Self-Conscious Emotion and Existential Concerns: An Examination of the Effect of Shame on Death-Related Thoughts

by

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Abstract

Shame is an emotionally painful experience that is commonly encountered in psychotherapy, typically involving a sense of exposure, negative self-judgment, and a strong desire to withdraw or hide. Such features reflect a perceived loss of status and safety in the world, issues that are of central concern to existential psychology. While existential psychology offers a theoretical framework for conceptualizing and remediating psychological difficulties, few principles in existential psychology have been subjected to rigorous empirical scrutiny. One exception is terror management theory (Greenberg, Pyszczynski, & Solomon, 1986), which proposes that our awareness of the inevitability of death evokes overwhelming fear, which we are motivated to reduce by engaging in activities such as improving social status or fostering meaningful relationships. However, despite well-established evidence that shame also arises from the same type of threats, the relationship between shame and terror management processes remains poorly understood. It was hypothesized that shame threatens the safety afforded by social status and close interpersonal relationships, leading to an increase in death-related thoughts. One hundred and fifty undergraduates wrote about either a personal experience of shame (shame induction) or about mundane events (control group), and then completed a word completion task designed to measure death-related thoughts. Although the shame induction failed to induce measurable increases in shame or death-related thoughts, post-hoc investigations revealed that guilt (but not shame) was associated with fewer death-related thoughts when there

was also a strong sense of resolution about the event. Implications for future theory and research are discussed.

Preface

This thesis is an original work by Carlton Thomas Duff. The research project, of which this thesis is a part, received research ethics approval from the Faculties of Education, Extension, and Augustana Research Ethics Board, University of Alberta, Project Name “Examining the effect of shame on death-related thoughts”, No. Pro00019521, on February 3, 2011.

For Melissa and Oliver

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CHAPTER 1

INTRODUCTION

The context and nature of our interpersonal relationships have an undoubtedly profound impact on our understanding of the world, sense of self, and emotional wellbeing. It is no surprise, then, that an enormous amount of research has been conducted on the complex interplay between the self and the social world. One important finding that has emerged from this scholarship is the central role that self-conscious emotions play in cognition and interpersonal behaviour (Tracy & Robins, 2007a, 2007b). Self-conscious emotions are those affective states that arise out of the awareness of and reflection on the self in relation to social values and standards, and include feelings of shame, guilt, embarrassment, and pride (Tangney, Stuewig, & Mashek, 2007). While all self-conscious emotions are intrinsically involved in social cognition and self-regulation (Campos, 1995; Fischer & Tangney, 1995; Tracy & Robins, 2007b), shame has been most frequently associated with maladaptive psychological outcomes (Gilbert, 1998; Gilbert & Andrews, 1998; Rüsch et al., 2007; Tangney & Dearing, 2002; Tangney et al., 2007).

An Introduction to Shame

Shame is an emotionally painful experience that can be conceptualized as a threat to the self, where one's self-concept, self-esteem, and sense of social connection come under attack (Dickerson, Gruenewald, & Kemeny, 2004; Gruenewald, Kemeny, Aziz, & Fahey, 2004; Van Vliet, 2008). The experience of shame typically involves a painful sense of exposure and a negative, critical

judgment of the self (M. Lewis, 1992, 2008; Mascolo & Fischer, 1995; Reimer, 1996; Van Vliet, 2008). Shame can have a profound negative effect on psychological functioning and is associated with a wide range of issues, including depression (Andrews, Qian, & Valentine, 2002; Kim, Thibodeau, & Jorgensen, 2011), anxiety disorders (Fergus, Valentiner, McGrath, & Jencius, 2010), eating disorders (Troop, Allan, Serpell, & Treasure, 2008), personality disorders (Scheel et al., 2013), substance abuse (Dearing, Stuewig, & Tangney, 2005), and suicide (Hastings, Northman, & Tangney, 2000). Given the impact that shame has on psychological health and the regularity with which counsellors and psychotherapists encounter shame as a core issue in their clients (Dearing & Tangney, 2011; Wheeler, 2003), clarifying its relationship to other psychological processes is of vital importance.

Shame is often accompanied by a strong desire to withdraw or hide in an effort to minimize negative evaluations and criticism from others (Gilbert, 2007; Gilbert, Pehl, & Allan, 1994; M. Lewis, 2008). Shame can signify an attack on key attachment relationships, which are necessary for survival (H. B. Lewis, 1971; Schore, 1991, 1998, 2002). Shame is also characterized by submissive behaviours such as lowered gaze, covered face, and hunched shoulders (Fischer & Manstead, 2008; Gilbert, 1998, 2000; Izard, 1977; Keltner & Harker, 1998), behaviours that are exhibited by many nonhuman primates during dominance encounters to signify withdrawal (Turner, 1997; Weisfeld, 2002) and which have been shown to influence humans' perception of others' social rank and status (Martens, Tracy, & Shariff, 2012; Tiedens, Ellsworth, & Mesquita, 2000). Such

withdrawal behaviours suggest a desire to protect the self from threat (Martens, Tracy, & Shariff, 2012), and in this way, shame is closely tied to the individual's sense of safety in the world (Gilbert, 1998).

While freedom from physical threat is a necessary element of survival for all animals, the socially interdependent nature of human life makes social status and connectedness equally essential. Tracy and Robins (2004a) argue that while all emotions have likely evolved to promote the attainment of reproductive and social goals, it is self-conscious emotions such as shame that are most closely tied to social safety. Indeed, people who feel socially isolated tend also to perceive the world as a threatening place, leading to increased stress and cortisol levels (see Hawkley & Cacioppo, 2010, for a review).

Existential Psychology and Shame

However, as Yalom (1980) points out, having a sense of safety in the world is not only a practical issue, but an existential one as well. In addition to being deeply emotional and social, humans exhibit a profound need to make meaning from the natural and social world, likely employed as a strategy to cope with stressful and unpredictable life events (Park, 2010). The study of existential issues such as meaning, isolation, connectedness, and safety in the world have long been the purview of a subfield known as *existential psychology*, which focuses on a humanistic understanding of the issues that arise from our awareness that life is finite and that death is inevitable (Becker, 1973; Frankl, 1967; May, 1969, 1981). Despite this, existential psychology has largely failed to integrate the empirical findings of emotion research with the humanistic models of its

discipline. One exception to this is terror management theory (TMT; Greenberg, Pyszczynski, & Solomon, 1986), which posits that our uniquely human awareness of the inevitability of death conflicts with our desire for continued life, thereby resulting in overwhelming and paralyzing fear (Landau, Greenberg, Sullivan, Routledge, and Arndt, 2009). As a solution to this dilemma, TMT contends that cultural worldviews have developed as a system of social standards and values that, when achieved or adhered to, create a sense of belonging, purpose, and self-esteem (Vail et al., 2012). In addition, belief and participation in cultural worldviews provide the individual with the opportunity to produce meaningful symbols of the self that become part of the cultural group and persist beyond the life of the individual (Schimel, Landau, & Hayes, 2008). TMT posits that these two processes (self-esteem and cultural worldviews) serve as powerful agents in alleviating the fear produced by mortality concerns (Solomon, Greenberg, & Pyszczynski, 2004). TMT predicts that when mortality is made salient, people will seek to reduce this awareness by engaging in efforts to bolster the structures that provide self-esteem, such as cultural values or social ingroups (Solomon, Greenberg, & Pyszczynski, 1991). This prediction has been consistently supported by research (Castano, Yzerbyt, & Palino, 2004; Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989; see also Solomon, Greenberg, & Pyszczynski, 2004, or Burke, Martens, & Faucher, 2010).

TMT also predicts that when the structures that provide self-esteem are weakened, thoughts of death become more easily accessible (Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994). For example, threats to one's

worldview (Schimel, Hayes, Williams, & Jahrig, 2007), self-esteem (Hayes et al., 2008), or sense of the self as desirable (Ogilvie, Cohen, & Solomon, 2008) have been shown to increase the accessibility of death-related thoughts (see Burke, Martens, & Faucher, 2010, for a review). It has also been shown that attachment relationships serve to assuage mortality awareness; when romantic relationships are threatened, death-related thoughts tend to become more easily accessible (Hirschberger, Florian, and Mikulincer, 2003; Mikulincer, Florian, & Hirschberger, 2004).

Collectively, these and other TMT findings strongly support the contention that threats to one's sense of social safety and self-esteem lead to an increase in the accessibility of death-related thoughts. However, investigations of the role of shame in terror management processes have been cursory and scant, leaving a gap in our understanding of how shame relates to existential concerns such as mortality awareness and death anxiety. This is surprising, given the clear parallels between the threat to social safety, self-esteem, and self-concept represented by shame, and the protection against death anxiety that these constructs appear to afford. The intent of the current study, therefore, is to help clarify the relationship between extant literature on shame and that of TMT theory by investigating whether the threat to the social self represented by shame leads to an increase in mortality awareness.

Statement of Purpose

The purpose of this dissertation is first to synthesize the literature on existential psychology, TMT, and shame, and second to investigate the potential relationship between shame and death-related thoughts. Using an experimental design, a study was conducted to address the following questions: does the experience of shame increase death thought accessibility (DTA), and if so, does shame-proneness play a role in the relationship between shame and DTA? It was hypothesized that the experience of shame weakens the ability to mitigate mortality awareness, leading to a subsequent increase in the accessibility of death-related thoughts. It was also hypothesized that because some individuals are more prone to shame than others, such individuals may be more likely to experience death-related thoughts when confronted with a shame-eliciting event. In addition to expanding the current literature on shame and TMT, it was hoped that the results of this study might prompt new ideas and research on mental health issues that involve shame as a core feature, suggest new ways of conceptualizing and treating the issues presented by psychotherapy clients who experience shame in their daily lives, and support the ongoing development of empirically-informed existential psychotherapy.

The following section is a review of the literature on shame, existential psychology, and terror management theory, and expands on the concepts presented in the preceding chapter. It is followed by a presentation of the method, analysis, results, and discussion of the research study undertaken to assess the hypotheses described above.

CHAPTER 2

SHAME AND THE SELF-CONSCIOUS EMOTIONS

Self-Conscious Emotion

Unlike "primary" emotions (such as joy, sadness, fear, and anger), some theorists and researchers have argued that emotions such as shame, guilt, embarrassment, and pride appear with the maturation of self-concept and socialization in childhood (Leary, 2007; M. Lewis, 2008). In addition, self-awareness and self-representation have been suggested as prerequisite conditions for these emotions (Buss, 2001; Tangney & Dearing, 2002; Tracy & Robins, 2007a), earning them the collective description of *self-conscious emotions*[1] (see M. Lewis, 2008; Tracy, Robins, & Tangney, 2007). However, others (H. B. Lewis, 1971; Schore, 1998) have argued that shame emerges much earlier in life than during the developmental period marked by objective self-awareness, because shame is involved in the early development of attachment bonds and self-regulation, rendering the labeling of shame as a self-conscious emotion potentially misleading. Nonetheless, the following section follows the current literature by briefly reviewing key works on self-conscious emotion in an effort to better situate shame (a central focus in the proposed study) in its theoretical, empirical, and experiential context.

[1] Shame, guilt, embarrassment, and pride do not represent all of those emotions that may be referred to as self-conscious, with envy, humiliation, empathy, suspicion, shyness, hubris, and a number of other affective states arguably belonging to this class. Indeed, many other emotions often involve some degree of self-awareness, but it has been argued that self-conscious emotions necessitate self-reflection (e.g., Leary, 2007). However, an exhaustive discussion of all self-conscious emotions is well beyond the scope of this paper, which will follow the lead of most existing emotion literature in focussing on these four states.

The Self in Self-Conscious Emotion

Classifying shame, guilt, embarrassment, and pride as self-conscious reflects the centrality of the self in their elicitation. For example, joy results when a positive event occurs in one's life, but pride results only when the positive event is attributed to the self (Tangney, 2003). The same can be said for feelings of anger or frustration that arise in response to negative events attributed to the actions of others, but it is shame or guilt that arises when a negative event is attributed to one's own negative characteristics or behaviours respectively (Tangney, 2003). While theorists have used the term *self* in various ways, the cognitive aspects of the self can be roughly defined as "the mental apparatus that allows the organism to think consciously about itself" (Leary, 2007, p. 39). Therefore, the self can be thought of as the product of both an abstract representation of the individual in cognition and an awareness of being distinct from others.

However, Baumeister (1998, 2010) has argued that the self is a fundamentally social construct, or "an interface between the animal body and the social system" (p. 139). Baumeister argues that in addition to an ability to reflect upon oneself, establishing a concept of *self* involves both interacting with others and making choices/exerting control. Baumeister argues that the self is a necessary construct that allows the individual to be located within the social system (i.e., as distinct as well as similar to others); this allows the individual to navigate the social world, establish social acceptance and standing, and secure the necessary resources afforded by inclusion in a social group.

Self-conscious emotions may therefore involve an evaluation of the distinct, abstract construct of the self in relation to internalized social and cultural standards, rules, or goals (M. Lewis, 2008). Self-conscious emotions require not only that a stable self-representation be formed, but also that attention is focused on this self-representation and that an evaluation of the representation ensues (Tracy & Robins, 2007a). Complex self-evaluative processes such as self-conscious affect often involve an assessment of the nature (e.g., positive or negative) and causality of events, whereby some (or all) outcomes of the event may be attributed to the self (M. Lewis, 2008; Tracy & Robins, 2004b, 2007a, 2007b; see also Van Vliet, 2009).

The Other in Self-Conscious Emotion

However, self-conscious emotions also involve an awareness and reflection on how others perceive the self. Darwin (1872/1965) observed that emotions that elicit a blush usually result from imagining what others think about the self. Darwin's astute observation has been well supported in research, particularly in relation to shame. For example, feelings of shame have been shown to increase when participants are made aware that they are being socially evaluated (Gruenwald, Kemeny, Aziz, & Fahey, 2004) or when they hold a stable belief that others expect them to be perfect (Klibert, Langhinrichsen-Rohling, & Saito, 2005). Gilbert (1997, 1998, 2000, 2003) likewise argues that a major component of shame is an acute awareness of the real or imagined perceptions of others. It is clear that self-conscious emotion not only involves an awareness of the self, but an awareness of what others could be (or are) thinking about the self.

