorders accounts for about 10% of the total disease burden (Lopez, Mathers, Ezzati, Jamison, & Murray, 2006). Statistics South Africa's national household survey reported that 16% of the total population (at the time the population was estimated to be 44 500 000 people) were suffering from mood disorders (Statistics South Africa, 2005). A study by Tomlinson, Grimsrud, Stein, Williams and Myer (2009), estimated the lifetime prevalence rate of depressive disorders to be at 9.7% and 4.9% for the past 12 months in South Africa. Tomlinson et al. (2009) also found slightly over 90% of all the respondents in their study who in addition to reporting depressive experiences, reported role impairment in their important areas of functioning.

Depressive disorders are viewed as encompassing a wide spectrum of negative reaction to stress that affects the normal regulations of cognition and emotion. Aetiologically, self-conscious emotions of shame and guilt are increasingly been recognised as playing a role in the development of depressive disorders (Kim, Thibodeau, & Jorgensen, 2011). There is some research evidence that indicates that these self-conscious emotions show strong positive associations with a range of depressive disorders (Dearing, Stuewig & Tangney, 2005; Gilbert & Andrew, 1999; Gotlib & Hammen, 2014; Harder, 1995; Kim et al., 2011; Tangney & Dearing, 2002; Tracy, Robins, & Tangney, 2007). However, the relationship between these self-conscious emotions and depression are contradictory. Therefore clarity is needed to understand better these relationships.

Given the impact that depression has on people's functioning, it is important for practitioners to focus research efforts on understanding the aetiological factors that contribute to depression. This is important because risk factors can be identified early, subsequently, preventative methods and management approaches can be designed and put in place to optimise the management of the individuals affected by depression.

1.2 Statement of the problem



Shame and guilt are an inevitable feature of human experience. These unpleasant emotions are normally a consequence of the transgression of personal, social or moral standards (Tangney, Steuwig, & Mashek, 2007). Shame and guilt are not only commonly linked with depressive mood in everyday life but also with clinical depression (Kim et al., 2011). The relationship between guilt and depressive mood has been demonstrated in various empirical studies (see Alexander, Brewin, Vearnals, Wolff, & Leff, 1999; Ghatavi, Nicolson, MacDonald, Osher, & Levitt, 2002; Jarrett & Weissenburger, 1990; Walters-Chapman, Price, & Serovich, 1995). Similarly, shame has also been found to be related to depression (Allan, Gilbert, & Goss, 1994; Andrews, 1995; Andrews & Hunter, 1997; Andrews, Qian, & Valentine, 2002; Cheung, Gilbert, & Irons, 2003; Fontaine, Luyten, DeBoeck, & Corveleyn, 2001; Harder, Cutler, & Rockart, 1992; Stuewig & McCloskey, 2005; Tangney, Wagner, & Gramzow, 1992).

While some individuals respond to adversity with a sense of guilt, others respond by experiencing a sense of shame. The latter cohort is often said to be experiencing more psychological distress (Tracy et al., 2007), an experience that stems from their viewing and negative evaluation of their total self instead of their behaviour as flawed and defective (Lewis, 1971). Not only do shame-prone individuals experience more distress in general, they also appear to be prone to various psychological problems (Tracy et al., 2007). In guilt, an individual's self is not the centre of the negative evaluation, and this appears to motivate prosocial behaviours and leads to reparative actions against those set at risk by one's behaviour (Kim et al., 2011). Research evidence also suggests that guilt-prone individuals general tend to suffer less severe forms of psychological distress (Kim et al., 2011). In spite of the scientific data that indicate that self-conscious emotions (especially shame) have negative outcomes on mental health (see Dearing et al., 2005; Ghorbani, Liao, Çayköylü & Chand, 2013; Gruenewald, Dickerson, & Kemeny, 2007), the precise nature of the relationship between these emotions and mental health outcomes remains largely contentious. For instance, Kim and colleague's (2011) meta-analytic study found partial to small correlations between guilt-proneness and depression. However, this relationship became



insignificant when they controlled for shame. Larger and significant effect sizes between shame and depression were also reported in their results.

However, several studies (Alexander et al., 1999; Ghatavi et al., 2002; Jarret & Weissenburger, 1990; Kim et al., 2011; Walters-Chapman et al., 1995), have found that guilt but not shame was associated with depression. Although these studies are clinically useful, they also indicate some of the prevailing contradictions regarding the nature, correlates and outcomes of guilt and shame on mental health. The contradictory results of some of these studies thus warrant further empirical exploration. This study investigated the relationships between shame, guilt, self-esteem, rumination, and depression among a non-clinical sample of university students.

1.3 Aim of the study

The aim of this study was to investigate whether self-esteem and rumination mediates the relationship between shame, guilt and depression.

1.4 Objectives of the study

This study examines the mediation effect of self-esteem and rumination simultaneously for shame and guilt, by predicting that 1) shame will be associated with depression, 2) that the effect of shame on depression will be mediated by self-esteem and rumination, and 3) that shame-free guilt will show no direct effect on depression and no indirect effect mediated by self-esteem and rumination.

1.5 Research questions

- 1.5.1 Will shame be associated with depression?
- 1.5.2 Will the effect of shame on depression be mediated by self-esteem and rumination?
- 1.5.3 Will shame-free guilt show no direct effect on depression?
- 1.5.4 Will self-esteem and rumination explain if shame-free guilt is maladaptive?



1.6 Significance of the study

While studies simultaneously examining the effect of shame and guilt on depression suggest that only shame has a strong unique effect, it is however not yet clear which psychological processes cause shame and not shame-free guilt to be related to depression. To date, only two studies tested whether rumination mediates the effect of shame, although reaching conflicting results (Cheung et al., 2004; Orth et al., 2006). Cheung et al.'s (2004) study found that rumination partially mediated the shame-depression link. Whereas, Orth et al. (2006) testing the mediation effect simultaneously for shame and guilt, reported the shame-depression link to be substantially and fully mediated by rumination.

The current study was designed to provide clarity on self-esteem and rumination's mediation effect for shame and guilt's association with depression. This was done by correcting some of the methodological limitations of the two cited studies, namely: 1) testing of the mediation effect only for shame, 2) the exclusion of all elements of the causal chain, e.g., self-esteem in the tested model and 3) the use of methodologically problematic event-based and scenario-based measures (i.e., due to their context based nature).

1.7 Operational definition of terms

1.7.1 Depression

In the context of this study depression is used to refer to a clinical syndrome comprising recurrent, prolonged and significant changes in affective (i.e. anhedonia, avolition, sadness and or irritable mood), cognitive (i.e. hopelessness, helplessness, suicidality) and somatic (i.e. significant decrease/increase in weight, too much/too little sleep, psychomotor agitation/retardation) functioning that has deleterious outcomes on individual's functioning (at home, work, school and interpersonal domains) (DSM-5;



American Psychiatric Association, 2013). Among non-clinical populations, these symptoms may well be present but they do not cause significant impairment in functioning in important areas of life and do not warrant a diagnosis of clinical depression.

1.7.2 Self-conscious emotions

A group of emotions that are elicited when an individual fails to live up to his/her and other's standards and expectations, these can be real and or imagined (see Tangney & Dearing, 2002; Tracy et al., 2007). For these emotions to be elicited an individual has to have the capacity for self-awareness and self-reflection, and to evaluate his/her behaviour and or him/herself against the standards, expectations and behavioural rules that govern his/her social relational functioning in his/her social environment (Tangney & Dearing, 2002; Tracy et al., 2007; Tangney et al., 2007).

1.7.3 Shame

Shame is a self-focused emotion that focuses the negative evaluations originating from the failure in meeting important standards, expectations and behavioural rules that govern behaviour to the total self (Tangney & Dearing, 2002; Tracy et al., 2007; Tangney et al., 2007).

1.7.4 Guilt

Guilt is a behaviour-focused emotion that focuses the negative evaluations originating from failure in meeting important standards, expectations and behavioural rules that govern behaviour on the particular aspects of one's behaviour (Tangney & Dearing, 2002; Tracy et al., 2007; Tangney et al., 2007).

1.7.5 Self-esteem



An individual's perceived self-worth and favourability in comparison to others in the contexts of his interpersonal and social relationships (Leary & Baumeister, 2000).

1.7.6 Rumination

A cognitive response style to distress characterised by recurrent compulsive reflecting and brooding over the symptoms of one's distress, and on their possible causes and consequences, as opposed to its solutions (Nolen-Hoeksema, Roberts, & Gotlib, 1998; Papageorgiou & Wells, 2001).

1.8 **Conclusion**

This chapter provided the context from which the multivariate relationship between self-conscious emotions and depression can be understood and evaluated. The problem statement of this study was discussed in relation to the literature and empirical evidence, so was the probable significance of this study. The study's aim, objectives and research questions were also highlighted. Lastly, the definition of terms used in this study was provided.



CHAPTER 2 THEORETICAL PERSPECTIVE AND LITERATURE REVIEW

2. Introduction

This chapter examines various theoretical perspectives and literature pertaining to the study.

2.1 Theoretical Perspective

This study used a combination of theoretical explanations to examine cross-sectional relationships between self-conscious emotions, self-esteem, rumination and depression among university students. In accordance with Self-discrepancy theory (Higgins, 1987), shame but not guilt involves the imagined negative evaluation of the self from the perspective of significant others. The theory proposes that standpoints on the self-representations and beliefs about the self, elicit different emotional discomforts. Shame is viewed as a dejection-related emotion that arises from a perceived discrepancy between the actual self and the ideal self, whereas guilt is conceptualised as an agitation-related emotion that arises from the perceived discrepancy between actual self and the ought self (Higgins, 1987).

In both these emotions, an individual evaluates him/herself and his/her worth (and favourability) through the eyes of the significant others. In shame, the resulting discrepancy between actual self-state and ideal representation leads to the experience of shame. The resulting painful emotional experience elicited by shame then threatens an individual's self-esteem. According to the Sociometer theory, this threat to and probable drop in self-esteem, serve to warn the individual that his/her relational value is at risk and disturbs optimal cognitive processing of experience (Leary & Baumeister, 2000). Following this theory, self-esteem denotes an individual's subjective evaluation of his/her worth and favourability in comparison to others in the contexts of his interpersonal and social relationships (Leary & Baumeister, 2000). The threat to and possible drop in self-esteem due to shame thereof signals to the



individual that there is a risk in the fulfilment of the need for belongingness, a fundamental human need and a core aspect of the self (Leary & Baumeister, 2000).

This threat to the fundamental need for belongingness then elicits rumination about the problematic situation and potential solutions in accordance with Rumination theory (Papageorgiou & Wells, 2001). Consequently, ruminative processes are set in motion as a result of the lack of ways of repairing the total self that is judged as defective. In response, an individual either withdraws from others, attacks the self and/ or others since access to social resources for coping is also inhibited by the risk of relational loss (Leary & Baumeister, 2000; Nolen-Hoeksema et al., 1998; Papageorgiou & Wells, 2001). This ruminative process then becomes the centre of an individual's attention, where the focus is on the negative aspects of the total self, and these results in depression, as hypothesised by the Response style theory (Nolen-Hoeksema et al., 1998).

2.2 Literature Review

Shame and guilt have long been conceptualised as unitary constructs in the psychological literature (see Tomkins, 1962). However, over the past decade, there has been growing agreement in distinguishing shame and guilt (Tangney & Dearing, 2002; Tracy et al., 2007). These self-conscious emotional states entail a negative evaluation of the self (Tangney, 1999). Guilt is a moral emotion precipitated by the transgression of moral values, mainly emanating from interpersonal relations (Baumeister, Stillwell, & Heatherton, 1994; Haidt, 2003). While shame may also be a product of moral violations, it is, however, not limited to situations with moral significance. A significant feature of shame is that the individual perceives the failure of the self in meeting important social standards. This includes both moral standards, competence and aesthetic standards.

Another difference between guilt and shame is that guilt implies a negative judgment of a specific behaviour, while shame entails a negative evaluation of



the global self (cf., Tangney, 1999). Likewise, guilt and shame elicit dissimilar interpersonal motivations. While guilt is often followed by empathy and reparative behaviour for those violated by the moral transgression, shame decreases empathy and elicits avoidance and aggression motivation (Tangney, 1991; Tangney, Wagner, Fletcher, & Gramzow, 1992). Accordingly, guilt is considered to be a more adaptive emotional state than shame - which is currently recognised to be antagonistic to well-being (Tracy et al., 2007).

Although sufficient evidence points that guilt is more adaptive than shame (see Tangney & Dearing, 2002, 2011; Tracy et al., 2007), there are instances where it can be possibly psychopathogenic. For instance, Shapiro and Stewart (2011), report that excessive, persistent and irrational guilt may be the core motivating emotional experience in anxiety disorders and obsessive-compulsive and related disorders. Although the specific pathways and mechanisms of associations between pathological guilt, anxiety and mood disorders are not fully known as yet, several other studies have also found evidence and reported on this link (see Gangemi, Mancini, & van den Hout, 2007; Mancini & Gangemi, 2004; Mancini, Gangemi, Perdighe, & Marini, 2008; Nissenson, 2006; Takashi, et al., 2004). Furthermore, in the case of survivor guilt among army veterans with post-traumatic stress disorder, guilt is often excessive and pathogenic and often presents challenges for effective psychotherapeutic treatment of post-traumatic stress disorder (Okulate & Jones, 2006).

2.2.1 Self-conscious emotions

Human emotions can be grouped into two classes of basic and self-conscious emotions (Izard, 2009). Factor analytic studies and qualitative research evidence suggests that such grouping holds true (Izard, 2009; Tracy et al., 2007). The former entails a cohort of emotions such as joy, disgust, happiness, anger, sadness, and fear (Lagattuta & Thompson, 2007). These emotion has also been referred to as cognitive-independent emotions because they tend to be autonomic and require less cognitive processing and abilities for them to be elicited (Izard, 2007; 2009). Although some basic



emotions such as anger, sadness and fear may involve some self-evaluative processes, they do not require these processes for them to be elicited (Tangney & Dearing, 2002; Tracy et al., 2007). Furthermore, basic emotions appear early in the phase of human development, are biologically-driven, involve rudimentary cognitive processes and are generally amenable to studying and manipulation in laboratory settings (Barrett & Wager, 2006; Beer, 2006; Ekman, 2003; Izard, 2009; Tangney & Dearing, 2002; Tracy & Robins, 2004). Basic emotions have often been thought of as universal and pan-cultural (Cacioppo, Berntson, Larsen, Poehlmann, & Ito, 2000), and serving to promote the fulfilment of survival, reproductive and biological needs and goals (Tangney & Dearing, 2002; Tracy & Robins, 2004).

The last category proposed include emotions such as embarrassment, pride, guilt and shame and these are accorded the status of self-conscious emotions (Izard, 2009; Tracy & Robins, 2004; Tracy et al., 2007). These emotions have also been called cognitive-dependent emotions, on the basis of them solely requiring cognitive processes to be elicited (Blum, 2008; Izard, 2009), this requirement is a critical feature of self-conscious emotions - that is without complex and advanced cognitive evaluative and reflective processes they cannot be elicited (Blum, 2008; Kim et al 2011; Tracy et al., 2007). Second, since self is at the very core of self-conscious emotions, a developed sense of self and identity is important for their elicitation (Tangney & Dearing, 2002; Tracy & Robins, 2004). Researchers agree that since a sense of self starts developing later in the phase of human development during adolescence through to adulthood (Lagatutta & Thompson, 2007), this later development of the self correlates with the inception of the development of self-conscious emotions (Lagatutta & Thompson, 2007). To elucidate, self-conscious emotions require that an individual have self-awareness and a stable sense of uniqueness that is related yet separate from others (Laguttuta & Thompson, 2007; Kim et al 2011; Lewis & Brooks-Gunn, 1979), the ability to direct attention to oneself thus reflecting (Laguttuta & Thompson, 2007; Kim et al 2011; Lewis & Brooks-Gunn, 1979), an ability to understand that self is the source of behaviour (Kagan, 1981; Laguttuta & Thompson, 2007; Lewis & Brooks-Gunn, 1979), the capacity for apprehending, internalizing and



carrying-out standards, norms, and values guiding behaviour (Laguttuta & Thompson, 2007; Stipek, Recchai, & McClintic, 1992), the capacity for awareness of the discrepancies between these standards, norms, and values and one's own self-representation and behaviour (Tangney & Dearing, 2002; Tracy et al., 2007; Weiner, 1985), the ability to make attributions of behaviour and the ability to make sense of those attributions (Weiner, 1985). Recently, Tracy and Robins' (2004) theoretical model of self-conscious emotions has found evidence for this line of thinking about self-conscious emotions.

2.2.2. Unique nature of self-conscious emotions

2.2.2.1 Self-conscious emotions require complex and advanced cognitive abilities

Piaget's formal operational stage which extends from adolescence into adulthood has been linked to the inception of the development of complex and advanced cognitive processes needed for self-conscious emotions to be elicited (Laguttuta & Thompson, 2007; Lapsley, 1993; Mora, Gobbo, Marinii, & Sheese, 2007; Mezirow, 2000). Empirical evidence from cognitive and developmental psychology suggests that pre-adolescence developmental processes see the emergence of hypothetico-deductive reasoning abilities (see Moshman, 1998; Kuhn, 2009; Kellogg, 2007). The effect of this development is that an adolescent's ability to use, understand and apply abstract reasoning related to complex modes of symbolism and abstract concepts in his/her environment increases exponentially (Lagatutta & Thompson, 2007). Self-reflection and metacognition 'thinking about thinking' are such abilities that emerge with adolescence, at this stage, adolescents become increasingly aware of their emerging personalities and identity and they refine them accordingly to meet their own understanding of themselves and their context (Lagatutta & Thompson, 2007). Furthermore, research from developmental psychology has proved that the development of self reaches its peak in adolescent and that a sense of self which Sroufe (1990) called selfreflective self "allow for the youth to observe and reflect on his/her own perspective and capacities" (Sroufe, 1990, p. 55).



2.2.2.2 Self-conscious emotions require self-awareness and self-representations

As previously discussed, an essential feature of self-conscious emotions is that they require the capacity for self-awareness and self-representation, this is a by-product of cognitive development (Lagatutta & Thompson, 2007). This feature also significantly differentiates self-conscious from basic emotions. The availability of self-awareness and self-representation makes it possible for self-evaluative processes to take place, and consequently self-conscious emotions (Lagatutta & Thompson, 2007; Tracy & Robin, 2004; Tracy et al., 2007).

2.2.2.3 Self-conscious emotions serve identity-relevant and social needs and functions

It is likely that emotions evolved through the process of natural selection, and this evolutionary process have emerged to serve two primary functions: the promotion of the attainment of survival, reproductive and biological needs and functions and the promotion of the attainment of identity-relevant and social needs and functions (Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007). These two primary functions have distinctly unique features with divergent outcomes on human welfare (Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007). As social creatures, human beings have identity-relevant and social needs that are essential for psychosocial functioning, and these are probably indirectly linked to essential for survival, reproductive and biological needs and goals (Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007). Whereas basic emotions serve to accomplish survival, reproductive and biological needs, self-conscious emotions serve to accomplish identity-relevant and social needs (Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007).

Humans being have evolved to be able to negotiate terms for interactions within their social systems that are often structurally complex in terms of the multiple layers of overlying, and sometimes contradictory and conflicting hierarchical organisation (Tangney & Dearing, 2002; Tracy & Robins, 2004;



Tracy et al., 2007). In line with this idea, it is thought that self-conscious emotions have evolved to coordinate and encourage socially-relevant moral behaviours that motivate harmonious social relations and functioning in these settings (Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007). Taken together, the self-conscious emotions (are supposed to) promote behaviours that increase interpersonal and social effectiveness and functioning across various contexts (Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007). In addition, self-conscious emotions are likely to encourage individuals to engage in behaviours that result in positive reinforcement and reward 'socially valued behaviours' and to elude engaging in behaviours that would result in social discord and result in punishment (Tangney & Dearing, 2002; Tracy & Robins, 2004). Simply put, society prescribes what kind of a person one ought to and should be; one internalizes these standards, expectations, behavioural rules and beliefs in the form of ideal self-representations; and self-conscious emotions actual and encourages prosocial behavioural repertoires whose goals are embodied in and consistent with these self-representations (Higgins, 1987; Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007). By reinforcing and rewarding prosocial behaviours, humans are encouraged to act in socially acceptance ways - in this way, self-conscious emotions also assist in the facilitation of interpersonal reciprocity (Tangney & Dearing, 2002; Tracy & Robins, 2004).

2.2.3 The different types of self-conscious emotions.

2.2.3.1 Embarrassment

Embarrassment is a self-conscious emotion that requires self-evaluative processes and an evaluation of threats to identity and social needs to be elicited (Tracy & Robins, 2004). However, unlike guilt and shame, embarrassment does not require any further attributions — as such it is focused on the on social blunders and deficiencies that one commits in the presence of others in the here-and-now (Weir, 2002). Thus for embarrassment to be elicited less cognitive processes are involved. In



addition to its cognitively simplicity, the experience of embarrassment require that an individual be aware of his/her normative social blunders and deficiencies in the presence of others, be aware of the discrepancies between his/her public self in the presence of others, notice their reactions as likely relevant to his/her identity and or social need or functioning as they manifest in the here-and-now (Tracy & Robins, 2004; Weir, 2012). As a result, although embarrassment may involve the judgement that one's identity and social goals are at stake, it does not require complex self-evaluative processes and intricate attributional processes because the attentional focus is on the public self (Tracy & Robins, 2004; Weir, 2012). Other researchers argue that embarrassment is a weaker form of shame and that it lies on the lower end of the continuum of shame (Tracy & Robins, 2004). Embarrassment is, however, different from guilt, pride and shame on the dimensions of the attributions since embarrassment do not often involve further attributions because it is based on the here-and-now manifestation of experience in the presence of others (Tracy et al., 2007). A lack of precise nature of this distinction between the emotions is however hampered by the paucity of research on embarrassment (Tracy et al., 2007).

2.2.3.2 Pride

As a self-conscious emotion, pride is experienced when an individual generally considers that he/she is responsible for favourable social outcomes or for being socially valuable (Tracy & Robins, 2004). Through a series of factor analytic studies, Tracy and Robins (2004) have found support for the long hypothesised two-faces of pride, which are differentiated by the stability and globality of their attributions. Authentic pride refers to the form of pride experienced when an individual makes attributions to internal, unstable, specific and controllable causes (e.g. I am proud of what I *did* [notice the emphasis on the behaviour 'italic']). Authentic pride is based on actual achievements and is likely to co-occur with realistic feelings of achievement, effort, self-worth and a realistic self-esteem (Tracy & Robins, 2004). The focus of authentic pride is on the particular thing that an individual did. Hubristic pride is the second form of pride and is experienced when an individual



makes attributions to internal, stable, global and uncontrollable causes (e.g. *I am* proud of what I did [notice the emphasis on the self 'italic']). Hubristic pride may well be based on realistic accomplishment as authentic pride, however, the often inflated and grandiose sense of self-worth that accompanies it is often unrealistic or an over-exaggeration of one's true potential (Robins, Tracy & Shaver, 2001; Tracy & Robins, 2007). The inflated and grandiose sense of self-worth in hubristic pride is viewed as part of a dynamic regulatory mechanism through which feelings of shame are suppressed and a false sense of self is exaggerated to bypass experiencing shame (Robins et al., 2001; Tracy & Robins, 2004; 2007). These two forms of pride have been consistently found to hold true and have divergent causal factors, personality correlates and mental health outcomes (Tracy & Robins, 2004; 2007). In conclusion, pride is elicited when an individual views and evaluates a positive event as important to their identity and social needs and goals and as caused by internal caused.

2.2.3.3 On guilt and shame

Guilt and shame are the most researched of the self-conscious emotions (Tracy et al., 2007). Research indicate that the two emotions are likely to be elicited by a similar set of processes. For guilt and shame to be elicited an individual must focus attention on the self thus triggering self-representations, and then evaluate the events as significant to and probably incongruent with their identity and social goals, make attribution of the cause of the event to some internal factors, blaming oneself for the situation or blaming the behaviour (Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007). As previously discussed, what differentiates the causal factors of the two emotions, though, are stability and globality attributions: shame entails painful feelings about the internal, global, stable, and uncontrollable aspects of the self, whereas guilt entails less painful feelings about a specific behaviour (Tangney & Dearing, 2002; Tracy & Robins, 2004). Regarding the phenomenology of these emotions, guilt is reported to comprise a felt experience of tension and a sense of uneasiness, concern for others and other-oriented emotions (i.e. empathy, perspective-taking, etc.) (Kim et al.,



2011; Tangney & Dearing, 2002). Shame's phenomenology comprises feelings of inadequacy, being exposed, inferiority, small and defective (Kim et al., 2011; Tangney & Dearing, 2002).

Since guilt is conceptualised as a more adaptive emotion because of its cognitively flexible attributional style that focuses on the specific aspects of one's behaviour it is likely to be weakly related to psychopathology unless it is infused with shame then it becomes problematic (Tracy & Robins, 2007). Shame, on the other hand, is normally thought to spiral into maladaptive behaviour due to the attack of the total self, coupled with a lack of ways to repairing it since it is perceived as all-bad (Tracy & Robins, 2007), this experience likely motivates defending against the negative affect by use of various unhelpful defences as proposed by Nathanson (1992) and Elison, Lennon and Pulos (2006).

2.2.4 The significance of studying guilt and shame

Focus on self-conscious emotions is important for various reasons. First, sufficient empirical evidence points that generally self-conscious emotions are a life-blood of human beings' social and mental well-being, they lie at the heart of human life (Sroufe, 1997). Second, emotions serve to promote vital human functions as environmental mastery, social cohesion and relations, safety and survival of species (Tangney & Dearing, 2002; Tracy & Robins, 2004). Third, emotional reactions communicate socio-emotional needs, intents and desires of an individual to and from the larger social group (Tangney & Dearing, 2002; Tracy & Robins, 2004). Last, through the involvement of biological systems, emotions, also promote responses to danger and physiological functioning of an individual (Tangney & Dearing, 2002; Tracy & Robins, 2004). For these reasons, it is important to investigate and determine the extent to which these emotions can serve to promote human welfare and or are antagonistic to welfare by mapping their pathways to psychopathology.