Cultural Variations in Self-Conscious Emotion

Cultural differences in social rules, values, and emphasis placed on the self likewise result in some variation in the importance and expression of self-conscious emotions across cultures. Adopting evolutionary and social-constructivist viewpoints on emotion, Keltner, Haidt, and colleagues (Goetz & Keltner, 2007; Keltner & Haidt, 2001; Keltner, Haidt, & Shiota, 2006) have proposed a social-functional approach to self-conscious emotion in which evolutionary processes are deemed to play a key role in the genetic coding and selection of emotions. According to this approach, emotions are linked to the biological maturation of humans and the initiation of specific behaviours and physiological processes intended to influence the social and physical interaction of the individual with the environment in such a way that reproductive success (of the individual and group) is maximized (Keltner & Haidt, 2001; Goetz & Keltner, 2007).

Specifically, Keltner, Haidt, and colleagues have suggested that self-conscious emotions have arisen in response to group governance; that is, the need for humans to cooperate and remain organized toward the goal of survival and successful reproduction. They cite research in which guilt has been shown to reinforce reciprocity (Keltner & Buswell, 1996), cooperation (Ketelaar & Au, 2003), and forgiveness (McCullough et al., 1998), and in which embarrassment and shame have been shown to aid in the negotiation of status hierarchies (Kemeny, Gruenwald, & Dickerson, 2004), all of which increase the likelihood of group cohesion and subsequent group survival (Goetz & Keltner, 2007; c.f.

comments by Izard, 1977). In addition, Keltner, Haidt, and colleagues (Goetz & Keltner, 2007; Keltner & Haidt, 2001; Keltner, et al., 2006) suggest that the social functions of emotions can be classified at four levels of analysis: the individual, dyadic (interactional), group, and cultural levels. They suggest that self-conscious emotions are largely universal at the individual and dyadic levels, which accounts for the finding that most self-conscious emotions can be reliably identified when observed, regardless of cultural affiliation of the observer (Haidt & Keltner, 1999; Hejmadi, Davidson, & Rozin, 2000; Keltner, 1995; Keltner & Buswell, 1996; Tracy & Robins, 2004b). However, according to this theory, self-conscious emotions are expected to vary substantially at the group and cultural levels. Keltner, Haidt, and colleagues suggest that this is largely due to two processes: (a) the increasing role of cultural institutions in regulating social behaviour reduces the utility of some emotions in social regulation, decreasing the perceived importance of such emotions; and (b) different applications of self-conscious emotion to the emergence and maintenance of different cultures' changing social hierarchies. Thus, cultures vary in the value they place on certain self-conscious emotions and in the function these emotions play in the social hierarchy. Indeed, Japanese children tend to report higher levels of shame-proneness, Korean children higher levels of guilt-proneness, and American children higher levels of pride-proneness, likely reflective of the functional value of these emotions across the three cultures (Furukawa, Tangney, & Higashibara, 2013).

Toward an Understanding of Shame

There has been some variability in the definition of shame in the literature, likely due to the difficulty in identifying reliable and universal behavioural cues elicited by shame (M. Lewis, 2008). Despite this difficulty, most people are able to identify self-conscious emotions such as shame when they witness them, even when the same stimulus is presented to members of different cultural groups (Haidt & Keltner, 1999; Hejmadi et al., 2000; Izard, 1977; Martens, Tracy, & Shariff, 2012; Tracy & Robins, 2004b). Based on the past several decades of research, it can be broadly stated that shame is a complex emotional experience involving cognitive, social, somatic, and biological features. More specifically, shame can be thought of as an emotionally painful experience that involves a threat to the social self, where a perceived deficit of the self is exposed (Dickerson et al., 2004; Gruenewald et al., 2004; M. Lewis, 1992, 2008; Mascolo & Fischer, 1995; Reimer, 1996; Van Vliet, 2008). However, the complexity of the emotion and the difficulty in conceptualizing it has led to several theories about its role and effects. The following review briefly touches on some of the major advances toward understanding the complex nature of shame and clarifies what features have been proposed to distinguish shame from other similar self-conscious emotions.

Shame Versus Guilt

There has been much written on the distinction between shame and guilt, with the two emotions sometimes regarded as a singular construct in both the literature and colloquial use (Tangney & Dearing, 2002; see also Agrawal &

Duhachek, 2010). Although shame and guilt both reflect an awareness of the failure to meet social standards, goals, and norms (M. Lewis, 2008), a number of scholars (M. Lewis, 2008; Tangney & Dearing, 2002; Tracy & Robins, 2004b) argue that when the failure or shortcoming is attributed to negative aspects of the self, shame results. Conversely, guilt arises from attribution of the failure or shortcoming to one's behaviour. This sentiment is shared by Tangney and colleagues (Tangney, 1995; Tangney, Burggraf, & Wagner, 1995; Tangney & Dearing, 2002; Dearing et al., 2005) and Tracy and Robins (2006, 2007), whose research has shown that people who blame poor performance on themselves tend to feel shame, whereas people who blame poor performance on effort tend to feel guilt (Tangney, Wagner, & Gramzow, 1992; Tracy & Robins, 2006). Other researchers have refined this view to state that the distinction lies in responsibility for an untoward outcome (guilt) versus responsibility for an unwanted identity (shame; Ferguson, Brugman, White, & Eyre, 2007; see also Lindsay-Hartz, de Rivera, & Mascolo, 1995).

In addition to differences in attribution, it has also been pointed out that shame typically involves a strong desire to hide, withdraw, or otherwise conceal the shortcoming, whereas guilt involves a desire to make amends or repair the damage caused (Gilbert, 1997, 1998, 2000, 2003; Tangney & Dearing, 2002). This point represents an important distinction in the phenomenology of shame and guilt, and strengthens the argument that shame reflects the exposure of a flaw in the self (an internal, stable, and uncontrollable characteristic) whereas guilt reflects exposure of a flaw in action (an internal, unstable, controllable

characteristic; Tracy & Robins, 2007b). Given that there is no recourse to adapt an internal, stable, and uncontrollable characteristic, it follows that when such vulnerability is exposed to others, hiding or withdrawing is an effective means of self-protection and social preservation (Gilbert, 1997, 2000, 2003; Gilbert et al., 1994). It is no surprise that shame is therefore more frequently associated with maladaptive outcomes than guilt (Andrews, Qian, & Valentine, 2002; Gilbert, 1998; Gilbert & Andrews, 1998; Rüsch et al., 2007; Tangney & Dearing, 2002; Tangney et al., 2007).

However, it has been argued that the distinction between shame and guilt is much more clear theoretically than it is practically. For example, Blum (2008) points out that measures of shame and guilt are often significantly correlated, and that the measurement of shame often requires that the variance shared with guilt be statistically controlled. Blum further argues that the everyday experience of shame is almost always entwined with feelings of guilt, making these two emotions inextricably linked. Although shame and guilt have both been shown to arise from internal (self-referential) attributions, the relationship between guilt and other constructs is typically only observed when the effect of shame is statistically controlled for (Tracy & Robins, 2006), and the discriminant validity of measures intended to differentiate shame from guilt has not been consistently supported (Rüsch et al., 2007). Other research has found that while observers can reliably identify facial expressions of shame, guilt is less reliably determined (Keltner & Buswell, 1996), highlighting the difficulty in differentiating these two emotions.

Shame Versus Embarrassment

Some theorists have argued that shame falls on a continuum of intensity, with embarrassment falling on the weaker end of the spectrum and therefore being synonymous with shame (Gruenwald, Dickerson, & Kemeny, 2007; Izard, 1977; Kroll & Egan, 2004). However, Babcock and Sabini (1990) contest this view, arguing that shame and embarrassment are distinct emotions that result from violations of different types of internalized standards. Babcock and Sabini conducted several experiments in which participants imagined themselves in situations where they behaved in ways that were contrary to how they typically would (i.e., violating the *persona*) or in ways that were contrary to the participants' ideal behaviours (i.e., violating the *ideal self*). Participants reported higher feelings of embarrassment in the "persona" violation conditions and higher feelings of shame in the "ideal self" violation conditions, suggesting that embarrassment results from violation of one's typical set of behaviours whereas shame results from violation of a shared ideal.

Other research has found that people's phenomenological descriptions of shame and embarrassment often differ significantly (Tangney, Miller, Flicker, & Barlow, 1996), leading Tangney and colleagues (Tangney et al., 1996; Tangney, Niedenthal, Covert, & Barlow, 1998) and Keltner and Buswell (1996, 1997) to conclude that embarrassment results from violation of social conventions (such as forgetting someone's name at a party), whereas shame results from violation of moral rules (such as hitting a child in public). Sabini and colleagues (Sabini, Garvey, & Hall, 2001; Sabini & Silver, 1997) have contested this view, arguing

that a reevaluation of prior research suggests that shame and embarrassment are similar in that in both cases there is a perception that others believe that a flaw has been exposed. However, similar to Keltner and Bushwell, Sabini and colleagues argue that shame results when an actual flaw (i.e., as perceived by the shamed as one) is present, whereas embarrassment results when no actual flaw exists. Consistent with this, Sabini, Garvey, and Hall (2001) found that participants reported experiencing shame when a real flaw was exposed but reported embarrassment if an observer would *think* that a flaw (which did not exist) was exposed. Contrary to this, however, Keltner and Buswell (1996) found that when participants are asked to describe antecedent events for shame, such descriptions typically involve the failure to meet important personal standards (even when the failure is judged as so by others), whereas events described for embarrassment typically involve transgressions of social convention.

Internal Versus External Shame

Gilbert (1997, 1998, 2000, 2003) argues that shame can arise from being viewed as defective in the eyes of others. Gilbert argues that shame consists of two distinct components, one resulting from negative self-evaluation (i.e., internal shame) and the other resulting from the perception of (real or imagined) negative evaluation by others (i.e., external shame). He argues that *internal shame* involves the cognitions and feelings that result from perceiving the self as undesirable, unattractive, or otherwise flawed (negative self-evaluation), whereas *external shame* involves the perception that others view the self in this way. Gilbert argues that this distinction better reflects the complexity of the shame experience,

allowing for a more sophisticated understanding of the role that shame plays in psychological problems such as social anxiety and depression (Gilbert, 2000).

Shame-Proneness and the Propensity to Shame

A further distinction can be made between the transient, time-limited emotional experience of shame that has been discussed so far (sometimes called *state shame*) and the more persistent, internalized, and pervasive experience of shame that has been called *trait shame* (del Rosario & White, 2006; Goss, Gilbert, & Allan, 1994) or *shame-proneness* (Tangney & Dearing, 2002). The latter type of shame involves a characterological propensity to experience shame rather than some other emotion in response to a given event (Tangney & Dearing, 2002). Shame-proneness is characterized as a persistent sense of inferiority and is associated with frequent and intense experiences of shame in early development and onward (Claesson & Sohlberg, 2002; del Rosario & White, 2006). The construct of shame-proneness has received considerable empirical attention, and has been associated with a wide range of psychological and interpersonal problems such as persistent anger, low self-esteem, depressive symptoms, poor coping skills, interpersonal problem-solving difficulties, alcohol abuse, problematic relationships, and posttraumatic stress symptoms (Agrawal & Duhachek, 2010; Covert, Tangney, Maddux, & Heleno, 2003; Holgund & Nicholas, 1995; Leith & Baumeister, 1998; Robinaugh & McNally, 2010; Tangney, Burggaff, & Wagner, 1995; Tangney, Wagner, Barlow, Marschall, & Gramzow, 1996; Woien, Ernst, Patock-Peckham, & Nagoshi, 2003). Indeed,

shame-proneness represents a key therapeutic consideration in reports of psychological distress.

Cultural Variations in the Experience of Shame

Given the relationship between the social self and shame, it is of little surprise that the role and experience of shame differs across social groups and cultures. For example, cultures differ in which behaviours are proscribed and the extent of negative judgment associated with violation of certain social standards (Gilbert, 2003). Cultural values therefore have a direct effect on what events are likely to elicit shame. In addition, linguistic differences across cultures complicate the comparison of shame experiences between members of different cultural and linguistic groups (see the detailed comparison of English and Indian linguistic representations of shame offered by Shweder, 2003). However, there is evidence that some nonverbal expressions of shame are recognized across cultures (Haidt & Keltner, 1999; Hejmadi et al., 2000; Izard, 1977; Martens, Tracy, & Shariff, 2012; Tracy & Robins, 2004b), suggesting that there are common features of shame that are experienced among all people. Nonetheless, there appear to be important differences in the interpersonal role that shame plays and the impact of cultural notions of the ideal self on the experience of shame as an emotion between cultures.

For example, Fessler (2010) points out that much of the shame research conducted using Western samples focuses on the self-conscious and moral aspects of shame while ignoring its social-rank aspects, a focus likely due to the cultural values of independence and individuality held by most Western researchers. In a

direct cross-cultural comparison, Fessler (2004) conducted a series of studies comparing the way in which shame is conceptualized in collectivist and individualistic cultures. In one study, Fessler labeled 52 cards with common emotion terms (in Malay and English) and asked participants in Bengkulu (a collectivistic culture) and California (an individualistic culture) to sort the cards in order of perceived frequency in everyday conversation. Bengkulu participants ranked the term *shame* as very frequently used (2^{nd} out of 52) while Californian participants ranked it as very infrequently used (49^{th} out of 52), suggesting substantial differences in the importance placed on shame between cultures. In another study, Fessler collected several hundred written accounts of shame events from Bengkulu and Californian participants; qualitative analyses revealed that while accounts from both groups reflected a concern with actual or imagined negative evaluations by others, Bengkulu accounts tended to emphasize the subordinate (social-rank) aspects of shame while Californian accounts tended to focus on the aspects of shame associated with violation of social standards. More recently, evidence has emerged that certain cultures (such as Japanese) have a higher propensity to experience shame than others (Furukawa, Tangney, & Higashibara, 2013). These studies not only suggest that shame plays a different role in collectivistic versus individualistic cultures, but that the experience of shame itself is contingent on the value placed on the group versus the self by the dominant culture. Such findings also highlight the marked avoidance in individualistic cultures of aversive emotions associated with subordinance, where

individual success and freedom from dominance underlie the most cherished of Western values.