Specific to self-conscious emotions, research is flourishing that indicates that these emotions have a myriad of consequences on human welfare (Tangney et al., 2007; Tracy, Robins & Tangney, 2004; 2007). Self-conscious emotions specifically evolved to help individuals to deal effectively with social interactions, however, if not well regulated these emotions can be harmful to human welfare as they will lose their adaptive value and display their dark side (Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007). The 'dark side' of these emotions is the thwarting of the fulfilment of identity-relevant and social needs that are vital for harmonious social relations (Leary & Baumeister, 2000). It is thus important to study these emotions given their evident impact on human social and mental welfare. The link between these emotions, especially guilt and shame and psychopathology, is well established (Tracy et al., 2007). This link is robust across assessment methods, cultures and diverse populations (Tangney & Dearing, 2002; Tracy & Robins, 2004; Tracy et al., 2007).

In this particular study, focus is on guilt and shame and their impact on depression. The relationship between these three constructs has proved to be complex and contradictory. Since guilt is seen as a lesser painful emotion its impact on function is hypothesised to be less impactful compared to shame which has been linked to many forms of severe psychological maladies (Tracy et al., 2007). Although these claims have been found to be true, there remains a chasm in terms of understanding how guilt and shame are individually linked to depression, and which psychological factors may help explain their relationship with / to depression. An effort to critically study the nature of these two closely related yet separated emotions is important for that reason. More so, if these emotions have an impact on welfare, it is worth understanding the extent to which they can be deleterious to well-being (Tracy et al., 2007), gaining this knowledge is important for treatment planning. Second, given the paucity of research on depression in an African context, efforts to study the role of guilt and shame as aetiological factors in depression is a worthwhile undertaking.

2.2.5 Shame and guilt, and depression



Past research suggests that the relationship between guilt and depression disappears or is less significant when shame is controlled for (see Alexander et al., 1999; Fontaine et al., 2001; Harder et al., 1992; Stuewig & McCloskey, 2005; Tangney et al., 1992). For instance, Fontaine et al. (2001; cf., Luyten, Fontaine, & Corveleyn, 2002) reported semi-partial correlations at sr = 0.35 for shame and depression (partialing out guilt from shame) and at sr = -0.04 for guilt and depression (partialing out shame from guilt). Furthermore, Harder et al. (1992) reported semi-partial correlations at sr = 0.24 for shame and sr = 0.17 for guilt. Stuewig and McCloskey (2005) reported semi-partial correlations at sr = 0.22 for shame and sr = -0.13 for guilt with anxiety and depression.

Lastly, Tangney et al., (1992) reported semi-partial correlations at about sr = 0.30 to 0.40 for shame and at about sr = 0.00 for guilt. However, Alexander et al. (1999) reported a partial correlation with pr = 0.06 for shame and depression (controlling for guilt) and pr = 0.28 for guilt and depression (controlling for shame). These inconsistent results may be accounted for by methodological factors. For example, the use of varying concepts underlying scales measuring shame and guilt. Another reason for this problem is the pervasive use of the concepts of shame and guilt as unitary construct in the psychological literature (Tangney, 1999).

2.2.6 Self-esteem, shame and depression

The role of self-esteem is noteworthy in the relationship between shame, rumination and depression. Johnson and O' Brien (2013) reported a significant positive correlation between self-compassion and self-esteem, but no correlation was found between self-compassion and shame-free guilt. They also reported that self-esteem in addition to shame and rumination significantly mediated the relationship between self-compassion and depression (Johnson & O' Brien, 2013). Gao, Qin, and Qian (2013), also found that shame-proneness correlated with low self-esteem, higher anxiety, fear of negative evaluation and depressive symptomatology. Furthermore,



their mediation analysis, found shame-proneness to significantly predict selfesteem and accounted for 17% of the variance in the relationship (Gao et al., 2013). Self-esteem also fully mediated the relationship between shameproneness and depressive symptoms (Gao et al., 2013).

2.2.7 Rumination, shame and depression

In shame, rumination may entail a persistent and recurrent thinking pattern over the shameful experiences and the accompanying emotions aroused by such thinking (Gotlib, & Hammen, 2014; Joireman, 2004). Rumination in shame disturbs normal emotion processing mechanism by hindering the process of accepting painful emotions and working through them positively (Compare et al., 2014). It incapacitates an individual's ability to generate effectual plans and solutions to addressing problems (Covert, Tangney, Maddux, & Heleno, 2003), and thwarts an individual's sense of self-efficacy about their abilities to effectively solve their problems (Covert et al., 2003; Elison, Lennon, & Pulos, 2006).

There is now some evidence that suggests that shame-proneness and rumination are related especially in depression (Cândea, Matu, & Szentágotai, 2014; Gotlib, & Hammen, 2014; Papageorgiou & Wells, 2004). This recurrent, persistent and unhelpful brooding over the past negative self-focused experiences then explains why shame-prone individuals and/or guilt-prone individual are more likely to be depressed than non-ruminators (Gotlib, & Hammen, 2014; Orth et al., 2006; Papageorgiou & Wells, 2004). In fact, some research evidence document that shame-proneness, rumination and depressive symptomatology seem to be strongly related (Cândea et al., 2014; Kim et al., 2011; Nolen-Hoeksema, 2000; Orth et al., 2006; Papageorgiou & Wells, 2004). A recent study by Hiroki, Ayano, Asuka, Nobuhiro and Yohsuke (2015) found that shame-prone individuals were more likely to self-punish than their counterparts who did not report experiencing shame. Suicide ideation has been found to higher among shame-proneness individual than their guilt-prone counterparts (Blum, 2008). This evidence thus gives rise to the idea that rumination is involved in the shame-pathology link. Evidence for



this link (shame-rumination-depression) was recently reported by Orth et al. (2006), where rumination was found to have explained (i.e., mediated) the relationship between shame and depression.

2.3 Conclusion

This chapter looked at how self-conscious emotions are related to depressive mood. The impact of rumination and self-esteem in the relationship between guilt, shame and depression were highlighted. Various ways and processes through which emotions of shame and guilt may and may not be linked or related to depression were highlighted.



CHAPTER 3 RESEARCH METHODOLOGY

3. Introduction

This chapter presents a description of the research design and procedures of the present study.

3.1 Research design

This study adopted a quantitative exploratory research method, with a crosssectional survey design. Quantitative research is an inquiry into an identified problem, based on testing a theory, measured with numbers, and analysed using statistical techniques (e.g., Structural Equation Modeling) (Creswell, 2002). This assumes an empiricist perspective to research, whereby, the goal quantitative methods) is to determine whether the predictive generalisations of a theory hold true (Popper, 2002; Ryan & Julia, 2007). Human behaviour follows some laws and rules of causation, which can be discovered via rational and logical investigative analysis (Popper, 2002; Ryan & Julia, 2007). Processes and complexities pertaining to theories, laws, rules and their relationships can be reduced to simpler and more readily understandable principles or working knowledge (Popper, 2002; Ryan & Julia, 2007).

This reductionism then makes it possible to determine the validity, reliability, generalisability, and objectivity of human behaviour (Ryan & Julia, 2007). Human behaviour can, therefore, be best understood by analysing the interrelations among multiple factors as guided by theories (Ryan & Julia, 2007). Ontologically, the empiricist perspective holds that reality is objectively given, can be quantifiable, measured, manipulated and controlled using tools that are independent of the researcher (Popper, 2002; Ryan & Julia, 2007). This method, therefore, seeks to understand social processes and reality by use of methods of observing and analysing large data. The overarching assumption here is that there is a causal link between phenomena. Our



interest was in modeling relationships among variables, their influence on each other and their differential outcomes.

3.2 **Participants**

A convenient sample of 246 students from the University of Pretoria was recruited for participation in this study. Larger sample sizes are often necessary for studies employing more complex data analysis techniques [i.e. structural equation modeling (SEM)], and they also serve to enhance the statistical power of the analyses (cf., Hatcher, 2013). Convenient sampling was used on the basis of student's availability and willingness to participate (Gravetter & Forzano, 2012). Despite the issue of accessibility, the use of university students in our study is consistent with previous studies investigating similar variables (Kim et al., 2011). Moreover, self-esteem, depression and self-conscious emotions take prominence among students given their developmental phase and life-task as emerging adults (Else-Quest, Higgins, Allison, & Morton, 2012). Registered students taking undergraduate Humanities studies were targeted for participation.

3.3 Research instruments

The data was collected with the following questionnaires: a demographic questionnaire, the Personal Feelings Questionnaire-2 (PFQ-2), the Rosenberg self-esteem scale (RSES), the Rumination Response Scale (RSS), and the Patient Health Questionnaire-9 (PHQ-9).

3.3.1 Demographic questionnaire

In the demographic information, participants were asked to provide information on their background. All the respondents indicated their age, gender, ethnic identification and the current level of study.

3.3.2 Personal Feelings Questionnaire-2 (PFQ-2; Harder & Zalma, 1990)



The PFQ-2 is a 16-item measure of guilt and shame proneness. The PFQ-2, has two subscale (i.e., guilt and shame, respectively). Six items load on the guilt factor and ten load on the shame factor. Respondents indicate on a 5-point Likert-type scale the extent to which they agree with the items (0: I did not experience this feeling to 4: I experience the feeling very strongly). The mean scores on the guilt subscale range from 0 to 18, higher scores indicate greater experience of guilt. The mean scores on shame sub-scale range from 0 to 40, higher scorers indicate greater experience of shame. Rüsch et al. (2007) reported good internal consistency for the measure (i.e., α = 0.86 for the guilt sub-scale and α = 0.91 for the shame sub-scale). The PFQ-shame subscale had good internal consistencies in the current study (PFQ-shame = 0.85 and PFQ-guilt = 0.81). The internal reliability coefficient of the total scale was 0.89 in the present study.

3.3.3 Rosenberg self-esteem scale (RSES; Rosenberg, 1965)

The RSES is a 10-item unidimensional measure of global state self-esteem that assesses both positive and negative feelings towards the self. Respondents indicate on a 4-point Likert-type scale the extent to which they agree with the items (1: strongly disagree to 4: strongly agree). Five positively worded items assess positive self-esteem while the remaining five negatively worded items assess negative self-esteem. Supple, Su, Plunkett, Peterson, and Bush (2013) reported good internal consistency of 0.86 for the full RSES scale in their racially diverse sample. The RSES had an internal consistency of 0.88 in the present study.

3.3.4 Rumination Response Scale (RSS; Treynor, Gonzalez, & Nolen-Hoeksema, 2003)

The RRS is a 10-item measure of depressive rumination with two sub-scales (i.e., brooding and reflecting, respectively). Respondents indicate on a 4-point Likert-type scale the extent to which they disagree (1: almost never) to agree (4: almost always) with the statements in the questionnaire. Smart (2013) reported good internal consistency of the scale (i.e., $\alpha = 0.87$ for the brooding



subscale and α = 0.82 for the reflecting sub-scale). The internal reliability coefficient of the scale was 0.82 in the present study.

3.3.5 Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001)

The PHQ-9 is a 9-item self-report measure of depression. Respondents indicate the frequency of depressive symptoms on a 4 point Likert-type scale, that is, whether each symptom occurred over a two weeks period (0: not at all to 3: nearly every day). A single cut-off score of 10 or more will be used as a threshold for depression (Kroenke et al., 2001). Botha (2011) validated the PHQ-9 with a multicultural sample (i.e., students and community members) and reported an internal consistency reliability coefficient of α = 0.86. The internal reliability coefficient of the scale was 0.87 in the present study.

3.4 **Procedure**

Guidelines for conducting ethical research from the University of Pretoria were adhered to. Data was only collected after ethical clearance had been granted by the Faculty of Humanities' Research and Ethics Committee. In addition, the Dean of the Faculty of Humanities, the Head of Department of Psychology and the lecturer responsible for the module (that was identified for collecting data from) were requested permission to access the students. The participants in this survey were undergraduate Humanities students studying at the University of Pretoria. The survey entailed a self-report questionnaire self-administered individually outside of students' normal class hours. An open invitation was made to the students with the assistance of their lecturer and those who volunteered were then included as participants. The purpose of the research was explained and participants were informed of their rights before volunteering to participate in the study. Only students who agreed to participate in the planned survey completed the informed consent forms and then proceeded to respond to the self-report questionnaires. The questionnaire was only available in English since it is one of the languages of tuition at the University of Pretoria.



3.5 Ethical considerations

All students provided written consent before participating in the study. Participation in this study was voluntary. Confidentially of the participants was safeguarded since no identifying information was collected for participation in this study. No information about a diagnosis of any psychological problem (i.e., depressive mood) and or psychological treatment was asked as prerequisites for participation. No foreseeable risks and discomforts were anticipated by participating in this survey study.