Others have more deeply connected the role of cultural values in the phenomenology of shame. In a discussion of the differences (and similarities) between the Oriya Indian- and English-language words for *shame*, Shweder (2003) points out that the experience of shame seems to be consistent across cultures, such that it represents "the deeply felt and highly motivating experience of the fear of being judged defective" (p. 1115). Shweder argues that many of the differences observed between the East Asian and Western phenomenology of shame may actually reflect differences in the meaning assigned to the thoughts, feelings, and behaviours that result from shame. For example, the desire to hide one's face (which is commonly associated with shame) reflects, from an Indian perspective, a core desire to uphold Indian cultural ideals and norms and to accept these ideals; therefore, revealing to others that one feels shame is to reveal one's virtues. Conversely, from a Western perspective, hiding one's face symbolizes the fundamental failure to embody cultural ideals and thus lose status in the eyes of others. Here, the difference lies in the cultural value placed on the individual versus the collective; for Indians, feeling shame implies internalization and acknowledgement of the importance of Indian values (a success), whereas for Westerners, the same implies failure. Indeed, when whole-body behavioural expressions of shame are presented to American and Indian research participants, both groups are able to identify the emotion as shame with relative accuracy (Hejmadi et al., 2000). This and other research (Haidt & Keltner, 1999; Tracy &

Robins, 2004b) suggest that while the cultural importance, lexical representation, and behavioural expression of shame may differ somewhat across cultures, the core aspects of shame (i.e., exposure of the self as defective) appear to be universally experienced.

Theories of Shame

Cognitive Theories

Cognitive theories of shame focus on the psychological constructs that are involved in the shame experience. Such theories conceptualize shame as a product of human cognitive complexity and the capacity to attribute effects to specific causes. Michael Lewis' cognitive-attributional theory (M. Lewis, 1991, 1992, 2008) argues that each of us possess a set of beliefs about what is acceptable for ourselves and others in terms of our actions, thoughts, and feelings. Inherent in this set of beliefs is that agents (including the self and others) and behaviours can be evaluated in terms of their qualities, abilities, and virtues. M. Lewis' model further asserts that humans naturally attribute causality to the global or specific aspects of agents or behaviours. In this way, self-conscious emotions such as shame can be described in terms of the standards and values (success or failure to meet them), evaluations (positive or negative), and attributions (self or other, global or specific) assigned to agents or behaviours. According to this model, shame can be conceptualized as a failure to meet standards or values, resulting in a negative evaluation that is attributed to the self. This is in contrast to guilt, which can be conceptualized as a failure to meet standards or values, resulting in a negative evaluation that is attributed to poor behaviour.

Similar to this is Tracy and Robins' (2007b) cognitive appraisal theory of self-conscious emotion that incorporates research on causal attributions, cognitive appraisals, emotion, and self-evaluation, and sets out a framework for describing and understanding self-conscious emotion. According to their model, one must make a series of appraisals of an event and its relatedness to one's identity, survival, goals, characteristics, motivations, and causal effects. Based on this model, Tracy and Robins argue that shame results when the cause of a negative event result is attributed to internal, stable, and global aspects of self. In support of this, research has shown that self-blame for poor performance is related to feelings of shame (Tangney et al., 1992; Tracy & Robins, 2006), and that participants who recall a distressing shame experience tend to attribute the cause of the event to the self (Van Vliet, 2009).

Bio-Evolutionary Theories

Other theories focus on the biological and evolutionary aspects of human functioning to conceptualize self-conscious emotions such as shame. For example, Dickerson, Gruenwald, Kemeny, and colleagues (Dickerson, Gruenwald, & Kemeny, 2004; Dickerson & Kemeny, 2004; Dickerson, Kemeny, Aziz, Kim, & Fahey, 2004; Gruenwald et al., 2007; Kemeny, 2003) propose a model in which emotional activation is intertwined with physiological responses (e.g., cortisol levels). In this model, emotions are thought to play a key role in defending against threats and capitalizing on opportunities, including threats and opportunities that may limit or improve access to security, resources, and reproductive success in the context of a social environment. Specifically,

Dickerson, Gruenwald, Kemeny, and colleagues' social self preservation model asserts that certain psychological, behavioural, and physiological responses stereotypically occur when the social self is threatened (i.e., threats to one's social esteem and status). In support of this model, Dickerson et al. (2004) found that cortisol activity increases in response to shame and that biological markers for inflammatory responses (a key indication of an animal's physiological anticipation for attack) increase after negative social evaluation. These findings strongly suggest that shame was evolutionarily selected in humans as an adaptive protective mechanism in instances where social esteem or status is threatened.

Similar to this, Gilbert (1989, 1997, 1998, 2007; Gilbert & McGuire, 1998) proposes that shame functions as an adaptive response to social threats, where the individual's access to resources and protection are contingent on securing social status. Gilbert (1989, 1998, 2007) argues that the withdrawal and submissive behaviours associated with shame serve, in part, as a means of damage control, where the exposed and vulnerable individual attempts to appease and de-escalate the aggression of potential attackers by conceding social standing and communicating defeat. Furthermore, Gilbert and others (Greenwald & Harder, 1998; Price & Sloman, 1987) point out that rank and power in a social group provide the individual with access to the resources of the group and protection from danger (such as from predators); they argue that the withdrawal and hiding behaviours that characterize the shame response have therefore played the evolutionary function of limiting the individual's exposure to real-world threats when the protection afforded by social rank and power is lost. Such a

conceptualization of shame focuses on the evolutionary role of self-awareness, social cooperation and competition, and the increasing importance of social status in the evolution of humanity.

Attachment-Based Theories

In her seminal work on shame, guilt, and their relationship to psychological problems, Helen Block Lewis (1971) conceptualized shame as a threat to the global self that is typically initiated in response to threats to close attachment relationships, such as those with a caregiver or romantic partner. In her view, threats to these relationships represent a threat to the core essence of the individual and present evidence for rejection of a defective, global self. There is some evidence of the validity of H. B. Lewis' conceptualization of shame as an attachment issue, as shame has been shown to be negatively associated with secure attachment styles and positively associated with preoccupied and fearful attachment styles (Gross & Hansen, 2000).

Schore (1991, 1994, 1997, 1998, 2002) has expanded on H. B. Lewis' (1971) work by proposing a neurological perspective on attachment and shame. Schore argues that early infant development and brain maturation are both contingent on the development of attachment bonds, socialization, and emotional regulation. In Schore's model, caregiver attunement to the emotional arousal of the infant is crucial to the development of attachment bonds, whereby the caregiver mirrors the child's emotional expressions primarily through congruent facial expressions. For example, when a child expresses joy at the appearance of the caregiver, the caregiver reciprocates this joy with an exaggerated facial

expression. In this way, the infant's emotional regulation is closely tied to the responsiveness of the caregiver and is directly reflected in the child's neurological activity and subsequent development; the caregiver thus serves as a primary catalyst of infant socialization and affect regulation. Schore argues that as the child grows into the first year of age, the caregiver's role shifts to one of socializing agent, increasingly attempting to inhibit the child's natural desire to engage in enjoyable activities such as unrestricted play, bowel movements, and loud vocalizations. Shore posits that shame plays a critical role in this self-inhibition socialization, where the caregiver responds to the child's expressions of joy with incongruent emotional expressions (such as disgust or anger) or punitive treatment. This results in "interactively triggered shame" (Schore, 1998, p. 66) that, with repeated exposure, will both inhibit the child's socially inappropriate behaviour and help to form the neurological structures that inhibit arousal and therefore "hard-wire" shame into a signal for inhibition when confronted by the responses of others to socially proscribed behaviour. According to Schore, it is these early experiences that create the neurological template for the socialization role of shame in later life. Indeed, Greenberg and Safran (1985) argue that emotions serve as a primary mechanism for developing fast, reflexive responses to environmental threats to biological or psychological survival, and that emotional experiences play an important role in the neurological development that underlies this system.

Cultural Theories

Some theorists have taken a culturally relativistic approach to understanding shame. For example, Scheff (1990, 2003) argues that humans have an innate need to establish and maintain social connections, which are mediated by communication (i.e., language) and emotion. He suggests that through the use of language, cultures develop a set of shared beliefs about the meaning of emotions such as shame and pride. Scheff posits that these emotions play a special role in social relationships by providing powerful sources of information about the strength of social bonds. For example, feelings of pride indicate that social bonds are intact, whereas shame indicates that they are threatened. In this way, shame plays a central role in the development of the social self. This view of shame is closely aligned with that of Kitayama, Markus, and colleagues (Kitayama & Markus, 1994; Kitayama, Markus, & Kurokawa, 2000; Kitayama, Markus, & Matsumoto, 1995), who argue that shame is not genetically pre-wired or self-contained, but rather arises out of the relationship between the self and the cultural environment. They argue that shame plays the key function of providing information about the status of self in relation to others, which is inexorably tied to the shared attitudes, practices, conventions, and social rules of a given culture. In this way, Kitayama, Markus, and colleagues argue that the experience of shame is contingent on the cultural environment. Similarly, Shweder (2003) also argues that many of the cultural differences in the phenomenology of shame reflect distinctions in the meaning assigned to the thoughts, feelings, and behaviours that

result from shame. That is, the phenomenology of shame is bound to the values of the dominant culture.

Harré (1987) has taken a similar but (arguably) more radically constructivist view of shame. He argues that the linguistic representations (i.e., words) used to identify emotions such as shame also represent a set of shared cultural beliefs about what thoughts, feelings, and behaviours should precede or result from the emotion itself. Harré suggests that this process virtually 'constructs' emotions. For example, Harré argues that shame is primarily a display of moral worth, as it is "the feeling a morally worthy person has on the occasion of being detected in an action that was morally unworthy" (p. 9). To Harré, shame therefore represents not only an emotion, but also the cultural construction of morality, worth, and the self.

Shame, Mental Health, and Psychotherapy

While a central aspect of self- and social-awareness, shame also presents as a difficult and painful issue for many of those who seek counselling and psychotherapy (Dearing & Tangney, 2011; Wheeler, 2003). In addition, shame has been implicated in the onset of a wide range of mental health problems (see Andrews, Qian, & Valentine, 2002; Dearing et al., 2005; Fergus, Valentiner, McGrath, & Jencius, 2010; Hastings, Northman, & Tangney, 2000; Troop, Allan, Serpell, & Treasure, 2008), highlighting the need to consider the impact and treatment of shame in counseling and psychotherapy treatment planning.

In particular, shame may be a salient preexisting factor in the lives of people who receive psychotherapy. For example, MacDonald and Morley (2001)

conducted a study in which 34 participants that had been referred for psychotherapy completed diaries of their emotional experiences over one week. Participants were also asked to indicate in the diaries whether or not they disclosed the emotions to anyone. Interviews were then conducted to investigate the participants' reasons for instances of non-disclosure. Qualitative analyses of the interviews and diaries revealed that 68% of the emotional incidents recorded were not disclosed and that shame was cited as a primary reason for secrecy. MacDonald and Morley point out that non-clinical samples report non-disclosure of approximately 10% of everyday emotional incidents, highlighting the heightened prevalence of shame in those who experience psychological distress and the need to account for shame in psychotherapeutic treatment planning.

The findings of MacDonald and Morely (2001) have been corroborated and expanded by more recent research that has investigated the role of shame in specific psychological problems. One area of research on perfectionism and self-criticism has identified a higher-than-average prevalence of shame in individuals who experience a high level of concern about imperfection (referred to as *maladaptive* or *unhealthy perfectionism*; Stoeber, Harris, & Moon, 2007) or who tend to self-criticize (Whelton & Greenberg, 2005). Other research has shown that internal shame plays a powerful mediating role on the relationship between maladaptive perfectionism and depression, especially in the presence of low self-esteem, suggesting that these factors are intrinsically linked (Ashby, Rice, & Martin, 2006).

Some clinicians and theorists have suggested that the identification and amelioration of shame in the therapeutic setting is a primary task for counsellors and psychotherapists. For example, Morrison (1996) argues that most clients seek counselling or psychotherapy as a means to feel better, regardless of presenting issue. Morrison suggests that clients typically experience some shame during counselling, and that they are unlikely to feel better if the shame is not addressed directly. H. B. Lewis (1971) echoes this, observing that when therapists do not acknowledge and address clients' feelings of shame, therapeutic goals are more difficult to meet and the duration of therapy is often extended. Retzinger (1998) expands this idea further by arguing that the therapist must also be aware of how shame impacts the therapeutic relationship. She contends that therapists can sometimes experience feelings of shame *themselves* in the therapeutic setting, which is typically an effect of countertransference; that is, the therapist experiences feelings of shame as a result of working with a client who feels shame. Retzinger argues that if this countertransference is not acknowledged and addressed, the therapeutic relationship will be damaged and therapy will be ineffective.

Indeed, Safran and Muran (1996) have demonstrated that resolving ruptures in the therapeutic relationship can be an important aspect of effective psychotherapy, and although Freud (1913/1958) pioneered the concept of the therapeutic relationship, emphasis on the relational aspects of counselling and psychotherapy is a core feature of many therapeutic models (including existential therapy). Given that the strength of this relationship is one of the best predictors

of psychotherapy outcome (Horvath & Symonds, 1991; see also Ahn & Wampold, 2001; Lambert & Ogles, 2004), attention to the factors involved in the development of a strong therapeutic alliance is an important aspect of psychotherapy practice.

There is some evidence that when counsellors non-verbally communicate positive regard toward clients, the potential for developing a strong therapeutic alliance is maximized (Duff & Bedi, 2010). Indeed, Rogers (1959) famously argues that communicating unconditional positive regard toward clients is a foundational necessity for effective psychotherapy. Rogers (1957, 1959) posits that by connecting with the client and expressing empathy, acceptance, and unconditional positive regard, the client will (in time) come to internalize these actions and apply them to the self. It is precisely this self-acceptance that has been identified as a critical component in the shame recovery process (Leary, Tate, Adams, Allen, & Hancock, 2007; Van Vliet, 2009). Fostering a strong therapeutic relationship through the use of acceptance and positive regard may therefore be of high importance when addressing shame in the therapeutic setting.

Despite the long-time recognition of the importance of targeting clients' feelings of shame (Morrison, 1984), some approaches to therapy also emphasize the development of tolerance of shame and other emotions as a cornerstone of therapy. For example, Rational-Emotive Behavioural Therapy (REBT; Ellis & Dryden, 1997) posits that psychological problems result, in part, from a low tolerance for emotional discomfort. REBT therefore advocates the use of methods such as 'shame-attacking exercises' in which the client deliberately acts

shamefully in public to develop tolerance for the resulting discomfort, prompting an overall reduction in feelings of shame. Cognitive approaches to psychotherapy also emphasize the importance of cognitive attributions in the elicitation of affect. For example, Beck (1987) argues that disturbing, persistent affect (such as shame or dysphoria) results from stable, negative self-attributions about negative events (e.g., "The car broke down because I am a stupid, useless person") or negative cognitive schemas about the self (e.g., "I always look ugly") and others (e.g., "People will never forgive me"). From this perspective, shame is addressed in therapy by recognizing incorrect negative self-attributions and schemas and replacing them with accurate ones (e.g., "The car broke down because it is getting old", or "sometimes I look better than other times", or "People usually forgive others in time"). This conceptualization of shame is echoed to some degree by contemporary theories of self-conscious emotion (M. Lewis, 1991, 1992, 2008; Tracy and Robins, 2007b).

However, Gilbert (2009, 2010) has more recently argued for an increased focus on the specific amelioration of shame and self-criticism in therapy. Gilbert argues that shame in the absence of self-compassion inevitably leads to a therapeutic roadblock, where shame and self-criticism prevent the client from experiencing a sense of safety and acceptance in therapy. Furthermore, Gilbert argues that psychopathology results (at least in part) from a failure to activate innate neurobiological affect regulation systems that trigger a sense of contentment and social safeness. Indeed, a recent meta-analysis found that self-compassion and psychopathology are strongly and inversely related to one

another across a number of mental health issues (MacBeth & Gumley, 2012). Gilbert (2009, 2010) has therefore developed a therapeutic model termed *compassion-focused therapy*, which is an approach with compassion training as its core. There is some evidence that compassion-focused therapy may be effective in reducing anxiety, depression, self-criticism, and feelings of shame (Gilbert & Procter, 2006; Pauley & McPherson, 2010), including in those with severe mental health concerns such as schizophrenia (Braehler et al., 2013); however, further research is needed to elucidate the efficacy of this approach relative to more established therapies.

Shame From an Existential Perspective

Many of the aspects of shame that have been the focus of previous scholarship (such as meaning, isolation, connectedness, and safety in the world) are also key concerns in existential psychology, which focuses on a humanistic understanding of the issues that arise from our awareness that life is finite and that death is inevitable (Becker, 1973; Frankl, 1967; May, 1969, 1981). However, shame has not yet been adequately conceptualized from an existential theoretical framework; therefore, the following chapter briefly reviews the core themes that underlie existential psychology and presents the ideas of key figures in that field. It also reviews recent developments in the empirical validation of existential psychology concepts, and argues that existential psychology can provide a novel and integrative method of conceptualizing shame from a humanistic perspective.

CHAPTER 3

THE PERSPECTIVE OF EXISTENTIAL PSYCHOLOGY

Existential psychology can be broadly defined as the study of how humans cope with and make meaning from their existence; or, as Jacobsen (2007) states, "the branch of psychology that deals with each human being's relationship to… [the] big questions of life" (p. 1). It is based on the tenets of the philosophical movement known as *existentialism*, which similarly emphasizes the uniqueness of human existence and the issues that arise from this experience. While existentialism as a philosophy (and perhaps a psychology) has its roots in Ancient Greek writings (Flynn, 2009), its modern renaissance began in earnest during the difficult times of 1940's postwar Europe. Perhaps due to increasing interest in psychotherapy during that same time period, the application of existential principles to the treatment of mental health issues became the focus of some theorists and therapists. The practice became known as *existential psychotherapy* or *existential analysis*, a myriad of distinct and sometimes conflicting models of therapy that were nonetheless united by their emphasis on the uniqueness of individual experience and the 'big questions' that arise from being human. The following section reviews the major themes that define existential psychotherapy, followed by a discussion of four key theorists who have been largely influential in its historical development. Finally, terror management theory (TMT) and its relationship to existential psychology are reviewed, and the literature on TMT directly related to the proposed study is presented.

Five Themes in Existential Psychology

While far from a unified school of thought, there are five common themes that run through much of existential psychology, all of which focus on the nature of the human condition. First, there is an emphasis on the human capacity for self-awareness and on the importance of acknowledging and fostering this capacity. Self-awareness permits reflection on our lives and on our relationship to the world, giving us the ability to govern our behaviour and to realize the myriad of choices that are available to us (Yalom, 1980). Second, there is a focus on taking responsibility for the freedom of choice that we have in the actions that we take (Frankl, 1959/1984). Accepting responsibility for our own lives, rather than relegating it to others, is seen as central to living a full life (May, 1969). Third, existential psychological theories and psychotherapies tend to emphasize the uniqueness of personal experience and the isolation inherent within it (van Deurzen, 2002), including the development of personal identity, sense of self, and sense of relatedness to others. Fourth, there is an acknowledgement of the anxiety that is intrinsic to human existence, which is primarily brought on by the awareness of the reality of our own eventual death (Becker, 1973; Greenberg et al., 1986; May, 1969). Rather than a categorically pathological problem, anxiety is considered in existential psychology and psychotherapy as an intrinsic part of life that can serve as a motivation for personal growth and meaningful pursuits. Fifth, existential psychotherapies emphasize the individual's search for meaning in life, and highlight the importance of searching for meaning in the context of life's challenges (see, esp., Frankl, 1959/1984). Given that life is unfair,

unpredictable, paradoxical, and devoid of intrinsic meaning, finding meaning within that life is an ongoing and central challenge.

Key Figures in Existential Psychotherapy

The history and theory behind contemporary existential psychology is probably best understood through the lives of those who most contributed to its development. Therefore, the lives and ideas of Viktor Frankl, Rollo May, James Bugental, and Irvin Yalom are reviewed here.

Victor E. Frankl

Born in 1905 to a civil service family, Victor Frankl was an Austrian psychiatrist and neurologist who authored some of the earliest works on existential psychotherapy. He was greatly influenced by Freud and Adler, both of whom he had met while still a university student. Soon after Frankl completed his studies in medicine, Austria was invaded by Nazi Germany. It was during this time that Frankl began to more fully develop his thoughts on psychotherapy, and he began work on a manuscript that illustrated some of his views. However, before Frankl could publish his work, he was detained and forced to work in a series of concentration camps, during which time his manuscript was lost along with the lives of his mother, father, brother, and wife. Frankl spent nearly three years in concentration camps before being freed.

While being forced to work in the horrifying conditions of Auschwitz, Frankl (1959/1984) reports that he marshaled the will to survive by maintaining the hope that he would one day be reunited with his wife and publish his work. To this end, Frankl imagined the voice and image of his wife while he painstakingly

reconstructed his lost work on scraps of found paper (Frankl, 1959/1984). After his liberation in 1945, Frankl returned to Vienna and resumed work as a psychiatrist. The manuscript that he had worked on so diligently while in captivity, *Ärztliche Seelsorge* (*The Doctor and the Soul*; Frankl, 1952), was published a year later.

As a result of his experiences, Frankl developed a form of psychodynamic therapy that he termed Logotherapy (Frankl, 1959/1984), or "therapy through meaning." Through his observations of concentration camp prisoners and reflection on his own experience, Frankl concluded that those who survived the harsh conditions tended to have a deep sense of meaning and purpose in their life, either through religious faith, family, or the desire for future achievement. Following from this, the core feature of Logotherapy is the assertion that many psychological problems result from the experience of meaninglessness or loss of purpose in life. The task of the psychotherapist, therefore, is to challenge the client to find meaning and purpose in everyday experience. Frankl considered the modern world to be a climate of meaninglessness, which in turn left the individual to flounder without a guide. Frankl argued that meaning could either be found by adopting the values of the dominant culture or by keeping oneself busy with work (cf. Greenberg et al., 1986). While a focus on meaning is a common theme throughout early and contemporary existential psychotherapies, Frankl's emphasis on the search for meaning as the central human concern is unparalleled.

Where the psychoanalytic theories popular at the time conceptualized mental health as the absence of psychodynamic conflict and tension, Frankl's

Logotherapy asserted that psychological tension or anxiety was an essential feature of mental health (Frankl, 1959/1984). He argued that some level of psychic tension was necessary to act as a psychological buffer against adversity and as a motivator toward achievement and meaning. To Frankl, internal tension results from the awareness of the difference between what one *is* and what one *has the potential to become* (Frankl, 1959/1984), which is similar to the concept of cognitive dissonance but differs in its hypothesized outcome (see Festinger, 1957; cf. Frankl, 1959/1984; Yalom & Leszcz, 2005). This idea of tension or anxiety as both an adaptive and necessary human experience is one of the features of Logotherapy that is common with many other existential theories and therapies (see also Becker, 1973; Greenberg et al., 1986; Kierkegaard, 1843/1992; May, 1969; Yalom, 1980; Yalom & Leszcz, 2005). Undoubtedly, Frankl's ideas influenced many theorists who came after him, and his impact on the field of existential psychology was widespread.

Rollo May

Rollo May was born of mentally ill parents in Ada, Ohio on April 21, 1909. He had a difficult childhood, and most of his immediate family members (including both of his parents and his sister) suffered from psychotic disorders. After graduation from Oberlin College in Ohio, May left the United States and studied briefly with Alfred Adler, who encouraged May to pursue further education in psychotherapy. May subsequently began a degree in divinity at Union Theological Seminary, where he met Paul Tillich, an influential existential theologian who would influence May greatly.

After completing his seminary education, May was struck with Tuberculosis and spent three years in hospital. While facing the prospect of death, May spent his time reading literature, which included in large part the works of Søren Kierkegaard. In particular, May was impacted by Kierkegaard's idea of existential despair, which Kierkegaard (1843/1992) argued results from living a life driven by sensory pleasure and the avoidance of discovering one's own values. Kierkegaard's ideas provided the framework for May's doctoral dissertation at Columbia University, which would later become the basis for one of May's most important works, *The Meaning of Anxiety* (May, 1977). May's interpretation of Kierkegaard's ideas was new to American psychology at that time, and May was therefore instrumental in bringing existential psychology to North America.

Like Frankl, May disagreed with the assertion that anxiety is a cause of psychopathology (cf., Wolpe, 1958). May considered anxiety to be part of normal human experience, and that anxiety ultimately resulted from our self-awareness and the subsequent realization that our lives are finite (May, 1969). May argued that we can either choose to suppress this anxiety by rejecting our individuality and accepting collective cultural values, or we can have the courage to confront our anxiety and use it to motivate us toward creativity and discovering our own values (May, 1975). May believed that taking responsibility for our choices and for our lives is a key source of positive personal growth and human goodness, and he viewed taking responsibility for our choices as a necessary precursor to creativity and to love (May, 1969). That is, May argued that we develop the

opportunity to establish a deep sense of connectedness with others by connecting with, understanding, and feeling empowered by our*selves*. May asserted that a deep connection with the self was prompted by questions such as: What will I do with my life? How will I do it? What choices will I need to make to become myself?

May's approach to psychotherapy and counselling was one of guiding clients to discover themselves, subsequently helping clients to experience life to the fullest. For May, the counsellor or psychotherapist's role was to aid the client in liberating him or herself from the fear of responsibility and the frantic efforts to avoid it (May, 1981). May's form of existential psychotherapy could therefore include any techniques that prompt a sense of responsibility and freedom from the fear of choice within the natural limitations of life (Schneider & May, 1995). As mentioned before, May disagreed with Frankl on the point of how to use the freedom of choice. While Frankl advocated the adoption of meaningful cultural values, May (1981) argued that these values must be challenged and examined by the individual if they are to be meaningful, and as such should not be accepted uncritically. In other words, values must come from within if they are to lead to an authentic, rewarding life.

May's existential psychotherapy emphasizes anxiety and responsibility to a greater degree than other theorists, and he can be credited with translating Kierkegaard's ideas into psychotherapy practice. However, it is likely that his introduction of existential ideas to American psychotherapy is his most marked

accomplishment, and he had a profound effect on other American psychotherapists. One such therapist, James Bugental, is discussed next.

James F. T. Bugental

James Bugental was born in Lansing, Michigan in 1915, and spent most of his childhood growing up amid the Great Depression. Due to his family's substantial economic difficulties, Bugental worked odd jobs for most of his childhood to help support the family. When Bugental was old enough to attend college, he left home and pursued studies in psychology. Bugental received his PhD in psychology from Ohio State University in 1948.

Bugental was impacted both by the ideas of Rollo May and by the humanistic movement that was developing in the United States in the 1950's, which was born out of a reaction to Behaviorism and the reductionism that it espoused. Bugental became deeply involved in the humanistic movement, and along with Abraham Maslow, Carl Rogers, and others, was one of the founding members of the Association of Humanistic Psychology. He served as the first president of the association, and in 1965 Bugental published a treatise on Humanism called *The Search for Authenticity* (Bugental, 1965) that outlined the postulates of humanistic psychology.

Much of what Bugental wrote in his lifetime was devoted to psychotherapy practice rather than theory. His most influential works include *The Art of the Psychotherapist* (1987) and *Psychotherapy Isn't What You Think* (1999), both of which instruct the reader on psychotherapy techniques that place 'authenticity' and 'presence' at the zenith of importance. In this way, Bugental's

ideas on existential psychotherapy are not as clearly delineated as others such as Yalom (1980; 2001), yet his approach is clearly focused on existential concerns. Throughout his life, Bugental developed and reformulated an approach to psychotherapy that emphasizes the validity of the individual's experience while focusing on the isolation inherent in being an individual. For Bugental, the primary goal of the psychotherapist is to connect with the client on a phenomenological level, where the client and therapist engage in an experiential exploration of the existential "givens of being", which include being finite, existing within the limits of the body, the ability to act or to not act, having choice, and the paradox of being related to others while also being isolated (Bugental, 1987).