The participants were informed that they can at any point during the study choose to withdraw without any consequences. Although there is no empirical evidence indicating that completion of self-report questionnaires on depressive mood can exacerbate psychological distress, the researchers kept in mind the possibility that some students who are already having difficulties with depressive symptomology may experience the process as particularly taxing. During the research process none of the participants experienced the process as such. Should any student have had some distress as a result of completing the questionnaire, the student would be referred to the University of Pretoria's Student Counseling Centre for debriefing. No form of remuneration for participation in this study was offered. The raw data will be securely stored (i.e., HSB 11-23) for reuse and archiving for a minimum period of 15 years. Other researchers will also have access to the data during this period.

3.6 Conclusion

This chapter presented a description of the research design and procedures undertaken to execute the study.



CHAPTER 4 RESULTS

4. Introduction

This chapter presents the results of the study and the interpretation of the data for the study.

4.1 Data analysis strategy

The SEM path analysis with maximum likelihood estimation was conducted using AMOS 22.0 (Arbuckle, 2013). The first analyses considered self-esteem and rumination as mediators of the association between shame and depression. Relatedly, the analysis also examined a hypothesized chain mediation path model that proposed self-esteem and rumination as mediators of the relationship between guilt and depression.

Mediating effects of self-esteem and rumination were tested following Holmbeck's (1997) and Baron and Kenney's (1986) guidelines on mediation and moderation analysis. The validity of the structural models was considered based on the statistical significance of the path coefficients and overall model fit. The fit indices were reported: the chi-square statistic (p > 0.05), the comparative fit index (CFI; ≥ 0.95), the goodness of fit index (GFI; > 0.90), the adjusted goodness of fit index (AGFI; > 0.80), and the root mean square error of approximation (RMSEA; < 0.06) along with its related 90% confidence interval (Bryne, 2010; Kline, 2005). The mediating effects of self-esteem and rumination were examined for significance using Bootstrap estimation in Amos, wherein a bootstrap sample of 1000 was specified.

4.2 Presentation of results

Descriptive data



Of the total sample, about forty-one (17%) were male, 201 (81.7%) were female, 1 participant (.4%) indicated "Other", and 3 participants (1.2%) did not indicate their gender. The average age of the participants was 20.39 (range 17-31) with a standard deviation of 1.89. Hundred and thirty (52.8%) participants were black, 89 (36.2%) were white, 15 (6.1%) were Asian/Indian, 9 (3.7%) were Coloured, 2 participants (.8%) indicated "Other" as their race, and 1 participant (.4%) did not indicate his/her race.

Scores on the PFQ shame subscale ranged from 0 to 40, with a mean score of 13.09, (SD = 7.21), 13.00 as median and the mode was 11.00. Scores on the PFQ guilt subscale ranged from 0 to 24, with a mean score of 8.20, (SD = 4.98), 8.00 as median and the mode was 10.00. Scores on the RSES (selfesteem) ranged from 10 to 40, the mean for this measure was 27.99, (SD = 5.96), 27.00 as median and the mode was 24.00. The RSS (rumination) scores ranged from 8 to 38, the mean for this measure was 22.66, (SD = 6.12), 23.00 as median and the mode was 25.00. Last, the PHQ (depression) scores ranged from 0 to 25, the mean for this measure was 9.66, (SD = 6.23), 9.00 as median and the mode was 3.00. About hundred and ten participants (45 %) scored on the symptomatic range (\geq cut-off point of 10) of the PHQ (Kroenke & Spitzer, 2002; Kroenke, Spitzer, & Williams, 2001).



Table 1
Sample demographics

		Frequency	Percentage
Ages	17-20 years	136	58.4
	21-31 years	97	41.6
Race	Black	130	53.8
	Coloured	9	3.7
	White	89	36.3
	Asian	15	6.1
Gender	Female	201	82.0
	Male	41	16.7
Educational level	Undergraduate	243	99.6
	Post-graduate	1	0.4

Note: Numbers in columns for each variable do not always add up to 246 due to missing values.



4.3 Skewness, kurtosis, mean and reliability coefficients of the research instruments

The normality of the data and the psychometric properties of the scales were tested. The skewness and kurtosis for each of the individual scales are within range. All the measures had high reliability coefficients (see Table 2).



Table 2
Skewness, kurtosis, mean and Cronbach's alphas of the research instruments

		Skewness	Kurtosis	Mean	SD	α	Items
1.	PFQ Shame	0.410(0.164)	-0.349(0.326)	13.09	7.21	0.851	10
2.	PFQ Guilt	0.463(0.160)	-0.270(0.320)	8.20	4.98	0.809	6
3.	PHQ	0.488(0.158)	-0.541(0.316)	9.67	6.235	0.872	9
4.	RRS	0.187(0.160)	-0.397(0.319)	22.66	6.120	0.829	10
5.	RSES	-0.324(0.163)	-0.388(0.324)	27.99	5.642	0.880	10



4.4 Relationship between predictors, mediators and outcome variable

Table 3 provides the results of the association between shame, guilt, self-esteem, rumination and depression. As the table demonstrates, all of the correlations are statistically significant (p < 0.01) and are in the expected directions.



Table 3

Correlations among predictors, mediators and outcome variable

		1	2	3	4	5	
1.	PHQ	-					
2.	RRS	0.599**	-				
3.	RSES	-0.587**	-0.484**	-			
4.	PFQ shame	0.515**	0.504**	-0.477**	-		
5.	PFQ guilt	0.439**	0.372**	-0.338**	0.666**	-	

Note:

^{**}*p* < 0.01



4.5 Shame-depression path model

The hypothesized model proposed that the association between shame and depression would be mediated by self-esteem and rumination. The model fit results for the simple associations (in Table 4), demonstrated a good fit to the data: χ^2 [27] = 36.62, p > 0.05; CFI = 0.98; TLI = 0.97; RMSEA = 0.04. There was a significant relationship between shame and depression (β = 0.542, p < 0.05). The full model also indicated a good fit: χ^2 [352] = 408.48, p > 0.05; CFI = 0.97; TLI = 0.97; RMSEA = 0.03, however, while the association between shame and self-esteem (β = -0.544, p < 0.5), self-esteem and rumination (β = -0.703, p < 0.05) and rumination and depression (β = 0.951, p < 0.05) were significant, the previously significant simple association between shame and depression became non-significant and the effect size reduced (β = 0.078, p = 0.152). The results suggest that self-esteem and rumination are possible mediators for the relationship between shame and depression.

4.6 Guilt-depression path model

This model suggested that the relationship between guilt and depression would be mediated by self-esteem and rumination. The model fit indices for a simple association between guilt and depression (Table 5), indicated a good fit to the data: χ^2 [27] = 40.70, p < 0.05; CFI = 0.98; TLI = 0.96; RMSEA = 0.05. There was a significant association between guilt and depression (β = 0.427, p < 0.05). The full model also indicated a good fit: χ^2 [352] = 409.26, p < 0.05; CFI = 0.97; TLI = 0.97; RMSEA = 0.03. The path from guilt to self-esteem was significant in the hypothesised direction (β = -0.404, p < 0.05), while the association between self-esteem and rumination (β = -0.688, p < 0.05), and rumination and depression (β = 0.944, β < 0.05) were also significant. Lastly, the previously significant simple association between guilt and depression remained significant and even though the effect size reduced (β = 0.113, β = 0.022). This suggests that self-esteem and rumination do not mediate the relationship between guilt and depression.



Table 4: Fit indices for each mediation model test (shame-depression link)

							90%
Model	χ^2	p	df.	CFI	TLI	RMSEA	RMSEA CI
							_
Direct effects	36.62	0.10	27	0.98	0.97	0.04	0.00, 0.07
Full model	408.48	0.02	352	0.97	0.97	0.03	0.01, 0.04

Table 5: Fit indices for each mediation model test (guilt-depression link)

							90%
Model	χ^2	p	df.	CFI	TLI	RMSEA	RMSEA CI
Direct effects	40.70	0.04	27	0.98	0.96	0.05	0.00, 0.08
Full model	409.26	0.01	352	0.97	0.97	0.03	0.01, 0.04



4.7 Conclusion

This chapter reported the results of the study. It is also provided evidence that self-esteem and rumination mediated the shame-depression relationship, but did not for the guilt-depression relationship.



CHAPTER 5 DISCUSSION

5. Introduction

This chapter presents the discussion of the results and compares the findings of the current study with those reported previously by other studies. This chapter will also present recommendations and limitations of this study.

5.1 The relationship between shame and depression

This study found that shame and depression show a strong relationship. This finding is consistent with recent empirical research findings on the shame-depression association (Andrews, Qian & Valentine, 2002; Carvalho, Dinis, Pinto-Gouveia, & Estanqueiro, 2015; Castilho, Xavier, Pinto-Gouveista, & Costa, 2015; Matos & Pinto-Gouveia, 2011; Matos, Pinto-Gouveia, & Costa, 2011; Pinto-Gouveia, Matos, Castilho, & Xavier, 2014).

Shame involves the negative evaluation of the entire selfhood, and it can be thought of as having a depressogenic attributional style through its focus on the internal, stable and global aspects of the self (Blum, 2008; Muris & Meesters, 2014; Tangney, Wagner, & Gramzow, 1992). In fact, this attribution style has been found to foster and predict depressive symptoms (Abramson et al., 2002). In many ways shame also involves phenomenological experiences similar to depression such as global feelings of helplessness, perceived inner irreparable defectiveness, incompetence, inferiority, hopelessness, and powerlessness (Andrews, Qian & Valentine, 2002) and both generate a desire to socially withdraw from others perceived and or experienced as shame-inducing or holding a negative view of one's self (Andrews et al., 2002; Ferguson, Stegge, Miller, & Olsen, 1999).

Gilbert (2002) also argues that shame and depression are linked because shame threatens an individual's social status and social rank, to which an individual responds by withdrawal. The perceived reproach from others from



whom one socially withdraw as proposed by the self-discrepancy theory (Higgins, 1987), further amplify the isolation (emotional and social); sustaining the negative emotional state, and the preoccupation with one's perceived unattractive flaws or defects. The resulting inward directed hostility due to failure to fix the self that is perceived as flawed and defective, in addition to the isolation and inward directed hostility, the lack of social support may also lead to or exacerbate depressive mood (Elison, Garofalo, & Velotti, 2014).

Furthermore, since shame threatens an individual's personal and relational worth, it is often internalised as an attempt to deal with it and to hide it from others (Cook, 1996; 2001; Elison, Lennon, & Pulos, 2006a; 2006b). Consequently, this only leads to an internal emotional turmoil and dysregulation difficulties in interpersonal functioning (Cook, 1996; Kim et al., 2011). Once internalised it becomes a source of a hyper-aroused state of inner experience that is often expressed through or as aggression towards others, withdrawal from others, avoidance of social spaces and attacking the self as defences or coping strategies against it (Elison, Lennon, & Pulos, 2006a; 2006b). It is probable that in depressive disorders, the prominent coping strategy when shame is experienced is avoidance of and withdrawal from social interactions and attack on the self.

Studies by Harper and Hoopes (1990) and Lundberg, Kristenson, and Starrin (2009) have found evidence for the association between shame-proneness and pessimism, a trait that is closely related to depression. Harper and Hoopes (1990) found that participants who reported experiencing shame were more likely to believe that everything in their lives will go wrong for them and that they were generally more hyper-vigilant about others with whom they relate to uncovering and being aware of their shame. They also reported that rejection (attack of others) was also used as a defence to keep people who may probably uncover their shame at bay as they may find out that they are flawed and defective, therefore unattractive and unworthy of connection (Harper & Hoopes, 1990).

5.2 The relationship between guilt and depression



This study found that guilt and depression were also associated, although not as strong as that of depression with shame. While many studies have found this link (e.g. Alexander, Brewin, Vearnals, Wolff, & Leff, 1999; Ghatavi, Nicolson, MacDonald, Osher, & Levitt, 2002; Jarrett & Weissenburger, 1990; Walters-Chapman, Price, & Serovich, 1995) there seem to be a failure in literature to explain why and how guilt is related to depression. Orth et al., (2006) suggests that methodological and conceptual issues in shame and guilt may account for the often competing results in empirical research. The relationship between guilt and depression is also acknowledged in the DSM-5 (APA, 2015), where it is listed as a symptom of major depressive disorder. This was confirmed by several studies (e.g. Demaria & Kassinove, 1995; Jarrett & Weissenburger, 1990; Jones & Kruger 1993) in spite of recent literature suggesting that shame but not guilt may be more pathological especially in depressive disorders.

Literature is clear and a consensus exists that guilt encompasses a more flexible, although still negative attributional style focusing the evaluation of the external, unstable and specific aspects of one's behaviour (Blum, 2008; Muris & Meesters, 2014; Tangney, Wagner, & Gramzow, 1992) and that it encourages prosocial behaviour via motivating reparative acts (i.e. seeking forgiveness, showing regret, remorse, apology, etc.) towards those set at risk by one's behaviour (Blum, 2008; Muris & Meesters, 2014; Tangney, Wagner, & Gramzow, 1992). Guilt also appears to be transitory and its process can be easily interrupted and remediated by engaging in prosocial behaviours (Blum, 2008; Muris & Meesters, 2014). These features of guilt, appear to be inconsistent with the typical clinical picture and presentation of depressive symptomatology (viz., withdrawal from and avoidance of social interactions, emotional and social isolation, behavioural repertoires and accompanying affective experiences) (Kim et al., 2011; Muris & Meesters, 2014). Evidently, the self-system in guilt is not in a state of perceived inhalation and disintegration as it may probably be in shame (Blum, 2008; Kim et al., 2011; Muris & Meesters, 2014).