Bugental's compassionate and authentic approach to existential concerns prompted a new wave of existential psychotherapists to seek training with him wherever he taught, and his influence on psychotherapy has been widespread. However, Bugental's influence on existential psychology and psychotherapy is less often cited than that of his contemporary Irvin Yalom.

Irvin Yalom

Irvin Yalom was born in 1931 in Washington, DC, of Russian immigrant parents. Yalom grew up in an impoverished Washington neighborhood, where he sought solace in reading and education. A high achiever in high school and university, Yalom followed the lead of his achievement-oriented peers and attended Boston University School of Medicine, where he graduated in 1956. Yalom decided to specialize in psychiatry, and trained at Mount Sinai Hospital in

New York. After further training with the military, Yalom accepted a faculty position at Stanford, where he authored his seminal existential work, the widely used *Existential Psychotherapy* (1980).

Yalom's approach to psychotherapy focuses on four 'ultimate human concerns': death, freedom, isolation, and meaningless (Yalom, 1980). Unlike many other existential theorists, who avoid psychodynamic explanations of behaviour, Yalom uses the four existential concerns as a psychodynamic framework to conceptualize the problems presented by mental health clients. For Yalom, the denial of death is at the core of all psychopathology, a sentiment that was first offered by Ernest Becker (1973) and later extended by terror management theory (Greenberg et al., 1986). Yalom (1980) argues that the awareness of our mortality and the consequent fear that this awareness evokes plays a major role in our unconscious experience, and that the avoidance of being actively aware of one's mortality prevents the individual from living fully and authentically. According to Yalom, while conditions such as schizophrenia have a biological component, the symptoms manifested in such conditions can be understood as the individual's creation of a symbolic world that is used as a psychological defense against death anxiety. Yalom argues that death anxiety is so powerful and subversive that researchers and therapists, primarily as a result of their own difficulties in confronting the problem of mortality, have largely ignored its role in mental health.

Yalom (1980) asserts that one of the primary goals of the psychotherapist is to raise the client's awareness of death into consciousness so that he or she can

confront the fear that it elicits and move toward a more authentic existence; in this way, the awareness of death inevitably prompts the theme of freedom and responsibility to enter the therapeutic process. Yalom argues that the therapist must challenge the client to develop a sense of responsibility over the direction of his or her life, and to avoid this responsibility is an indicator of poor mental health. Connected to this is the need for the individual to explore how he or she relates to others in the world, given that responsibility for the self ultimately rests with the individual. May and Bugental's influence on Yalom is clear, as Yalom likewise emphasizes the therapist's role in using the therapeutic relationship to help the client explore the themes of isolation and responsibility.

Yalom (1980) credits various existential philosophers for the development of his approach to psychotherapy. He notes Kierkegaard and May for their ideas on anxiety and dread, Nietzsche for his discourse on death and will, Heidegger and Bugental for their emphasis on authenticity, responsibility, and isolation, Sartre for his thoughts on meaninglessness and choice, and Frankl for his emphasis on meaning. In many ways, Yalom's *Existential Psychotherapy* serves as a synthesis of existential philosophy and its application to psychotherapy, while *The Gift of Therapy* (2001) instructs the next generation of psychotherapists on the practical use of existential principles in therapy. But an unlikely cohort of researchers has also shared Yalom's emphasis on the fear of death, supporting the idea that existential concerns play a central role in shaping human social behaviour.

Terror Management Theory

Social and cultural psychology has recently given birth to a resurgence of interest in the empirical investigation of existential themes in human behaviour. Based primarily on the work of Ernest Becker (1962, 1973) and Otto Rank (1936/1945), terror management theory (TMT; Greenberg et al., 1986) posits that full and unmitigated awareness of our own mortality elicits overwhelming and paralyzing terror. TMT argues that through evolutionary development, human beings have adapted to this problem by engaging in processes that reduce mortality awareness and assuage its resultant fear. TMT posits that one process humans have developed to this end involves the creation of complex social structures (or cultures) in which individuals can participate and succeed. The shared conception of reality that is necessitated by culture (i.e., cultural worldview) prescribes standards of appropriate behaviour and indicators of personal success toward which we can strive (Arndt & Vess, 2008). Faith in a cultural worldview both imparts a sense of belonging and gives our lives meaning, and our participation in cultural worldviews likewise strengthens the symbolic immortality of the culture as well as the individual (Solomon et al., 1991). In addition to faith in cultural worldviews as a path to symbolic immortality, TMT posits that living up to the standards and values of the cultural worldview gives people a sense of self-esteem, or the belief that we are a valuable and important member of a meaningful, larger-than-self worldview (Greenberg, Solomon, & Pyszczynski, 1992).

The Anxiety-Buffer Hypothesis

Several hypotheses have been the focus of empirical assessment of TMT. The first is the *self-esteem as anxiety-buffer hypothesis*, which asserts that if self-esteem is strengthened or increased, the anxiety-producing effect of mortality reminders will be assuaged, thereby reducing defensiveness and death-related fear (Greenberg, Solomon, & Pyszczynski, 1997). In assessment of this hypothesis, Greenberg, Simon, Pyszczynski, and Solomon (1992) conducted experiments in which participants' self-esteem was manipulated through positive feedback on a bogus personality or intelligence test, followed by exposure to a death-related video. Experimental condition participants in this study whose self-esteem had been artificially increased reported lower levels of anxiety than controls in response to a death-related video and lower physiological arousal in response to the threat of an electric shock. Several other studies have also found that high levels of trait self-esteem or increases in state self-esteem are associated with lower reports of anxiety in response to death reminders (Greenberg et al., 1992; Greenberg et al., 1993), while other research has demonstrated that an increase in self-esteem is associated with decreased use of other processes that buffer against death-related anxiety (Harmon-Jones et al., 1997).

The Mortality Salience Hypothesis

The second postulate advanced by TMT is the *mortality salience hypothesis*, which states that if people are made aware that they will eventually die, they will engage in processes to reduce the potential for anxiety resulting from this awareness (Greenberg, Solomon, & Pyszczynski, 1997). Consistent with

this hypothesis, research has demonstrated that mortality salience leads to an increase in efforts to bolster the importance or validity of cultural worldviews, such as professing greater fondness for an in-group member and expressing greater dislike for an out-group member (Greenberg et al., 1990), or reacting more positively to people who exemplify the values and standards of the cultural worldview and reacting more negatively to those who violate them (Solomon, Greenberg, & Pyszczynski, 2004; see also Mikulincer & Florian, 1997; Rosenblatt et al., 1989). Other research has demonstrated that reminders of the animal nature of the human body paired with mortality awareness elicit increased feelings of disgust toward the physical (but not romantic) aspects of sex (Goldenberg, Cox, Pyszczynski, Greenberg, & Solomon, 2002), suggesting that awareness of the mortality of the body poses a direct threat to symbolic immortality (Goldenberg, 2005). The mortality salience hypothesis has garnered a considerable amount of empirical support (see Solomon, Greenberg, & Pyszczynski, 2004, for a more comprehensive review; also see Burke, Martens, & Faucher, 2010, for a meta-analysis).

The Death-Thought Accessibility Hypothesis

More recently, a third hypothesis derived from TMT has been termed the *death-thought accessibility hypothesis* (see Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994; Hayes, Schimel, Arndt, & Faucher, 2010; Hayes, Schimel, Faucher, & Williams, 2008; Mikulincer, Florian, Birnbaum, & Malishkevich, 2002; Pyszczynski, Greenberg, & Goldenberg, 2003; Schimel et al., 2007; Schimel, Landau, & Hayes, 2008; Solomon et al., 2004). This hypothesis states

"that if a psychological structure provides protection from thoughts of death, then weakening this structure should render death thoughts more accessible to consciousness" (p. 601, Hayes et al., 2008). In a seminal study investigating the DTA hypothesis, Greenberg and colleagues (1994, Study 4) developed a novel measure of DTA using a word-completion task in which participants were asked to fill in the blanks for 20 word fragments which were either death-related (e.g., "COFF_ _" can be completed as "COFFEE" or "COFFIN") or neutral (e.g., "TAB _ _" can be completed as "TABLE" or "TABOO"). Greenberg et al. randomly assigned participants into two experimental conditions and one control. Experimental condition participants were reminded of their own mortality by having them respond to open-ended questions about their own death; control participants instead responded to questions about watching television. One group of the experimental condition participants then read a mundane story as a distraction from the problem of death, followed by the DTA measure (distraction condition), and the other experimental condition completed these tasks in reversed order (no-distraction condition). Greenberg et al. found that DTA in the distraction condition was significantly higher than both other conditions, but that DTA in the no-distraction condition was not significantly different from that in the control condition. These findings suggest that when reminded of their own mortality, participants engaged in processes to suppress death-related thoughts, but when these suppression effects are relaxed, thoughts of death remain highly accessible (yet still outside of conscious awareness).

In another series of studies, Schimel and colleagues (2007) investigated the effect of directly threatening one's worldview on DTA. In one study, Schimel et al. found that threatening the cultural values of participants led to an increase in DTA. In another study, participants who held a Creationist worldview demonstrated significantly greater DTA after reading an anti-Creationist article than participants who held Evolutionist beliefs. Schimel et al. also found that threats to worldview increased DTA independently of the arousal of anger or state anxiety. Other studies have shown that direct threats to self-esteem (such as through the provision of negative feedback about intelligence or personality; Hayes et al., 2008), self-worth (such as priming reminders of undesired personal traits; Ogilvie, Cohen, & Solomon, 2008), fundamentalist beliefs (Friedman & Rholes, 2007), or participants' belief in a just world (Landau et al., 2004; Hirschberger, 2006) also lead to an increase in DTA.

Of particular interest in the current study, the effect of threats to interpersonal relationships has also been investigated. Mikulincer, Florian, and colleagues (Florian, Mikulincer, & Hirschberger, 2002; Mikulincer et al., 2002; Mikulincer, Florian, & Hirschberger, 2003, 2004) have hypothesized that close relationships serve as an important anxiety-buffering function because of a number of basic properties inherent in these relationships. First, they argue that close relationships improve the chances of survival and reproductive success, bolstering the odds of producing offspring that will symbolically carry on the genetic heritage of the parent into future generations. Second, they point out that close relationships provide an opportunity for security and safety in a dangerous

world, reducing the potential for immediate death (see also Ainsworth, 1969; Bowlby, 1969, 1988; Mikulincer, Florian, Cowan, & Cowan, 2002). Third, Mikulincer, Florian, and colleagues (2004) argue that the formation of close relationships represents the fulfillment of cultural values, thereby imparting status and the acknowledgement of interpersonal success. Fourth, they reason that close relationships are powerful bases of self-esteem and self-worth, which in turn bolster the ability to assuage death anxiety (cf. Greenberg et al., 1992). Lastly, Mikulincer, Florian, and colleagues argue that close relationships provide sources of symbolic immortality through the transcendence of romantic love and the promise of remembrance after death.

To test the hypothesis that close relationships play a protective role against the terror of death awareness, Mikulincer and colleagues (2002) conducted a study in which participants were divided into two experimental conditions and a single control. In one experimental condition, participants were asked to imagine a separation from a close partner, and in the other, to imagine the partner's death. Control participants were asked to think about a TV show (a neutral theme). All participants were then assessed using a version of Greenberg at al.'s (1994) word completion task in which the number of death-related words served as the dependent variable. Results indicated that death-thought accessibility (DTA) in both experimental conditions significantly differed from the control condition, but that there was no difference in DTA between experimental conditions. While these and other findings (e.g., Taubman–Ben-Ari & Katz–Ben-Ami, 2008) suggest that the threat of loss of a close relationship leads to an increase in DTA,

the effect of threats to other sources of social connection on DTA remains unclear.

TMT and the Current Study

The collective findings of TMT research over the past two decades, particularly those that bolster the DTA hypothesis, appear to support the notion that threats to one's sense of social safety and self-esteem lead to an increase in the accessibility of death-related thoughts. However, despite well-established theory and evidence that conceptualize shame as a key emotional response arising from these very types of threats, investigations into the relationship between shame and existential processes such as terror management are scant.

In one study, Hirschberger, Florian, and Mikulincer (2002) found that participants who were low in self-esteem tended to react with shame when forced to compromise on their standards of an ideal mate, but only when they were administered a mortality salience manipulation where they responded to two open-ended questions about their own death. However, the authors reported that, "these emotional reactions were specific to compromise in mate selection… and were not a product… of the mortality salience manipulation itself" (p. 621). Another study found that mortality salience exacerbated feelings of shame when high OCD individuals were exposed to a mistake-checking task (Fergus & Valentiner, 2012). However, like the previous study, Fergus and Valentiner note that shame "emerged as relevant to scrupulosity" (p. 110), likely resulting from OCD symptoms rather than from the mortality salience manipulation itself. Neither of these studies sought to clarify the role of shame in TMT processes, and

these findings are therefore complicated by the specificity of the populations and manipulations used.

Consequently, the direct role that shame plays in TMT processes remains unclear, leaving existential psychology without a sound empirical basis for understanding how shame relates to existential concerns. Given that therapists who practice existential psychotherapy frequently encounter shame in their practice, it is critical that such therapists are afforded an evidence-based understanding of how shame relates to the theoretical precepts of existential psychology. Therefore, the intent of the current study is to help is to help clarify the relationship between literature on shame and that of TMT by investigating whether the threat to the social self represented by shame leads to an increase in mortality awareness.

CHAPTER 4

EXAMINING THE EFFECT OF SHAME ON DEATH-RELATED THOUGHTS

Using an experimental design, this study sought to address the following questions: does the experience of shame increase death thought accessibility (DTA)? If so, does shame-proneness play a role in the relationship between shame and DTA? It was reasoned that (a) the experience of shame threatens the anxiety-buffering effect of social status and close relationships, and therefore shame may cause an increase in DTA, and (b) because some individuals are more prone to shame than others, such individuals may be more likely to experience death-related thoughts to a greater degree when confronted with a shame-eliciting event than individuals who are less prone to shame. It was specifically hypothesized, therefore, that (a) DTA would be significantly greater in shame induction participants than in control participants, and that (b) shame-proneness would significantly moderate the relationship between shame and DTA. An illustration of these hypotheses is shown in Figure 1.

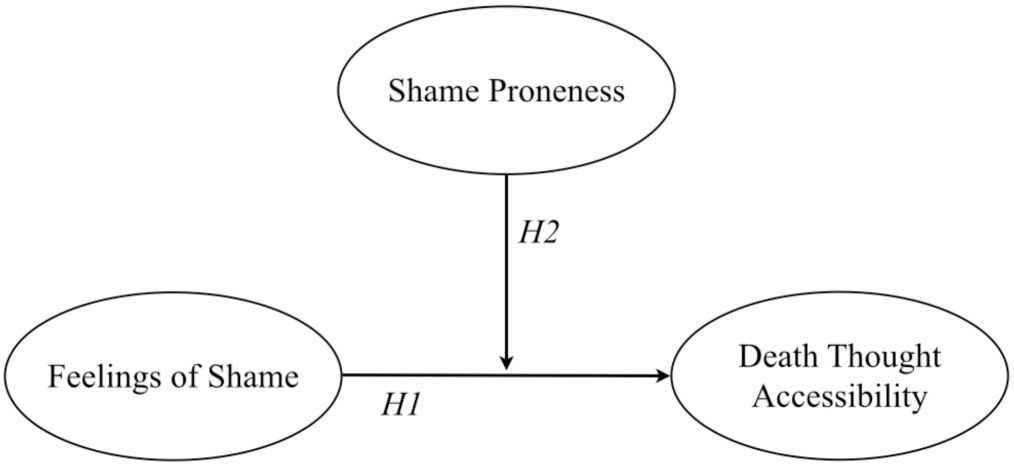

Figure 1. Illustration of main study hypotheses.

Method

Design

Since the effect of shame on the accessibility of death-related thoughts was of primary interest, an experimental method was selected to examine the possible causal relationship between shame and death-thought accessibility (DTA). Therefore, shame served as an independent variable and DTA as a dependent variable. In addition, prior research has shown that shame-prone individuals are more likely than others to experience shame (rather than some other emotion) in relation to a given interpersonal experience (del Rosario & White, 2006; Tangney & Dearing, 2002), with shame-proneness acting as a moderating variable in the affective experience of shame. Therefore, the potential moderating effect of shame-proneness on the relationship between state shame and DTA was also investigated. Participants were randomly assigned to either a shame induction condition or a control condition, and the shame-proneness of all participants was measured prior to the experimental manipulation. Because of the potential for a shame-inducing event to also elicit guilt or reduce self-esteem, measures of state shame, state guilt, and self-esteem were administered to all participants after the DTA measure as a manipulation check, consequently serving as alternate dependent variables. Measuring these variables also allowed for statistical examination and control of their relative effect. An illustration of the overall study design is presented in Figure 2.

Ethical Considerations

Prior to the collection of data, a detailed design for this study was approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta as meeting the standards for ethical conduct outlined in the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (1998). In addition to this, the ethical implications of the proposed study were carefully considered from a participant-centered perspective to ensure the dignity, privacy, and safety of research participants while maximizing the benefit of the research to participants and the community at large.

Given that this study involved the induction of negative emotions that have the potential to induce psychological discomfort or pain, a primary ethical consideration was the potential for harm. Although this was estimated to be extremely low, the experimental manipulation used was nonetheless carefully chosen from a range of possibilities (such as using experimental confederates in a social situation to induce shame) so that the manipulation would have the least potential for harm. While the use of retrospective recall as an experimental induction of emotion does not eliminate the potential for harm entirely, it reduces the potential for harm in several important ways. First, the distress caused by the recollection of a shame event is likely mitigated to some degree by the opportunity afforded to participants (through the passage of time) to develop effective resources to cope with the distress of such a memory. Such opportunities are less likely to exist when participants are exposed, unprepared, to a novel

shame-eliciting event at the time of the experiment. In addition, participants were free during the proposed manipulation to determine which event they would recall, giving them an opportunity to choose a less distressing event should they prefer to avoid remembering an excessively distressing experience.

Participants were also informed of the potential risks and benefits of the study before expressing interest (see Appendix F) and during the informed consent procedure (see Appendix G), and participants were repeatedly assured during recruitment and before beginning the study that they were free to withdraw from the study at any time, for any reason, and without penalty. In addition, the researcher was a therapist with a graduate degree in counselling and nearly five years of experience in crisis intervention and psychotherapy at the time of the study, and was therefore well equipped to monitor participants' emotional and psychological states. Participants were also repeatedly encouraged to contact the researcher should they experience distress upon concluding the study, and all participants were provided with a comprehensive list of support resources (see Appendix L) that could be accessed without cost.

Another ethical consideration of particular importance was that the full purpose of the study was partially concealed from participants in order to reduce the potential for demand characteristics. Efforts were therefore undertaken to minimize the degree of deception involved. To this end, the study concealed only the construct of interest in the DTA measure but did not conceal the nature of the task (i.e., that it is a word completion task). This deception was fully disclosed to participants during debriefing (see Appendix K), and all participants were given

the opportunity to withdraw their data from the study should they have objected to the deception.

Lastly, the sensitivity of participant data collected in the study (such as written accounts of shame events) made the confidentiality of participants and the need for security of data especially salient. The only identifying information collected was the participant's name, and this was recorded exclusively on the participant consent form, which was securely maintained in a locked filing cabinet after completion. Identifying participant information was never paired with any questionnaire, and all questionnaires were securely locked in a separate filing cabinet to further maximize participant confidentiality. Participants were informed that all identifying participant data would be destroyed 5 years after the conclusion of the study.

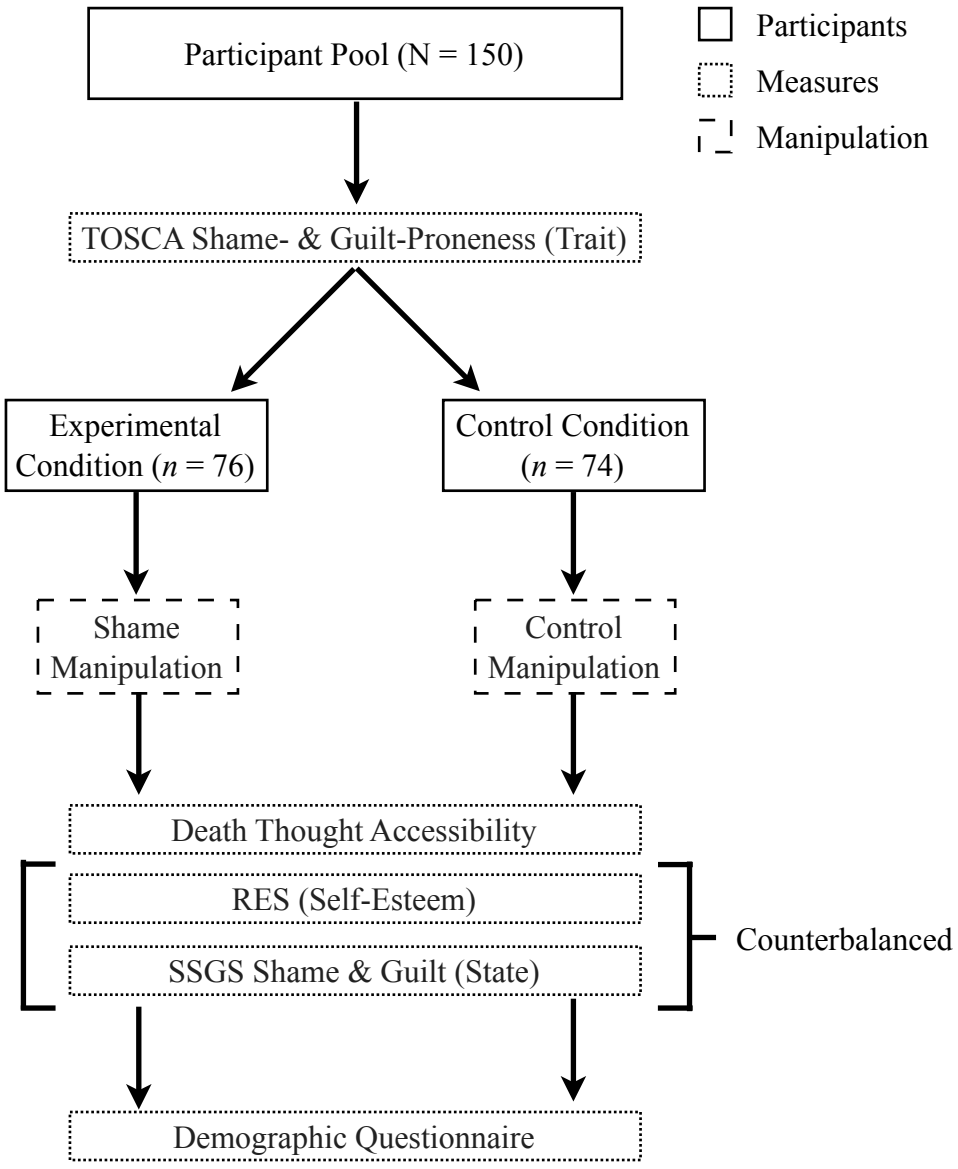

Figure 2. Illustration of overall study design.

Participants

Based on an a priori power analysis[2] and to account for a potential dropout rate of approximately 5%, 150 adult undergraduate students were recruited through 12 classroom presentations at the University of Alberta and randomly assigned[3] to either experimental (n = 76) or control conditions (n = 74). Demographic characteristics of the sample are presented in Table 1. Consistent with typical university student populations (e.g., Gainsbury, Russell, & Blaszczynski, 2012), the sample was predominantly female, single or never married, without children, low income, at least high-school educated, and nonreligious.

[2] As recommended by Cohen (1990), an a priori power analysis was conducted to determine the sample size required for the study. Assuming a very conservative effect size of $R^2 = 0.10$ (Cohen, 1988; 1992), a minimum sample size for the current study was calculated to be 143 (see Faul, Erdfelder, Lang, and Buchner, 2007, for a description of the method used in this calculation).

[3] To accomplish random assignment, research packets were first designed with counterbalanced shame/guilt (using a single questionnaire) and self-esteem measures for control and experimental conditions, resulting in four possible packets (i.e., control packet 1: shame/guilt then self-esteem; control packet 2: self-esteem, shame; experimental packet 1: shame, self-esteem; experimental packet 2: self-esteem, shame). Software was used to randomize 150 participant numbers to one of each of four research packets. Research packets were then created according to participant number (1-150) with no identifying information aside from participant number on the outside of the packet to keep the experimenter blind to condition. Packets were given in order, by participant number, as participants were recruited. Because the chance of a participant number being assigned to a packet was random and independent (i.e., each assignment was not dependent on previous assignments), the sample resulted in slightly uneven groups (experimental n = 76, control n = 74).

Table 1

Demographic Characteristics of Sample

Variable	*n*	%	*M*	*Mdn*	*SD*	Range
Gender						
Male	39	26	-	-	-	-
Female	111	74	-	-	-	-
Age	-	-	22.11	21	4.63	18-51
Marital Status						
Never Married	121	80.7	-	-	-	-
Married/Common Law	21	14.0	-	-	-	-
Divorced/Separated	3	2.0	-	-	-	-
Widowed/Other	4	2.7	-	-	-	-
Education[a]						
High School	94	62.7	-	-	-	-
Diploma	23	15.3	-	-	-	-
Bachelor's Degree	32	21.3	-	-	-	-
Master's Degree	1	.7	-	-	-	-
Income[b]						
Less than $30,000	106	70.7	-	-	-	-
More than $30,000	40	23.6	-	-	-	-
Children			.11	0	.45	0-3
None	140	93.3	-	-	-	-
One or More	10	6.7	-	-	-	-
Religiosity						
Religious	26	17.3	-	-	-	-
Spiritual	33	22.0	-	-	-	-
Both Religious and Spiritual	28	18.7	-	-	-	-
Neither Religious nor Spiritual	63	42.0	-	-	-	-

Note. $N = 150$. Some percentages do not add up to 100 because of missing data.
[a] Education level is based on highest completed degree; [b] Respondent-estimated total household income.

Procedure

Presentations were made in classes on education or psychology at the University of Alberta. Students were told briefly about the study during the presentation and asked to raise their hand if they would like to learn more about the study. Classroom sizes ranged from 15 to approximately 200 students, with about 20% of students expressing interest in the study. Interested students were provided with a copy of the screening questionnaire (see Appendix A) and asked to indicate whether they met the study criteria. Qualifying participants were (a) at least 18 years of age, (b) willing and able to remain after the end of the class to complete a 30-minute questionnaire, and (c) have completed a grade 9 education[4] (or equivalent) in English. Since TMT is believed to apply to all adult individuals regardless of gender, culture, ethnicity, religion, etc., all those who expressed interest in the study and met eligibility criteria were invited to participate. Those who met the criteria were given an information sheet (Appendix F) that explained the study in detail but refrained from revealing the key hypotheses; to prevent subject demand characteristics, participants were told that the study involved an investigation of the relationship between emotion, past experiences, and performance on word fluency tasks. Eligible and willing students were asked to remain after class, where they were given the opportunity to ask any questions that they may have about the study and were invited to contact the researcher with any questions via email or telephone any time after the class, after participation in the study, or if they preferred to arrange a time outside of the class to complete

[4] Text from the measures and instructions used for this study was input to text readability software that is based on the Flesch-Kinkaid scoring system to estimate the minimum grade reading level required. The algorithm used can be found at http://www.addedbytes.com/code/readability-score/

the study (there were no participants who chose this latter option). Qualifying students were offered $10 cash as a stipend for participation.