It appears that there could be other types of guilt which may explain the guilt-depression link. Kim, Thibodeau, and Jorgensen (2011) make a distinction between legitimate and maladaptive guilt. According to these authors, legitimate guilt is situationally-appropriate, includes accurate attributions about causality and effect, and reflects reality-based experiences (Kim et al., 2011). In case of maladaptive guilt, Kim et al. (2011) argue that it entails inaccurate, faulty attributions of responsibility even in things that are unrelated to an individual. On the other hand, Blum (2008) indicates that there is a difference between incompetence guilt during which an individual feels guilt from taking an action or not taking an action in any given situation (e.g. witnessing and reporting a crime, learning something about someone, etc.). The other type of guilt he mentions is perpetuator guilt, in which guilt is elicited when an individual feels that personal, interpersonal and social acts were beyond his moral standing and consequently his/her beyond justification (Blum, 2008).

It appears that Blum's (2008) typology is similar to Kim et al.'s (2008) distinctions of guilt. It appears that incompetence guilt and legitimate guilt carry similar features in that both seem to be based on reality-bound experiences and they may elicit almost sufficient amount of guilt that is not disproportionate and both may be thought to be adaptive in a specific situation. On the other hand, perpetuator gilt and maladaptive guilt appear to be maladaptive because they seem to elicit self-contempt, uncertainty and a sense of faulty attributions that are not found in reality about causality. Perhaps these latter types of guilt (perpetuator and maladaptive) can be better thought of as shame-infused guilt which may be what is found to be pathogenic in depressive disorders as stated in the DSM-5 (APA, 2013). It also appears that both incompetence and legitimate guilt illicit self-contempt, an essential component of shame, the two can be thought of as variants of shame-infused guilt (Tracy et al., 2013).

However, there is no literature on these types of guilt; even their existence appears to be questionable (Blum, 2008). Moreover, it is difficult to ascertain the exact nature of shame-infused guilt and to differentiate it from 'clean/pure' shame and shame-free guilt. Kim et al. (2011) hypothesise that legitimate guilt



can show negligible correlations with depression but maladaptive guilt would show stronger links with depression.

5.3 Associations between self-esteem, rumination, guilt, shame and depression

Self-esteem and rumination were negatively correlated in this study. Both selfesteem and rumination have been conceptualised as depressogenic factors (Kuster et al., 2012). There are several reasons explaining how and or why low self-esteem increases rumination. First, it is probable that individuals with a low self-esteem are vulnerable to experiencing negative affect when they self-reflect (Orth, Robins, & Widaman, 2012). In an effort to deal with the negative emotions they may misdirect their attention and experience of negative emotions by suppressing their thoughts and feelings, however, this has been linked to rumination (Wenzlaff & Wegner, 2000). Second, individuals with a low self-esteem have a general propensity to want to hide their perceived unattractiveness from others (Cameron, Holmes, & Vorauer, 2009), such concealment has been found to elicit ruminative processes (Gold & Wegner, 1995). Third, in line with the sociometer theory (Leary & Baumeister, 2000), a low self-esteem indicates to an individual that his/her relational value is at risk, thus threatening a fundamental need for belonging (Leary & Baumeister, 2000), which may elicit rumination. Last, unstable or contingent self-esteem has been linked with low self-esteem (Kuster et al., 2012), the low self-esteem may increase the likelihood of the occurrence of rumination during which individuals ruminate about the cause and outcomes of the instability of their self-esteem (Meier, Orth, Deniesse, & Kühnel, 2011; Okada, 2010).

Self-esteem and guilt were negatively correlated. Although some researchers advocate for the adaptive nature of guilt, this study did not find guilt to be adaptive as some prevailing literature indicates (see Zahn-Waxler, Kochanska, Krupnick, & McKnew, 1990). The present study found that guilt is related to low self-esteem, thus suggesting the maladaptive nature of guilt.



This signifies that the more guilt-prone individuals are, the more likely that their self-esteem is probably low.

The data revealed that self-esteem and shame had a negative correlation, indicating that the lower the self-esteem, the higher the levels of shame among the study's sample. This study confirms previous literature (Gilbert & Procter, 2006), asserting that individuals who experience low self-esteem are prone to negative emotions such as shame and anxiety. Likewise, this study's finding is in agreement with theorists who hypothesise that (low) self-esteem and shame have a shared variance regarding the perceived feelings of unfavourability, feelings of worthlessness and inadequacy (Wells et al., 1999). As such, individuals who experience low self-esteem are likely to have difficulties with experiencing elevated levels of shame (Wells, et al., 1999).

The study found that self-esteem was negatively correlated to depression. High self-esteem is expected to have no correlation with depression (negative affect), whilst low self-esteem has been linked to depression in several studies (Orth & Robins, 2013). In fact, low self-esteem is now understood to be a risk factor for depression (Orth & Robins, 2013). Furthermore, self-esteem is a relatively stable characteristic which is likely to predispose people to depression (Klein, Kotov, & Bufferd, 2011). Reportedly, using mediated vulnerability models a low self-esteem predicts clinical depression (Ormel, Oldehinkel & Volleberg, 2004; Sowislo & Orth, 2013; Trzesniewski et al., 2006).

5.4 Associations between rumination, guilt, shame and depression

Rumination was positively correlated with guilt although the correlation was weak. This finding is consistent with other studies (Joireman, 2004). It is probable that the self-focused attention of rumination has an impact on guilt because in both cases the focus is on the perceived unattractiveness about one's behaviour and action/inaction (Dempsey & Ferguson, 2000). Rumination has been speculated to be a variant of guilt, with reference to the brooding and reflecting over one's perceived failure in behaving in socially



appropriate ways (see Dempsey & Ferguson, 2000). Dempsey and Ferguson (2000) argue that the phenomenology of ruminative guilt is similar to that of guilt in that they both predominantly involve the focus on the negative effect of one's misdoings. However, the ruminative guilt reflects an excessive preoccupation with the negative affective tone of the experience than on the source of the problem at hand as it would normally be expected in pure rumination.

Rumination was strongly correlated with shame. Since rumination is a response style to distress characterised by recurrent compulsive reflecting and brooding over the symptoms of one's distress, and on their possible causes and consequences, as opposed to its solutions (Nolan, Roberts, & Gotlib, 1998; Papageorgiou & Wells, 2001), it is probable that shame-prone individuals' rumination tends to be directed inwardly toward themselves instead of externally, thus explaining the strong positive relationship between rumination and shame in this study. It is also likely that ruminating has an impact on shame because rumination disturbs normal information and cognitive processing by creating a repetitive maladaptive loop that diminishes problem-solving and heightens the focus on the self as defective thus enhancing shame (Cheung et al., 2003). Thus, rumination makes shame to be depressogenic.

Lastly, rumination was strongly correlated with depression. This finding suggests that as rumination increases so do depression. As previously discussed, rumination too, in addition to low self-esteem are both considered risk factors for the development of depression (Kuster et al., 2012). A focus on the self instead of behaviour in rumination can foster depression (Nolan, et al., 1998). For example, it can be deduced that the progression of depression once rumination sets in is likely to elicit depressive symptoms such as isolation and suicide ideation (APA, 2013) because the individual has a better opportunity to ruminate when in isolation.

5.5 Self-esteem and rumination as mediators in the relationship between shame and depression



Self-esteem and rumination fully mediated the relationship between shame and depression. No study could be found that tested the role of self-esteem and rumination simultaneously as mediators of the relationship between shame and depression. This finding is a novel addition to the literature. A study by Kuster et al. (2012) found that rumination mediated the relationship between low self-esteem and depression. Shame affects an individual's social belonging, this blow to self-esteem results in a low self-esteem which individuals may try to conceal by suppression or misdirection which may set ruminative processes in motion (Schoenleber & Berembaum, 2011; Wenzlaff & Wegner, 2000).

Orth and Robins (2013) postulate that self-esteem and depression are conceptually related since individuals with a low self-esteem tend to report feelings of worthless, hopelessness, incompetence and global feelings of inadequacy. Cameron, Holmes and Vorauer (2009) reported that globally low self-esteem has shame-like features in that individuals with low self-esteem try to hide their subjectively perceived unfavourability and perceived unattractiveness from others. Some research evidence indicated that nondisclosure of self-esteem difficulties facilitates the elicitation of rumination (Gold & Wegner, 1995). Secondly, the threat to the basic need for belongingness via a drop in self-esteem may elicit self-focused thoughts about one's social value and worth (Leary & Baumeister, 2000). Lastly, research also suggests that low self-esteem is related to and elicits rumination since the focus of their attention is already on the causes of their problems (Camborn, Acitelli & Pettit, 2009; Mezulis & Funasaki, 2009).

The link between rumination and depression has been studied extensively than the self-esteem-depression link. Within the response style theory (Nolen-Hoeksema, 1991; 2008), rumination exaggerates depressive symptoms. The mechanism of this relationship is that when an individual ruminates, their focus is on obsessive brooding and reflecting on the cause and source of their distress not necessarily on finding solutions to their problems (Nolen-Hoeksema, 2008). Rumination's self-focused attention has been found to have a causal effect on depression (Mor & Winquist, 2002).



5.6 Self-esteem and rumination as mediators of guilt and depression

This study found no evidence that self-esteem and rumination mediates the relationship between guilt and depression. This finding is consistent with several empirical research findings. Given that in this study guilt was conceptualised as a behaviour-focused emotion that focuses the negative evaluations originating from failure in meeting important standards, expectations and behavioural rules that govern behaviour on the particular aspects of one's behaviour (Tangney & Dearing, 2002; Tracy et al., 2007; Tangney et al., 2007), it is likely that both rumination and (low) esteem are essential features of guilt and may all be potential risk factors for developing depression instead of potential mediators (Kuster et al., 2012). It is also likely that since the relationship between rumination and depression has been extensively studied and that the link between the variables in rather more clear cut (Nolen-Hoeksema et al., 2008), rumination alone has been found to predict depressive mood more accurately than (low) self-esteem (Nolen-Hoeksema et al., 2008).

5.7 **Recommendation**

Future research should involve clinical populations to have an improved understanding of the relationship between the guilt and shame on depression, since research on this population is scant. It may also be useful to assess the effect and extend to which cognitive vulnerability factors such as causal orientation and self-efficacy impacts the relationship between self-conscious emotions and depression. Since a significant number of the participants were female in this study, future research should correct gender discrepancies by recruiting a balanced number of participants from both genders as having uneven number of gender could result in sampling bias and likely skewing the results which is likely to have been the case in this study. Last, it is hoped that future research would employ longitudinal studies to study causality.

5.7 Limitations



First, this study relied on the use of self-report questionnaires and required the participants' retrospection about their past experience, as such participants may have under- or over-reported their experiences. Second, a significant number of the participants identified themselves as black and white, racial diversity lacked in this study. Third, the sample was made up of university students only without a community or clinical sample which would have improved the robustness of the results. Last, the results of this study cannot be generalised to other populations since it involved only a subset of university students.

5.8 Conclusion

This chapter discussed and provided context for the results. Recommendations for future research and limitation of this study were provided.



References

- Abramson, L. Y., Alloy, L. B., Hankin, B. L., Haeffel, G. J., MacCoon, D. G., & Gibb,
 B. E. (2002). Cognitive vulnerability-stress models of depression in a self-regulatory and psychobiological context. In I. H. Gotlib & C. L. Hammen (Eds.),
 Handbook of depression (pp. 268–294). New York, NY: Guilford Press.
- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2009). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, *30*(2), 217-37.doi: 1016/j.cpr.2009.11.004
- Alexander, B., Brewin, C. R., Vearnals, S., Wolf, G., & Leff, J. (1999). An investigation of shame and guilt in a depressed sample. *British Journal of Medical Psychology*, 72, 323-338.
- Allan, S., Gilbert, P., & Goss, K. (1994). An exploration of shame measures: II. Psychopathology. *Personality and Individual Differences, 17,* 719–722. doi:10.1016/0191-8869(94)90150-3.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Arlington, VA: Author.
- Andrews, B. (1995). Bodily shame as a mediator between abusive experiences and depression. *Journal of Abnormal Psychology*, *104*, 277–285. doi:10.1037/0021-843X.104.2.277.
- Andrews, B., & Hunter, E. (1997). Shame, early abuse, and course of depression in a clinical sample: A preliminary study. *Cognition and Emotion*, *11*, 373-381.
- Andrews, B., Qian, M., & Valentine, J. D. (2002). Predicting depressive symptoms with a new measure of shame: The Experience of Shame Scale. *British Journal of Clinical Psychology*, *41*, 29-42.
- Arbuckle, J. L. (2013). Amos 22.0 update to the Amos user's guide. Chicago: SPSS.
- Arbuckle, J. L., & Wothke, W. (1999). *Amos 4.0 user's reference guide.* Chicago, Small-Waters Corporation.



- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 6, 1173-1182.
- Barrett, L. F., & Wagner, T. D. (2006). The structure of emotion: Evidence from neuroimaging studies. *Current Directions in Psychological Science*, *15*, 79-83.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, *115*, 243-267.
- Beer, J. S. (2006). The importance of emotion-social cognition interactions for social functioning: Insights from orbitofrontal cortex. In E. H. Jones & P. Winkielman (Ed.), *Fundamentals of Social Neuroscience*. Cambridge, MA: MIT Press.
- Blum, A. (2008). Shame and guilt, misconceptions and controversies: A critical review of the literature. *Traumatology*, *14*, 3, 91-102.
- Botha, M. (2011). *Validation of the Patient Health Questionnaire-9 in an African context* (Master's dissertation). North-West University, Potchefstroom Campus.
- Byrne, B. (2010). Structural Equation Modeling with AMOS: Basic concepts,

 Applications and Programming (2nd ed. Multivariate Applications Series). New

 York. NY: Routledge
- Cacioppo, J. T., Berntson, G. G., Larsen, J. T., Poehlmann, K. M., & Ito, T. A. (2000). The psychophysiology of emotion. In M. Lewis & M. Haviland-Jones (Eds.), *The handbook of emotion* (pp. 173-91). New York, NY: Guilford Press.
- Cambron, M. J., Acitelli, L. K., & Pettit, J. W. (2009). Explaining gender differences in depression: An interpersonal contingent self-esteem perspective. *Sex Roles,* 61, 751-761.
- Cameron, J. J., Holmes, J. G., & Vorauer, J. D. (2009). When self-disclosure goes awry: Negative consequences of revealing personal failures for lower self-esteem individuals. *Journal of Experimental Social Psychology, 45*, 217-222.
- Cândea, D. M., Matu, S. A., & Szentágotai, A. (2014). Individual differences in shame-proneness and trait rumination as predictors of depressive symptoms.



- Procedia Social and Behavioral Sciences, 127, 277-281. doi: 10.1016/j.sbspro.2014.03.255.
- Carvalho, S., Dinis, A., Pinto-Gouveia, J., & Estanquiero, C. (2015). Memories of shame experiences with others and depression symptoms: The mediating role of experiential avoidance. *Clinical Psychology and Psychotherapy, 22,* 32-44. doi: 10.1002/cpp.1862.
- Castilho,P., Xavier, A., Pinto-Gouveista, J., & Costa, T. (2015). When the "threat system" is switched on: The impact of anger and same on paranoia. *Revista de Psicopatologia y Pscicologia Clinica*, *20*, 199-2008. doi: 10.5944/rppc.vol.20.num.3.2015.15895.
- Castonguay, A. L., Brunet, J., Ferguson, L., & Sabiston, C. M (2012). Weight-related actual and ideal self-states, discrepancies, and shame, guilt, and pride:

 Examining associations within the process model of self-conscious emotions.

 Body Imagine, 9, 488-494. doi: 10.1016/j.bodyim.2012.07.003.
- Cheung, M., Gilbert, P., & Irons, C. (2003). An exploration of shame, social rank and rumination in relation to depression. *Personality and Individual Differences, 36,* 1143–1153. doi:10.1016/S0191-8869(03)00206-X.
- Compare, A., Zarbo, C., Shonin, E., Van Gordon, W., & Marconi, C. (2014). Emotional regulation and depression: A potential mediator between heart and mind. *Cardiovascular Psychiatry and Neurology, 2014, Article ID 324374,* 10 pages, 2014.doi: 10.11155/2014/324374.
- Cook, D. R. (1996). Empirical studies of shame and guilt: The internalized shame scale. In D. L. Nathanson, (Ed.), *Knowing feeling: Affect, script, and psychotherapy* (pp. 132-165). New York, NY: W.W. Norton.
- Cook, D. R. (2001). *Internalized shame scale: Technical manual.* North Towanda, NY: Multi-Health Systems, Inc.
- Covert, M. V., Tangney, J. P., Maddux, J. E., & Heleno, N. M (2003). Shame-proneness, guilt-proneness, and interpersonal problem solving: A social cognitive analysis. *Journal of Social and Clinical Psychology*, 22(1), 1-12. doi: 10.1521/jscp.22.1.1.22765.



- Creswell, J. (2002). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River, NJ: Merrill Prentice Hall.
- Cuijpers, P., & Smith, F. (2008). Subclinical depression: A clinically relevant condition? *Tijdschrift voor Psychiatrie*, *50*(8), 519-28.
- Dearing, R. L., Stuewig, J., & Tangney, J. P. (2005). On the importance of distinguishing shame from guilt: Relationship to problematic alcohol and drug use. *Addictive Behaviors*, *30*(7), 1392-1404. doi: 10.1016/j.addbeh.2005.02.002.
- Demaria, T., & Kassinove, H. (1991). Predicting guilt from irrational beliefs, religious affiliation and religiosity. *Journal of Rational Emotive and Cognitive Behavior Therapy*, 6, 259-272.
- Dempsey, H. L., & Ferguson, T. (2000, February). *Ruminative and empathic guilt:*Two sides of the same coin. Poster presented at the First annual meeting for Personality and Social Psychology in Nashville, Tennessee.
- Ekman, P. (2003). *Emotions revealed*. New York: Times Books.
- Elison, J., Garofalo, C., & Velotti, P. (2014). Shame and aggression: Theoretical considerations. *Aggression and Violent Behaviour, 19*(4), 447-453. doi: 10.1016/j.avb.2014.05.002
- Elison, J., Lennon, R., & Pulos, S. (2006a). Investigating the compass of shame: The development of the compass of shame scale. *Social Behavior and Personality*, 34(3), 221-238.
- Elison, J., Pulos, S., & Lennon, R. (2006b). Shame-focused coping: An empirical study of the Compass of Shame. *Social Behavior & Personality, 34,* 161-168.
- Else-Quest, N. M., Higgins, A., Allison, C., & Morton, C. L. (2012). Gender differences in self-conscious emotional experience: A meta-analysis. *Psychological Bulletin*, *138*(5), 947-981. doi: 10.1037/a0027930.



- Erk, S., Mikschl, A., Stier, S., Ciaramidaro, A., Gapp, V., Weber, B., & Walter, H. (2010). Acute and sustained effects of cognitive emotions regulation in major depression. *The Journal of Neuroscience, 30*(47), 15723-15734.
- Ferguson, T. J., Stegge, H., Miller, E. R., & Olsen, M. E. (1999). Guilt, shame, and symptoms in children. *Developmental Psychology*, *35*, 347-357.
- Fontaine, J. R. J., Luyten, P., De Boeck, P., & Corveleyn, J. (2001). The Test of Self-Conscious Affect: Internal structure, differential scales and relationships with long-term affects. *European Journal of Personality*, *15*, 449-463.
- Gangemi, A., Mancini, F., & van den Hout, M. (2007). Feeling guilty as a source of information about threat and performance. *Behaviour Research Therapy*, 45(10), 2387-2396. doi: 10.1016/j.brat.2007.03.011.
- Gao, J., Qin, M., & Qian, M. (2013). Validation of the TOSCA-3 among Chinese young adults. *Social Behavior and Personality, 41*(7), 1209-1218. doi: 10.224/sbp.2013.41.7.1209.
- Ghatavi, K., Nicolson, R., MacDonald, C., Osher, S., & Levitt, A. (2002). Defining guilt in depression: A comparison of subjects with major depression, chronic medical illness and healthy controls. *Journal of Affective Disorders, 68*, 307–315. doi:10.1016/S0165-0327(01)00335-4.
- Ghorbani, M., Liao, Y., Çayköylü, S., & Chand, M. (2013). Guilt, shame, reparative behaviour: The effect of psychological proximity. *Journal of Business Ethics*, 114(2), 3113-323.doi: 10.1007/s10551-012-1350-2.
- Gilbert, P. (2002). Body shame: A biopsychosocial conceptualisation and overview, with treatment implications. In P. Gilbert & J. Miles (Eds.), *Body shame:*Conceptualisation, research and treatment (pp. 3-54). Hover: Brunner-Routledge.
- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-esteem criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy, 13*(6), 353-379.



- Gold, D. B., & Wegner, D. M. (1995). Origins of ruminative thought: Trauma, incompleteness, nondisclosure, and suppression. *Journal of Applied Social Psychology*, 25, 1245-1261.
- Golden, S. H., Lazo, M., Carnethon, M., Bertoni, A. G., Schreiner, P. J., Diez Roux, A. V., ... Lyketsos, C. (2008). Examing a bidirectional association between depressive symptoms and diabetes. *JAMA*, 299(23), 2751-2759. doi: 10.1001/jama.299.23.2751.
- Gotlib, I. H., & Abramson, L. Y. (1999). Attributional theories of emotion. In T. Dalgleish & M. J. Power (Eds.), *Handbook of cognition and emotion* (pp. 613-636). Chichester, UK: Wiley.
- Gotlib, I. H., & Hammen, C. L. (Eds.). (2014). *Handbook of depression (3rd ed.)*. New York, NY: Guildford Press.
- Gravetter, F. J., & Forzano, L. B. (2012). *Research methods for the behavioural sciences (4th ed.).* Belmont, CA: Wadsworth, Cengage Learning.
- Griffin, B. J., Moloney, J. M., Green, J. D., Worthington, E. L., Cork, B., Tangney, J. P., ... Hook, J. N. (2016). Perpetrator's reactions to perceived interpersonal wrongdoing: The associations of guilt and shame with forgiving, punishing, and excusing oneself. *Self and Identity*, 15(6), 650-661. doi: 10.1080/15298868.2016.1187669.
- Gruenewald, T. L., Dickerson, S. S., & Kemeny, M. E. (2007). A social function for self-conscious emotions: The social self-preservation theory. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 68–87). New York, NY: Guilford Press.
- Haidt, J. (2003). The moral emotions. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 852-870). Oxford, UK: Oxford University Press.
- Harder, D. H., & Zalma, A. (1990). Two promising shame and guilt scales: A construct validity comparison. *Journal of Personality Assessment, 55*(3-4), 729-745.



- Harder, D. W., Cutler, L., & Rockart, L. (1992). Assessment of shame and guilt and their relationships to psychopathology. *Journal of Personality Assessment, 59*, 584–604. doi: 10.1207/s15327752jpa5903_12.
- Hare, D. L., Toukhsati, S. R., Jojansson, P., & Jaarsma, T. (2013). Depression and cardiovascular disease: A clinical review. *European Heart Journal*, *35*, 1365-1372. doi: 10.1093.euheartj/eht462.
- Harper, J. M., & Hoopes, M. H. (1990). *Uncovering shame: An approach integrating individuals and their family systems*. New York, NY: W, W. Norton.
- Hatcher, L. (2013). Advanced statistics in research: Reading, understanding and writing up data analysis results. Saginaw, MI: Shadow Finch Media.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*, 319-340.
- Hiroki, T., Ayano, Y., Asuka, K., Nobuhiro, M., Yohsuke, O. (2015). Shame-prone people are more likely to punish themselves: A test of the reputation-maintenance explanation for self-punishment. *Evolutionary Behavioral Sciences*, *9*(1), 1-7. doi: 10.1037/ebs0000016
- Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literature. *Journal of Consulting and Clinical Psychology*, 65, 87-96.
- Howell, A. J., Turowski, J. B., & Buro, K. (2012). Guilt, empathy and apology. *Personality and Individual Differences, 53*(7), 917-922. doi: 1.1016/j.paid.2012.06.0210.
- Hu, L., & Bentler, P. M. (1999) Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. doi: 10.1080/10705519909540118.
- Huang, C. (2015). Relation between attributional style and subsequent depressive symptoms: A systematic review and meta-analysis of longitudinal studies.



- Cognitive Therapy and Research, 39(6), 721-735. doi: 10.1007/s10608-015-9700-x.
- IBM Corporation. (2013). *IBM SPSS statistics for windows, version 22.0.* Armonk, NY: IBM Corp.
- Izard, C. E. (2007). Basic emotions, natural kinds, emotion schemas, and a new paradigm. *Personality and Psychological Science*, *2*, 260-80.
- Izard, C. E. (2009). Emotion theory and research. Highlights, unanswered questions, and emerging issues. *Annual Review of Psychology, 60*, 1-25. doi:10.1146/annurev.psych.60.110707.163539.
- Jarrett, R. B., & Weissenburger, J. E. (1990).Guilt in depressed outpatients. *Journal of Consulting and Clinical Psychology*, *58*, 495–498. doi:10.1037/0022-006X.58.4.495.
- Johnson, E. A., & O'Brien, K. A (2013). Self-compassion soothes the savage egothreat system: Effects of negative affect, shame, rumination, and depressive symptoms. *Journal of Social and Clinical Psychology, 32*, 9, 939-963. doi: 10.1521/jscp.2013.32.9.939.
- Jones, W. H., & Kruger, K. (1993). Interpersonal correlates of the guilt inventory. *Journal of Personality Assessment, 61*, 246-258.
- Joireman, J. (2004). Empathy and self-absorption paradox II: Self-rumination and self-reflection as mediators between shame, guilt, and empathy. *Self and Identity*, 3, 3, 225-238. doi: 10.1080/13576500444000038.
- Kagan, J. (1981). *The second year*. The emergence of self-awareness. Cambridge, MA: Harvard University Press.
- Kellogg, R. T. (2007). *Fundamentals of cognitive psychology*. Thousand Oaks, California: Sage Publications.
- Kenny, D. A., Kashy, D., & Bolger, N. (1998). Data analysis in social psychology. In
 D. Gilbert, S. Fisker, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., pp. 23-265). New York: McGraw-Hill.



- Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin, 137*, 1, 68-96. doi: 10.1037/a0021466.
- Klein, D. N., Kotov, R., & Buffered, S. J. (2011). Personality and depression: Explanatory models and review of evidence. *Annual Review of Clinical Psychology*, *7*, 269-295.
- Kline, R. B. (2005). *Principles and practice of Structural Equation Modeling* (2nd ed.). New York, NY: The Guilford Press.
- Kuhn, D. (2009). Adolescent thinking. In R. M. Lerner & L. Steinberg (Eds.)
 Handbook of adolescent psychology, 3rd ed., (pp. 152-186). New York, John Wiley & Sons.
- Kuster, F., Orth, U., & Meier, L. L. (2012). Rumination mediates the prospective effect of low self-esteem on depression: A five-wave longitudinal study. Personality and Social Psychology Bulletin, 38(6), 747-759. doi: 10.1177/0146167212437250.
- Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatry Annals* 32(9), 1-7.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*, 606-613.
- Lagattuta, K. H., & Thompson, R. A. (2007). The development of self-conscious emotions. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious: Theory and research* (pp. 91-113). New York, NY: Guilford Press.
- Lapsey, D. K. (1993). Toward an integrated theory of adolescent ego development: The "new look" at adolescent egocentrism. *American Journal of Orthopsychiatry: Mental Health & Social Justice, 63*(4), 562-571. doi: 10.1037/h0079470.



- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zama (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1-62). San Diego, CA: Academic Press.
- Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York, NY: International University Press.
- Lewis, M., & Brooks-Gunn, J. (1979). Social cognition and the acquisition of self.

 New York: Penum Press.
- Lopez, A. D., & Murray, C. J. L. (1998). The global burden of disease, 1990-2020.

 Nature Medicine, 4, 1241-1243. doi: 10.1038/3218.
- Lundberg, J., Kriestenson, M., & Starrin, B. (2009). Status incongruence revisited:
 Associations with shame and mental well-being. *Sociology of Health & Illness*, 31, 478-493. doi: 10.111/j.1467-9566.2008.01148.x.
- Luyten, P., Fontaine, J. R. J., & Corveleyn, J. (2002). Does the Test of Self-Conscious Affect (TOSCA) measure maladaptive aspects of guilt and adaptive aspects of shame? An empirical investigation. *Personality and Individual Differences*, 33, 1373-1387.
- Mancini, F., & Gangemi, A. (2004). Fear of guilt from behaving irresponsibly in obsessive-compulsive disorder. *Journal of Behavior Therapy and Experimental Psychiatry*, *35*, 2, 109-120. doi: 10.1016/j.jbtep.2004.04.003.
- Mancini, F., Gangemi, A., Perdighe C., & Marini, C. (2008). Not just right experience: Is it influenced by feelings of guilt? *Journal of Behavior Therapy and Experimental Psychiatry*, 39(2), 162-176. doi: 10.1016/j.btep.2007.02.002.
- Marcus, M., Yasamy, M. T., & van Ommeren, M., Chishlom, D., & Saxena, S. (May 2012). Depression: A global public health concern. In proceedings of the 65th World Health Organization, Geneva, Switzerland.

 http://www.who.int/mediacentre/events/2012/wha65/journal/en/index4.html.
- Matos, M., & Pinto-Gouveia, J. (2011). Shamed by a parent or by others: The role of attachment in shame memories relation to depression. *International Journal of Psychology and Psychological Therapy*, *14*(2), 217-244.



- Matos, M., Pinto-Gouveia, J., & Costa, V. (2011). Understanding the importance of attachment in shame traumatic memory relation to depression: The impact of emotion regulation processes. Clinical Psychology & Psychotherapy. doi: 10.1002/cpp.786.
- Meier, L. L., Orth, U., Denissen, J. J. A., & Kühnel, A. (2011). Age differences in instability, contingency, and level of self-esteem across the life span. *Journal of Research in Personality*, *45*, 604-612.
- Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In J. Mezirow & Associates (Eds.), *Learning as transformation* (pp. 3-34). San Fransisco: Jossey-Bass.
- Mezulis, A. H., & Funasaki, K. (2009). Modeling the gender difference in depression: A commentary on Cambron, Acitelli, and Pettit. *Sex Roles*, *61*, 762-768.
- Moore, M. T., Dawkins, M. R., Fisher, J. W., & Fresco, D. M. (2016). Depressive realism and attributional style: Replication and extension. *International Journal of Cognitive Therapy*, *9*(1), 1-12. doi: 10.1521/ijct_2016_09_03.
- Mor, N., & Winquist, J. (2002). Self-focused attention and negative affect: A metaanalysis. *Psychological Bulletin*, *128*, 638-662.
- Morra, S., Gobbo, C., Marinin, Z., & Sheese, R. (2007). *Cognitive development: Neo- Piaget perspective*. New York, NY: Psychology Press.
- Moshman, D. (1998). Cognitive development beyond childhood. In W. Damon (Series Ed) & D. Kuhn & R. Siegel (Vol Eds.), *Handbook of child psychology:* vol 2. Cognitive, perception, and language, 5th ed., (pp. 947-978). New York: Wiley.
- Muris, P., & Meester, C. (2014). Small or big in the eyes of the other. On the developmental psychopathology of self-conscious emotions as shame, guilt, and pride. *Clinical Child and Family Psychology Review, 17*, 9-40. doi: 10.1007/s10567-013-0137-z
- Nathanson, D. L. (1992). Shame and pride. New York: Norton.



- Nissenson, K. (2006). An evaluation of and a brief intervention for guilt, responsibility, and thoughts and behaviors associated with obsessive-compulsive disorder (unpublished dissertation). New Brunswick, NJ: Rutgers University.
- Nolan, S. A., Roberts, J. E., & Gotlib, I. H. (1998). Neuroticism and ruminative response style as predictors of change in depressive symptomalogy. *Cognitive Therapy and Research*, *22*, 5, 1998, 445-455.
- Nolen-Hoeksema, S. (2000). The role of rumination in depressive disorders and mixed anxiety/depressive symptoms. *Journal of Abnormal Psychology, 109*(3), 504-511. doi: 10.1037//0021-843X.109.3.504.
- Nolen-Hoeksema, S. (2008). It is not what you have; it is what you do with it: Support for Addis's gendered responding framework. *Clinical Psychology Science and Practice*, *15*(3), 178-181. doi: 10.111/j.1468-2850.2008.00128.x
- Nolen-Hoeksema, S., & Morrow, J. (1991). A prospective study of depression and posttraumatic stress symptoms after a natural disaster: The 1989 Loma Prieta earthquake. *Journal of Personality and Social Psychology, 61*, 115-121.
- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science*, *3*(5), 400-424.
- Ohira, T., Iso, H., Satoh, S., Sankai, T., Tanigawa, T., Ogawa, Y., Imano, H., ... Shimamoto, T. (2001). Prospective study of depressive symptoms and risk of stroke among Japanese. *Stroke, 32*, 903-908.
- Okada, R. (2010). A meta-analytic review of the relation between self-esteem level and self-esteem instability. *Personality and Individual Differences, 48*, 243-246.
- Okulate, G. T., & Jones, O. B. E. (2006). Post-traumatic stress disorder, survivor guilt and substance use a study of hospitalized Nigerian army veterans. South African Medical Journal, 96(2), 144-146.
- Ormel, J., Oldehinkel, A. J., & Volleberg, W. (2004). Vulnerability before, during, and after a major depressive episode. *Archives of General Psychiatry*, *61*, 990-996.



- Orth, U., Berking, M., & Burkhardt, S. (2006). Self-conscious emotions and depression: Rumination explains why shame but not guilt is maladaptive. *Personality and Social Psychology Bulletin, 32*, 1608-1619. doi: 10.1177/0146167206292958.
- Orth, U., & Robins, W. R. (2013). Understanding the link between low self-esteem and depression. *Current Directions in Psychological Science*, *22*(6), 455-460. doi: 10.1177/0963721412492763
- Orth, U., Robins, R. W., & Soto, C. J. (2010). Tracking the trajectory of shame, guilt, and pride across the life span. *Journal of Personality and Social Psychology*, 99(6), 1061-1071.
- Orth, U., Robins, W. R., Widaman, K. F. (2012). Life-span development of selfesteem and its effects on important life outcomes. *Journal of Personality and Social Psychology, 102*, 1271-1288.
- Papageorgiou, C., & Wells, A. (2001). Metacognitive beliefs about rumination in recurrent major depression. *Cognitive and Behavioral Practice*, 8(2), 160-164.
- Pinto-Gouveia, J., Matos, M., Castilho, P., & Xavier, A. (2014). Differences between depression and paranoia: The role of emotional memories, shame and subordination. *Clinical Psychology and Psychotherapy, 21*, 49-61. doi: 10.1002/cpp.1818.
- Popper, K. R. (2002). The logic of scientific discovery. New York: Harper & Row.
- Rosenberg, M. (1965). *Society and the adolescent child*. Princeton, JN: Princeton University Press.
- Roos, S., Hodges, E. V. E., & Salmivalli, C. (2014). Do guilt- and shame-proneness differentially predict prosocial, aggressive, and withdrawal behaviours during early adolescence? *Developmental Psychology*, *50*(3), 941-946. doi: 10.1037/a0033904.
- Rubenstein, L. M., Freed, R. D., Shapero, B. G., Fauber, R. L., & Alloy, L. B. (2016). Cognitive attributions in depression: Bridging the gap between research and clinical practice. *Journal of Psychotherapy Integration*, 26(2), 103-115. Doi: 10.1037/int0000030.



- Rüsch, N., Patrick, W., Corrigan, Bohus, M., Jacob, G. A., Brueck, R., & Lieb, K. (2007). Measuring shame and guilt by self-report questionnaires: A validation study. *Psychiatry Research*, *150*(3), 313-235. doi: 10.1016/j.psychres.2006.04.018.
- Ryan, M. J., & Julia, M. B. (2007). The symbiotic nature of hermeneutical vs. Classical generated knowledge. In R. W. Belk et al. (Eds.). *AMA Winter Educators' Conference* (pp. 191–194). Chicago: American Marketing Association.
- Schneider, G., Kruse, A., Nehen, H. G., Senf, W., Heuft, G. (2000). The prevalence and differential diagnosis of subclinical depressive syndrome in inpatients 60 years and older. *Psychotherapy and Psychosomatics*, *69*(5), 251-260. doi: 10.1159/000012404.
- Schoenleber, M., & Berenbaum, H. (2011). Shame regulation in personality pathology. *Journal of Abnormal Psychology*, *121*(2), 433-446. doi: 10.1037/a0025281.
- Shapiro, L. J., & Stewart, S. E. (2011). Pathological guilt: A persistent yet overlooked treatment factor in obsessive-compulsive disorder. *Annals of Clinical Psychiatry*, *23*(1), 63-70.
- Smart, L. M. (2013). *Development and validation of a measure of self-critical rumination* (Master's thesis). University of Kentucky, Lexington.
- Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin, 139*, 213-240.
- Sroufe, L. A. (1990). An organization perspective on the self. In D. Cicchetti & M. Beeghly (Eds.), *The self in transition: Infancy to childhood.* Chicago, IL: University of Chicago Press.
- Sroufe, L. A. (1997). *Emotional development: The organisation of emotional life in the early years*. Cambridge, United Kingdom: Cambridge University Press.



- Statistics South Africa. (2001). *Census 2001 by province, gender, disability and population group*. Retrieved from http://www.statssa.gov.za/extract.htm
- Stipek, D., Recchia, S., & McClintic, S. (1992). Self-evaluation in young children. *Monographs of the Society for Research in Child Development, 57*, 1-84.
- Stuewig, J., & McCloskey, L. A. (2005). The relation of child maltreatment to shame and guilt among adolescents: Psychological routes to depression and delinquency. *Child Maltreatment*, *10*, 324-336.
- Supple, A. J., Su, J., Plunkett, S. W., Peterson, G. W., & Bush, K. R. (2013). Factor structure of the Rosenberg self-esteem scale. *Journal of Cross-Cultural Psychology*, *44*(5), 748-764. doi:10.1177/0022022112468942.
- Takahashi, H., Yahata, N., Koeda, M, Matsuda, T., Asai, K., & Okubo, Y. (2004). Brain activation associated with evaluative processes of guilt and embarrassment: An fMRI study. *NeuroImage*, *23*(3), 967-974. doi: 10.1016/j.neuroimage.2004.07.054.
- Tangney, J. P. (1991). Moral affect: The good, the bad, and the ugly. *Journal of Personality and Social Psychology*, *61*, 598-607.
- Tangney, J. P. (1999). The self-conscious emotions: Shame, guilt, embarrassment and pride. In T. Dalgleish & M. J. Power (Eds.), *Handbook of cognition and emotion* (pp. 541-568). Chichester, UK: Wiley.
- Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York, NY: Guilford Press.
- Tangney, J. P., Steuwig, J., & Mashek, D. J. (2007). Moral emotions and moral behaviour. *Annual Reviews of Psychology, 58*, 345-372. doi: 10.1146/annurev.psych.56.091103.070145.
- Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology, 62,* 669–675. doi:10.1037/0022-3514.62.4.669.