Before completing the study, prospective participants were required to read and review a consent form (see Appendix G) and were given the opportunity to ask questions regarding the research before providing consent. Participants completed the study in the same classroom that they were invited to participate, but seated with at least three empty seats between them and two empty rows of seats both in front and behind. Participants from the same classroom consisted of between 1 and approximately 20 students. Participants were randomly assigned to either a shame induction or control condition, and the experimenter was not aware at any time during data collection of the condition each participant was assigned to. After the consent form was read and completed, all participants completed a measure of shame-and guilt-proneness. Shame condition participants were asked to read the following statement (see Appendix H):

> Please think about a negative event in your life that made you feel very badly about yourself - something that involved **failure** or **rejection**. Please focus on a time when you felt so badly about some aspect of yourself that **you wanted to withdraw or hide yourself from others**. It is best to choose something that you have not talked about with others in much detail. Remember, what you write here will remain completely confidential, and the researcher will not know who specifically wrote it. Please write down your experience of the event in as much detail as possible. It is important that you write down as much as you can

> remember about what the experience was like for you. For example, who was present at the time of the event? What might other people have thought about you at the time? What negative aspect of yourself was exposed to others? Please try your best to write about your deepest thoughts and feelings about the event.

This manipulation was an adaptation of the shame induction used by Dickerson et al. (2004) and Leary et al. (2007), and has been shown to successfully elicit feelings of shame in experimental settings (Agrawal & Duhachek, 2010; de Hooge, Zeelenberg, & Breugelmans, 2007, 2010; Dickerson et al., 2004). The manipulation was designed to elicit shame by focusing on the phenomenological experience of both external (i.e., "how I imagine others see me") and internal (i.e., "how I see myself") shame without using the term *shame* itself, avoiding the risk of variation in participants' understanding of affective terminology. The manipulation also focused on feeling badly about *oneself* and wanting to *hide* rather than feeling badly about *one's actions* and wanting to *make amends*, a distinction which has been identified as discriminating between the experience of shame and guilt, respectively (Gilbert, 2003; Greenwald & Harder, 1998; Tangney, 1996; Tangney & Dearing, 2002). Conversely, control condition participants read the following neutral statement (see Appendix I):

> Please think about the events you have experienced over the last 24 hours. Please focus on the specific details of your activities and schedule, thinking about the facts and circumstances as objectively as possible. Remember, what you write here will remain completely confidential, and

> the researcher will not know who specifically wrote it. Please write down your experience of the events in as much detail as possible. It is important that you write down as much as you can remember about the facts and circumstances. For example, who was present over the course of the day? What did you talk with others about? What did you think about? Please try your best to write about your thoughts as objectively as possible.

Both conditions asked participants to write about the experience for no more than 5 minutes to minimize the possibility of reducing (rather than increasing) feelings of shame, as prolonged writing has been shown to elicit a sense of resolution about negative life events (Pennebaker & Seagal, 1999), whereas the immediate impact of such writing tends to induce short-term increases in distress and negative mood (Baikie & Wilhelm, 2005).

After the manipulation, death thought accessibility (DTA) was assessed in both groups using a word-completion task described below. All participants then completed a measure of shame and guilt, as well as a measure of self-esteem (administered in a counterbalanced fashion to control for order effects) immediately afterward to ensure that shame, rather than guilt or self-esteem, was elicited. All three measures (DTA, shame/guilt, and self-esteem) were found to generally require less than 5 minutes to complete, based on observation of participants. Finally, all participants completed a demographic questionnaire (Appendix J), followed by a debriefing in which participants were informed of the purpose of the study in greater detail (see Appendix K) and provided with a list of available counselling support resources in the Edmonton area (Appendix L).

Measures

Test of Self Conscious Affect - 3 (TOSCA-3). The TOSCA-3 (Tangney, Dearing, Wagner, & Gramzow, 2000) is a 16-item self-report measure that asks respondents to rate the likelihood (1 = "not very likely"; 5 = "very likely") that they would respond in various ways to a number of scenarios. The original scale was developed from the responses of adult participants who were asked to describe personal experiences of pride, guilt, and shame (Tangney & Dearing, 2002). The TOSCA-3 has been widely used as a measure of both shame-proneness and guilt-proneness, and allows the presence or absence of each construct to be independently assessed (Robins, Noftle, & Tracy, 2007). Unlike other measures of shame-proneness, the scenarios used in the TOSCA-3 target the phenomenological experience of both external and internal shame (Gilbert, 1998; Tangney, 1996), thereby capturing the overall construct of shame-proneness. Given that both internal and external components of shame were induced in the experimental condition, the TOSCA-3 was considered an ideal choice for measurement of shame-proneness in the present study.

The TOSCA-3 includes subscales measuring proneness to Shame, Guilt, Externalization, Detachment/Unconcern, Alpha Pride, and Beta Pride. Reported full-scale reliabilities for the TOSCA-3 shame- and guilt-proneness subscales range from .77 to .91 and .64 to .78, respectively (Fedwa, Burns, & Gomez, 2005; Tangney & Dearing, 2002; Rüsch et al., 2007). The convergent validities of the shame- and guilt-proneness subscales of the TOSCA-3 have been supported by moderate correlations (0.49 and 0.40, respectively; Rüsch et al., 2007) with the

Harder Personal Feelings Questionnaire-2 (Harder & Greenwald, 1999), another shame- and guilt-proneness measure. The TOSCA-3 can also be condensed into a 10-item scale that includes only shame- and guilt-proneness subscales, which Tangney and Dearing (2002) report are highly correlated (.94 and .93, respectively) with their corresponding full-length versions. Given the focus of the current study on shame-proneness and the brevity afforded, the 10-item short version of the TOSCA-3 was used (see sample in Appendix B).

State Shame and Guilt Scale (SSGS). The SSGS (Marschall, Saftner, & Tangney, 1994; see sample in Appendix C) is a 15-item questionnaire that measures in-the-moment feelings of pride, guilt, and shame. The SGSS asks respondents to rate 5 items each for pride (e.g., "I feel proud"), guilt (e.g., "I feel tension about something that I have done"), and shame (e.g., "I feel humiliated, disgraced") with a 5-point scale (1 = "not feeling this way at all"; 5 = "feeling this way very strongly"). Based on H.B. Lewis' (1971) theory of the shame/guilt distinction, the SGSS is one of the only state-shame measures available that does not use the terms *shame* and *guilt* so as to avoid subjective interpretations of the terms by respondents, instead focusing on the phenomenological aspects of shame and guilt (Robins, Noftle, & Tracy, 2007; Tangney, 1996; Tangney & Dearing, 2002). Alpha reliabilities for both the shame and guilt subscales have been found to be between .86 and .89 (Tangney & Dearing, 2002; Stoeber, Kempe, & Keogh, 2008; Ghatavi, Nicolson, MacDonald, Osher, & Levitt, 2002). Construct validity of the SSGS shame and guilt subscales is bolstered by positive correlations with failure, negative correlations with success (Stoeber et al., 2008), and a significant

positive relationship between SSGS shame subscale scores, negative social evaluation, and cortisol levels (Gruenwald et al., 2004).

Rosenberg Self-Esteem Scale (RES). The RES (Rosenberg, 1965; see sample in Appendix D) is one of the most widely used measures of global self-esteem (Robins, Hendin, & Trzesniewski, 2001). Although generally considered a measure of trait self-esteem (Marsh, Scalas, & Nagengast, 2010), the RES has been shown to be sensitive to experimental manipulations of self-esteem (Greenberg et al., 1992) and was therefore selected to assess the degree to which the manipulation elicited self-esteem (rather than shame) in the present study. The RES is made up of 10 items that are rated on a 4-point scale from Strongly Agree to Strongly Disagree, with half of the items reverse-scored. The reliability of the RES has generally been established as good, with alpha reliabilities ranging from .72 to .90 (Robins, Hendin, & Trzesniewski, 2002; Gray-Little et al., 1997), and construct validity supported by strong correlations with other measures of self-esteem (Robins, Hendin, & Trzesniewski).

Death Thought Accessibility (DTA) Measure. The DTA measure prepared for use in the present study (see Appendix E) is based on the word completion task developed by Greenberg et al. (1994) and used successfully to measure death-related thoughts in a number of other studies (Arndt, Greenberg, Pyszczynski, Solomon, & Simon, 1997; Hayes et al., 2008; Mikulincer & Florian, 2000; Mikulincer, Florian, Birnbaum, & Malishkevich, 2002; Schimel et al., 2007; Schmeichel & Martens, 2005). The DTA measure asks participants to complete 21 word fragments, six of which can be completed with a death-related

word (e.g., “COFF_ _” can be completed as “COFFEE” or “COFFIN”) and the remainder can only be completed with a neutral word (e.g., “TAB _ _” can be completed as “TABLE” or “TABOO”). The eight death-related words are *buried, dead, grave, killed, skull, and coffin*. Participants were asked to complete the measure as quickly as possible, as there is some evidence to suggest that heightened cognitive load (e.g., time pressure) may increase the scale’s sensitivity (Arndt, Greenberg, Solomon, Pyszczynski, & Simon, 1997).

Reliability of measures. Internal consistency for all research measures was found to meet the generally accepted Cronbach’s alpha of approximately .7 or greater (Hair, Anderson, Tatham, & Black, 1998), although reliability could not be estimated for the DTA measure since it produces only a single score. Complete psychometric properties of the major research measures are listed in Table 2.

Table 2

Psychometric Properties of Major Research Measures

Measure	Condition	*M*	*SD*	α	Range		Number of Items
					Potent.	Actual	
Self-Esteem (RES)	Sample	21.59	4.97	.88	0-30	0-30	10
	Shame	21.32	5.10	.87		0-30	
	Control	21.86	4.86	.88		6-30	
Shame-Proneness (TOSCA-3)	Sample	30.72	6.44	.69	11-55	14-47	11
	Shame	30.83	5.80	.72		14-42	
	Control	30.61	7.08	.68		15-47	
Guilt-Proneness (TOSCA-3)	Sample	45.99	4.95	.69	11-55	22-55	11
	Shame	46.29	4.79	.69		33-55	
	Control	45.68	5.12	.69		22-54	
Shame (SSGS)	Sample	7.34	3.19	.82	5-25	5-20	5
	Shame	7.73	3.54	.81		5-20	
	Control	6.95	2.75	.82		5-16	
Guilt (SSGS)	Sample	9.44	4.49	.84	5-25	5-24	5
	Shame	10.09	4.99	.84		5-24	
	Control	8.77	3.87	.85		5-18	
Death Thought Accessibility	Sample	1.78	1.04	-	0-6	0-4	-
	Shame	1.84	1.02	-		0-4	
	Control	1.72	1.06	-		0-4	

Note. $N = 150$; Shame $n = 76$, Control $n = 74$. RES = Rosenberg Self-Esteem Scale; TOSCA-3 = Test of Self-Conscious Affect – 3; SSGS = State Shame and Guilt Scale; α = Cronbach's alpha.

Analytic Method

While analysis of variance (ANOVA) is better suited for the analysis of multivariate experiments in which independent variables (IVs) are categorical, regression is superior when at least one of the IVs is continuous (Cohen, Cohen, West, & Aiken, 2003; Tabachnick & Fidell, 2007a), particularly in studies where dimensional characterological traits (such as shame-proneness) are measured on a continuous scale but participants are randomly assigned to two or more experimental conditions (Tabachnick & Fidell, 2007b; West, Aiken, & Krull, 1996). In addition, although analysis of covariance (ANCOVA) allows for a combination of continuous and categorical variables, it is typically employed to control the effect of nuisance variables and does not permit the testing of specific moderation hypotheses as in the present study (see Field, 2013). Therefore, moderated multiple regression (Aiken & West, 1991; Jaccard, Turrisi, & Wan, 1990; Judd & McClelland, 1989) was chosen as the method for testing main research hypotheses, as it allows for an examination of the moderating effect of a continuous IV on the relationship between experimental condition (a categorical IV) and the dependent variable (DV).

Moderated multiple regression analyses can be conducted in a number of ways (for example, see Hayes, 2013; Aiken & West, 1991), although the simplest and clearest method when only a single moderator is of interest is that described by Howell (2013). In this method, a regression equation is built with a dependent variable *Y* (in this case, death thought accessibility), a two-group categorical

predictor *X* (dichotomously coded as experimental or control group), and a continuous predictor *M* (shame-proneness) as follows:

$$\hat{Y} = b_0 + b_1X + b_2M + b_3XM$$

Here, the main effect for *X*, the main effect for *M*, and the two-way interaction (moderation) *XM* are all clearly represented in the equation. Dichotomous codes of 1 = shame condition and 0 = control condition are used for the experimental effect, *X*. As is shown in the equation above, the effect of the moderating variable on the independent variable is examined by computing an interaction term, *XM*, which is simply the product of *X* and *M* for each case. However, because the interaction term is likely to be highly correlated with its factors *X* and *M*, the predictors must be centered (i.e., each score subtracted from the mean of all scores on that measure; West, Aiken, & Krull, 1996) prior to computation of the regression solution. After computation, significance of the interaction term *XM* indicates a significant moderating effect of *M* on the relationship between *X* and *Y*.

Multiple regression and moderated multiple regression are based on assumptions that the data are parametric (Tabachnick & Fidell, 2007b); that is, that the relationship between the independent and dependent variables is linear (assumption of linearity), that univariate as well as error distributions are approximately normal (assumption of normality), that the distribution of errors is random (assumption of independence of errors), that the variance of the errors is the same across all levels of the independent variables (assumption of homoscedasticity), and that the independent variables are not highly correlated

with one another (assumption of lack of multicolinearity). Therefore, these assumptions were checked for each analysis, and this process is described accordingly in the results below.

Results

Initial Data Screening

Initial screening identified no errors in data entry, however nine participants failed to complete one or more questionnaire items. Other item responses were compared between missing-item and complete-data participants using Little's (1988) Missing Completely at Random (MCAR) expectation-maximization replacement method. Estimated means for missing item responses were not found to be significantly different from complete-data responses for age, gender, level of education, household income, number of children, feelings of shame, feelings of guilt, death thoughts, shame-proneness, guilt-proneness, or self esteem, $\chi^2(588, N = 150) = 631.503$, $p > .10$, indicating that there was no systematic bias influencing missing-data participants. Therefore, rather than using a less powerful and potentially problematic method of dealing with missing data such as deletion or simple regression substitution (see Schafer & Olsen, 1998, for a discussion), missing values were substituted using estimated expectation-maximization values (i.e., using multiple imputation; Enders, 2001).