- Tangney, J. P., Wagner, P., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology*, *101*, 469-578.
- Tomkins, S. (1962). *Affect, imagery, consciousness. Volume 1. The positive affects.*New York, NY: Springer.
- Tracy, J. L., & Robins, R. W. (2004). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry*, *15*, 103–125.
- Tracy, J. L., & Robins, R. W. (2006). Appraisal antecedents of shame and guilt: Support for a theoretical model. *Personality and Social Psychology Bulletin, 32,* 1339–1351.
- Tracy, J. L., & Robins, R. W. (2007). The nature of pride. In J. L. Tracy., R. W. Robins., & J. P., Tangney (Eds.), The self-conscious emotions: Theory and research (pp. 263-282). New York, NY: The Guilford Press.
- Tracy, J. L., Robins, R. W., & Tangney, J. P. (2007). *The self-conscious emotions: Theory and research.* New York, NY: The Guilford Press.
- Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research*, *27*(3), 247-259. doi: 10.1023/A:1023910315561.
- Trzesniewski, K. H., Donnellan, M. B., Moffitt, T. E., Robins, R. W., Poulton, R., & Caspi, A. (2006). Low self-esteem during adolescence predicts poor health, criminal behaviour, and limited economic prospects during adulthood. Developmental Psychology, 42, 381-390.
- Vess, M., Schlegel, R. J., Hicks, J. A., & Ardnt, J. (2013). Guilty, but not ashamed: 'True' self-conceptions influence affective responses to personal shortcomings. *Journal of Personality*, 82, 3, 213-224. doi: 10.1111/jopy.1246.
- Walters-Chapman, S. F., Price, S. J., & Serovich, J. M. (1995). The effects of guilt on divorce adjustment. *Journal of Divorce & Remarriage*, 22, 163–177. doi:10.1300/J087v22n03_10.



- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, *92*, 548-573.
- Weir, K. (2012). *A complex emotion*. Retrieved from http://www.apa.org/monitor/2012/emotion.aspx
- Wells, M., Glickauf-Hughes, C., & Jones, R. (1999). Codependency: A grass roots construct's relationship to shame-proneness, low self-esteem, and childhood parentification. *The American Journal of Family Therapy, 27*(1), 63-71. doi: 10.1080/019261899262104.
- Wenzlaff, R. M., & Wegner, D. M. (2000). Thought suppression. *Annual Review of Psychology*, *51*, 59-91.
- William, R., Janet, S., & Susanne, D. (2014). Empathy, anger, guilt: Emotions and prosocial behaviour. *Canadian Journal of Behavioural Sciences*, *46*(4), 465-474. doi: 10.1037/a0035057.
- World Health Organization. (2004). *Promoting mental health: Concepts, emerging evidence and practice (Summary report).* Switzerland, Geneva: Author.
- Zahn-Waxler, C., Kochanska, G., Krupnick, J., & McKnew, D. (1990). Patterns of guilt in children of depressed and well mothers. *Developmental Psychology*, 26, 51-59.



Appendix A: Ethical Clearance Letter



Faculty of Humanities Research Ethics Committee

19 May 2016

Dear Prof Maree

Project:

Shame and guilt on depressive mood: Testing for the

mediation role of self-esteem and rumination

Researchers: PD Makhanya Supervisor: Dr S Makhubela

Department: Psychology

Reference number: 27200338 (GW20151108HS)

Thank you for the response to the Committee's correspondence of 18 May 2016.

I am pleased to be able to inform you that the above application was **approved** by the **Research Ethics Committee** and the Dean of Humanities on 18 May 2016. Data collection may therefore commence.

Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should the actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

We wish you success with the project.

Sincerely

Prof Karen Harris

Acting Chair: Research Ethics Committee

Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail:tracey.andrew@up.ac.za

Kindly note that your original signed approval certificate will be sent to your supervisor via the Head of Department. Please liaise with your supervisor.

Research Ethics Committee Members: Prof MME Schoeman (Deputy Dean); Prof KL Harris; Dr L Blokland; Dr R Fasselt; Ms KT Govinder; Dr E Johnson; Dr C Panebianco; Dr C Puttergill; Dr D Reyburn; Prof GM Spies; Prof E Taljard; Ms B Tsebe; Dr E van der Klashorst; Mr V Sithole



Appendix B: Information Sheet



Faculty of Humanities Department of Psychology

INFORMATION FOR PARTICIPANTS

PROJECT TITLE: "SHAME AND GUILT ON DEPRESSIVE MOOD: TESTING FOR THE MEDIATION ROLE OF SELF-ESTEEM AND RUMINATION".

PROJECT LEADER: DAVID MAKHANYA

1. You are invited to participate in the following research project:

"SHAME AND GUILT ON DEPRESSIVE MOOD: TESTING FOR THE MEDIATION ROLE OF SELF-ESTEEM AND RUMINATION".

- 2. Participation in the project is completely voluntary and you are free to withdraw from the project (without providing any reasons or consequences) at any time.
- 3. It is possible that you might not personally experience any advantages during the project, although the knowledge that may be accumulated through the project might prove advantageous to others.
- 4. You are encouraged to ask any questions that you might have in connection with this project at any stage. The project leader will gladly answer your question(s).
- 5. There are no known consequences of completing a questionnaire about shame, guilt and depressive mood. However, some individuals may react



apprehensively; being sensitive to completing questions about situations that were not particularly comfortable for them. If this happens, you will be referred for debriefing at the University of Pretoria's Student Counseling Service at no cost.

6. Should you at any stage feel unhappy, uncomfortable or is concerned about the research, please contact the researcher (Makhanya D) on: 076 370 0568 or his study supervisor (Dr. M.S Makhubela) at the University of Pretoria, tel: 012 420 2830.



Appendix C: Informed Consent Form



Faculty of Humanities Department of Psychology

CONSENT FORM

PROJECT TITLE: SHAME AND GUILT ON DEPRESSVE MOOD: TESTING FOR THE MEDIATION ROLE OF SELF-ESTEEM AND RUMINATION

I, _____ hereby voluntarily consent to participate in the following project:

"SHAME AND GUILT ON DEPRESSIVE MOOD: TESTING FOR THE MEDIATION ROLE OF SELF-ESTEEM AND RUMINATION"

I realise that:

- 1. The study deals with the evaluation of the relationship between shame, guilt and depressive mood in university students in South Africa.
- 2. The research project, i.e. the extent, aims and methods of the research, has been explained to me.
- 3. The procedure envisaged may hold some risk for me that cannot be foreseen at this stage (i.e., psychological distress as a result of completing a questionnaire on depressive mood).
- 4. The Faculty of Humanities' Research and Ethics Committee at the University of Pretoria has approved that individuals may be approached to participate in the study.
- 5. The project sets out the risks that can be reasonably expected as well as possible discomfort for persons participating in the research, an explanation of the anticipated advantages for myself or others that are reasonably expected



from the research and alternative procedures that may be to my advantage.

- 6. I will be informed of any new information that may become available during the research that may influence my willingness to continue my participation.
- 7. Access to the records that pertain to my participation in the study will be restricted to persons directly involved in the research.
- 8. Any questions that I may have regarding the research, or related matters, will be answered by the researcher.
- 9. If I have any questions about, or problems regarding the study, or experience any undesirable effects, I may contact the project leader.
- 10. Participation in this research is voluntary and I can withdraw my participation at any stage.
- 11. The raw data will be securely stored at the Department of Psychology's storage room (HSB 11 23) for a minimum period of 15 years for archiving and reuse. During this period the raw data might also be used for further research by other researchers.
- 12. I indemnify the University of Pretoria and all persons involved with the above project from any liability that may arise from my participation in the above project or that may be related to it, for whatever reasons, including negligence on the part of the mentioned persons.

SIGNATURE OF PARTICIPANT		SIGNATURE OF WIT	NESS
SIGNATURE OF PERSON THAT INFORMED THE RESEARCHED PERSON	Ō		
Signed at	this _	day of	20



Appendix D: Questionnaire

SECTION A:

<u>Instructions:</u> Please note that the information provided below does not in any way identify you as an individual. It is used to gain an even better understanding of the issues investigated in the study.

1. What is your gender?

1.	Male	
2.	Female	

2. My age: _____ years

3. What is your race?

1.	Black	
2.	Coloured	
3.	Asian	
4.	White	

4. What level are you currently in?

1.	Undergraduate	
2.	Postgraduate	



SECTION B:

<u>Instructions:</u> For each of the following listed feelings, indicate the degree to which you currently feel each of these emotions when you think about your daily life experiences. Read each item and then mark the appropriate answer in the space next to the word. Use the following scale to record your answers.

		I do not experience this feeling	I experience this a little bit	I experience this moderately	I experience this strongly	I experience this very strongly
1.	Embarrassment	0	1	2	3	4
2.	Mild guilt	0	1	2	3	4
3.	Feeling ridiculous	0	1	2	3	4
4.	Worry about hurting or injuring someone	0	1	2	3	4
5.	Self- consciousness	0	1	2	3	4
6.	Feeling humiliated	0	1	2	3	4
7.	Intense guilt	0	1	2	3	4
8.	Feeling stupid	0	1	2	3	4
9.	Regret	0	1	2	3	4
10.	Feelings 'childish'	0	1	2	3	4
11.	Feeling helpless, paralyzed	0	1	2	3	4
12.	Feelings of blushing	0	1	2	3	4
13.	Feeling you deserve criticism for what you did	0	1	2	3	4
14.	Feeling	0	1	2	3	4



	laughable					
15.	Feeling disgusting to other	0	1	2	3	4
16.	Remorse	0	1	2	3	4



SECTION C:

<u>Instructions:</u> Please read each item carefully, and then indicate in the appropriate box the response that best describes the way you have been feeling during the <u>last</u> <u>two weeks</u>, including today. Over the <u>last two weeks</u>, how often have you been bothered by any of the following problems?

		Not At All	Several Days	More Than Half Days	Nearl y Every day
1.	Little interest or pleasure in doing things	0	1	2	3
2.	Feeling down, depressed, or hopeless	0	1	2	3
	Trouble falling or staying asleep, or sleeping				
3.	too much	0	1	2	3
4.	Feeling tired or having little energy	0	1	2	3
5.	Poor appetite or over-eating	0	1	2	3
	Feeling bad about yourself – or that you are a				
6.	failure or have let yourself or your family down	0	1	2	3
	Trouble concentrating on things, such as				
7.	reading the newspaper or watching television	0	1	2	3
8.	Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9.	Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3



SECTION D:

<u>Instructions:</u> People think and do many different things when they feel down. Please read each of the items below and indicate in the appropriate box how often you have had that experience. Please indicate what do you generally do.

		Almost Never	Sometimes	Often	Almost Always
1.	Think "What am I doing to deserve this?"	1	2	3	4
2.	Analyze recent events to try to understand why you are depressed	1	2	3	4
3.	Think "Why do I always react this way?"	1	2	3	4
4.	Go away by yourself and think about why you feel this way	1	2	3	4
5.	Write down what you are thinking and analyze it	1	2	3	4
6.	Think about a recent situation, wishing it had gone better	1	2	3	4
7.	Think "Why do I have problems other people don't have?"	1	2	3	4
8.	Think "Why can't I handle things better?"	1	2	3	4
9.	Analyze your personality to try to understand why you are depressed	1	2	3	4
10.	Go someplace alone to think about your feelings	1	2	3	4



SECTION E:

<u>Instructions:</u> Below is a list of statements about general daily feelings you may have about yourself. Please read each of the statements below carefully and indicate in the appropriate box, the extent to which you agree with each of the statements.

		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	On the whole, I am satisfied with myself	4	3	2	1
2.	At times, I think I am no good at all (R)	4	3	2	1
3.	I feel that I have a number of good qualities	4	3	2	1
4.	I am able to do things as well as most other people.	4	3	2	1
5.	I feel I do not have much to be proud of (R)	4	3	2	1
6.	I certainly feel useless at times (R)	4	3	2	1
7.	I feel that I'm a person of worth, at least on an equal plane with others	4	3	2	1
8.	I wish I could have more respect for myself (R)	4	3	2	1
9.	All in all, I am inclined to feel that I am a failure (R)	4	3	2	1
10.	I take a positive attitude toward myself	4	3	2	1