Because extreme outliers can substantially influence the data derived from a sample while being generally rare in the population (Field, 2013), univariate outliers were identified using *z* score transformation of raw scores by condition (i.e., control or experimental). Since approximately 0.1% of scores would be

expected to have a *z* score ≥ ±3.29, values falling in this range can be reasonably defined as extreme outliers that are likely to be heavily influencing the data (Field, 2013). Four shame scores, two self-esteem scores, and one guilt-prone score fell in this range; the corresponding participants were removed[5] (as suggested by Tabachnick & Fidel, 2007b, for outliers that total approximately 5% of the sample). This can be considered a *truncation* method of removing outliers (Aguinis, Gottfredson, & Joo, 2013) because it is based on determining the likelihood of observing a true value based on a specific criterion (in this case, a *z* score ≥ ±3.29) and removing values that are a highly improbable representation of the population (likely to occur in less than 0.1% of cases). Three additional outliers were also removed after identification through the *z*-score method. The resulting sample size was 140 (*n* = 69 control, 71 experimental), amounting to removal of approximately 6.6% of the total sample. No multivariate outliers (defined as Cook's Distance > 1.0, Mahalanobis Distance > 18; Stevens, 2002) were found in subsequent regression analyses.

Because most test statistics (such as *F* and *t*) have distributions that are related to the normal distribution, parameter estimates and errors must also approximate a normal distribution for such tests to be theoretically tenable (Field, 2013). Therefore, when a sample size is sufficient to produce a reasonable estimate of the population, but the measurements derived from this sample and/or

[5] Although 5% trimming or Winsorization of outliers is often employed in psychology research, removal or modification of 5% of the scores is typically insufficient to reduce the influence of significant numbers of outliers while at the same time removing representative cases (Wilcox, 2012). Therefore, all scores that fell outside of the asymptotic *z*-score ≥ ±3.29 criterion recommended by Field (2013) were removed, as this minimizes the loss of data inherent in broad outlier removal techniques such as trimming.

the residuals of a regression equation used to test specific hypotheses using this sample are not normally distributed, parametric statistical procedures (such as *t* and *F* tests) are likely to be unreliable and their results misleading. Therefore, normality of sample univariate distributions was assessed through visual inspection of histogram plots and by converting the skewedness and kurtosis statistics into *z*-scores, which is accomplished by dividing the statistics by their standard error (Field, 2013). For the control condition, the skewedness statistic deviated significantly from normality (i.e., $z \geq \pm 1.96$, or $p < .05$) for the shame ($z = 5.19$), self-esteem ($z = -2.71$), and guilt-proneness ($z = -2.53$) measures. For the shame condition, the shame ($z = 4.94$), guilt ($z = 4.06$), and shame-proneness ($z = -2.93$) measures also demonstrated non-normal distribution, and kurtosis was non-normal for the control shame measure ($z = 3.10$).

Visual inspection of the univariate histogram distributions revealed substantial floor effects along with positive skew in both control and shame conditions for the shame measure, and moderate ceiling effects (although otherwise normal distribution) for the self-esteem, shame-proneness, and guilt-proneness measures. To correct this, log, square root, reciprocal, and reverse score transformation were attempted to normalize distributions, and normality tests were computed and examined as previously described. Transformations either failed to normalize the variables or produced unacceptably non-normal distributions in variables that were normal prior to transformation. In addition, for each regression computation used to test the main hypotheses, a histogram of standardized residuals was produced to inspect the normality of errors (as

suggested by Miles & Shevlin, 2007). Standardized residual histograms revealed unacceptably non-normal distributions, indicating that the assumption of normality of errors required for regression analysis was violated. In addition, for several regression analyses, scatterplots of standardized residuals against standardized predicted values indicated significant heteroscedasticity[6].

Therefore, bootstrapping was used for analyses where the assumptions of normality, homoscedasticity, and/or independence of errors were violated. Bootstrapping is a statistically robust procedure that reduces statistical bias (due to sample size, measurement error, and other sources), does not require most of the assumptions necessary for traditional parametric procedures, and greatly improves the reliability of confidence interval estimates (Thompson, 1993; Diaconis & Efron, 1983; Efron, 1979). Bootstrapping creates a new sampling distribution based on a given number of samples of *n* (where *n* is equal to the size of the original sample), replacing all values before deriving a new sample (Efron, 1979). The procedure produces confidence interval estimates based on the resampled distribution (which is approximately normal) and statistical significance is indicated in cases were the interval does not include zero (Wright & Field, 2009); therefore, statistical inference is derived from confidence intervals rather than point estimates (such as beta weights). As suggested by Efron (1979),

[6] When the variance of the residuals at every set of values for the predictor variable is equal, they are said to be homoscedastic (Miles & Shevlin, 2007). Homoscedasticity is an assumption of regression analysis, and visual inspection of the spread of values along the X-axis in a scatterplot of standardized predicted values against standardized residuals is recommended for examining skew (Wilkinson & Task Force on Statistical Inference, 1999). Violation of this assumption makes regression analysis inappropriate.

all bootstrap procedures used in subsequent analyses were based on 1000 samples producing bias corrected accelerated (BCa) 95% confidence intervals.

Random Assignment Check

Experimental and control groups were similar in terms of gender $\chi^2(1) = 1.06$, $p = .304$, $V = 0.07$, marital status $\chi^2(4) = 2.86$, $p = .582$, $V = .14$, level of education $\chi^2(4) = 4.29$, $p = .369$, $V = .169$, household income $\chi^2(7) = 4.38$, $p = .739$, $V = .173$, and religiosity $\chi^2(3) = 3.91$, $p = .272$, $V = .27$, as indicated by two-way chi-squared tests. In addition, bootstrapped independent *t* tests also revealed no statistically significant differences between experimental and control conditions for age, number of children, time to complete DTA measure, shame-proneness, and guilt-proneness (see Table 3), indicating that random assignment was successful in producing demographically equivalent groups.

Table 3

Independent-Sample t *Tests Comparing Shame and Control Groups on Age, Number of Children, Shame-Proneness, Guilt-Proneness, and Time to Complete DTA Measure*

							Bootstrap	
Variable	Group	*M*	*SD*	*t*	df	*p*	Lower *CI*	Upper *CI*
Age (years)	Shame	22.49	4.91	-.959	138	.329	-2.44	.76
	Control	21.72	4.55					
Number of Children	Shame	.13	.476	-.320	138	-	-.18	.14
	Control	.10	.458					
Shame-Proneness	Shame	30.99	5.80	-.650	138	.519	-2.84	1.60
	Control	30.29	6.83					
Guilt-Proneness	Shame	46.63	4.37	-1.16	138	.247	-2.34	.81
	Control	45.78	4.28					
Time to Complete DTA Measure (seconds)	Shame	105.7	63.0	-1.49	138	.135	-29.58	1.23
	Control	91.22	42.1					

Note. Control condition $N = 69$; shame condition $N = 71$. Bootstrap results are based on 1000 samples, with bias corrected and accelerated confidence intervals. CI = Confidence Interval; DTA = Death Though Accessibility.

Manipulation Check

To verify that the manipulation had the intended effect of producing shame (but not self-esteem or guilt), independent-sample *t* tests were conducted between experimental and control conditions for shame, guilt, and self-esteem, and the results are presented in Table 4. Bootstrapped independent-sample *t* tests were not statistically significant at the $p < .05$ level for shame, guilt, self-esteem, or DTA, indicating that although the manipulation did not increase guilt or self-esteem, it also did not elicit significantly more shame or DTA in experimental group participants.

Table 4

Independent-Sample t *Tests Comparing Shame and Control Groups on Shame, Guilt, Self-Esteem, and Death Thought Accessibility*

							Bootstrap	
Variable	Group	*M*	*SD*	*t*	df	*p*	Lower *CI*	Upper *CI*
Shame	Shame	7.23	2.93	-1.57	138	.124	-1.54	.15
	Control	6.55	2.06					
Guilt	Shame	9.42	4.19	-1.20	138	.229	-2.17	.57
	Control	8.62	3.64					
Self-Esteem	Shame	4.52	4.52	.497	138	.607	-1.07	1.92
	Control	4.29	4.28					
Death Thought Accessibility	Shame	1.81	1.04	-613	138	.502	-.45	.21
	Control	1.70	1.07					

Note. Control condition $N = 69$; shame condition $N = 71$. Bootstrap results are based on 1000 samples, with bias corrected and accelerated confidence intervals. CI = Confidence Interval; DTA = Death Thought Accessibility.

To investigate whether shame-proneness moderated the effect of the manipulation on shame, moderated regression (using centering of predictors prior to computation of the regression solution; Tabachnick & Fidell, 2007b) was used with condition and shame-proneness as independent variables, condition X shame-proneness as a moderator term, and shame as a dependent variable. After computing the regression solution, VIF statistics for each independent variable were found to be close to 1, eigenvalue variance proportions were relatively large, and correlations between predictors were small ($r < .39$), indicating that the assumption of multicolinearity was likely met (Field, 2013). The Durbin-Watson statistic was very close to 2 (specifically, 2.163), indicating that the assumption of independence of errors was likely met, and no significantly influential cases were identified using a cutoff of Cook's *d* greater than 1 (Field, 2013).

However, while inspection of a plot of standardized residuals against standardized predicted values (see Figure 3) revealed that the assumption of linearity was likely met (as indicated by a general lack of overall curve to the scatter), heteroscedasticity was also likely present (as evidenced by a funneled dispersion of values; see Field, 2013). Also, a normal P-P plot (see Figure 4) deviated significantly from the central line, and a histogram of standardized residuals (see Figure 5) suggested a non-normal distribution of residuals. Therefore, the regression was recomputed using bootstrapping because, as previously discussed, it does not require the assumptions of homoscedasticity or normality of errors to be met.

The bootstrapped moderated regression showed that although shame-

proneness significantly predicted feelings of shame, it was not a significant moderator of the effect of the manipulation on shame, and condition did not significantly predict shame (see Table 5), suggesting that shame-proneness was not responsible for the lack of a statistically significant difference between experimental and control conditions for shame.

To check whether shame-proneness moderated the effect of the manipulation on DTA, moderated multiple regression with centering was employed, with condition and shame-proneness as independent variables, condition X shame-proneness as a moderator term, and DTA as a dependent variable. After computing the regression solution, VIF statistics for each independent variable were found to be very close to 1, eigenvalue variance proportions were relatively large, correlations between predictors were small ($r <$ .2), and Durbin-Watson statistic very close to 2, all suggesting that the assumptions of multicolinearity and independence of errors were likely met. Standardized residual plots indicated linearity and homoscedasticity, although a residual histogram revealed a non-normal distribution of errors. Therefore, bootstrapping was used to compute the regression. The bootstrapped moderated regression revealed that shame-proneness did not moderate the effect of the manipulation on DTA, and neither the model nor any predictor was statistically significant (see Table 6), indicating that shame-proneness was also not responsible for the lack of a statistically significant difference between experimental and control conditions for DTA. Given that *t* tests revealed that experimental and control conditions did not differ in levels of shame or DTA, and

that shame-proneness was not a significant moderator of the experimental effect, it was concluded that the experimental manipulation was ineffective in producing sufficient levels of shame to allow the causal hypotheses of the study to be examined.

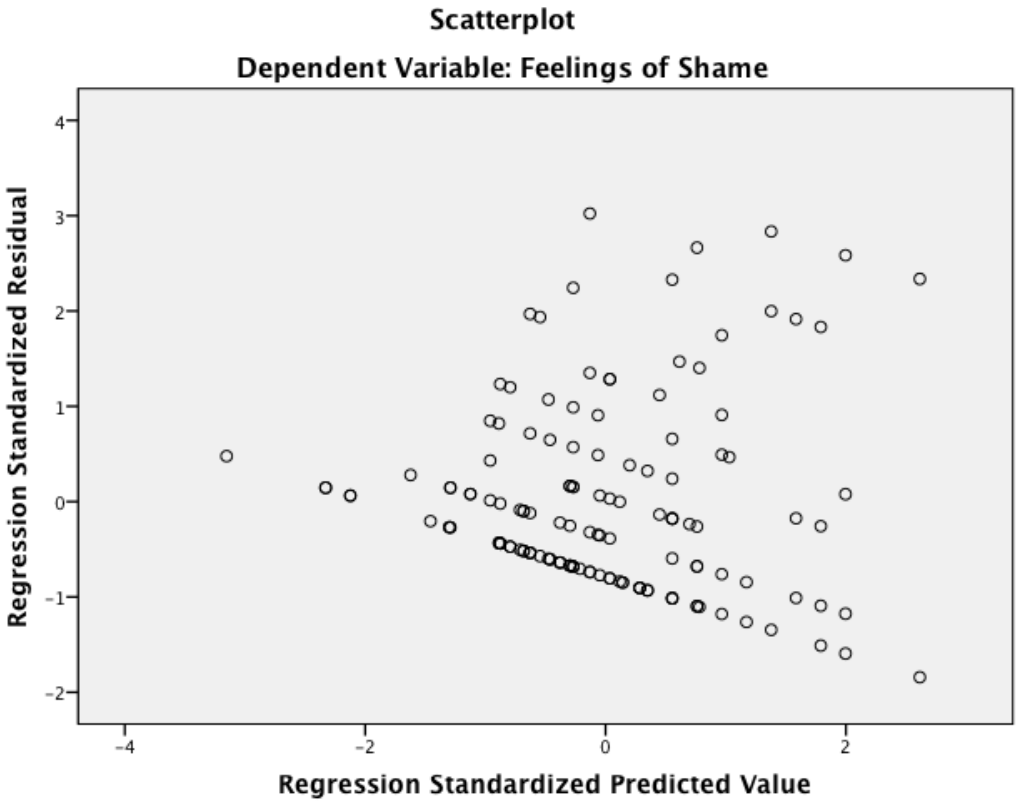

Figure 3. Scatterplot of standardized predicted values against standardized residuals for regression of condition and shame-proneness on shame, indicating linearity and heteroscedasticity.

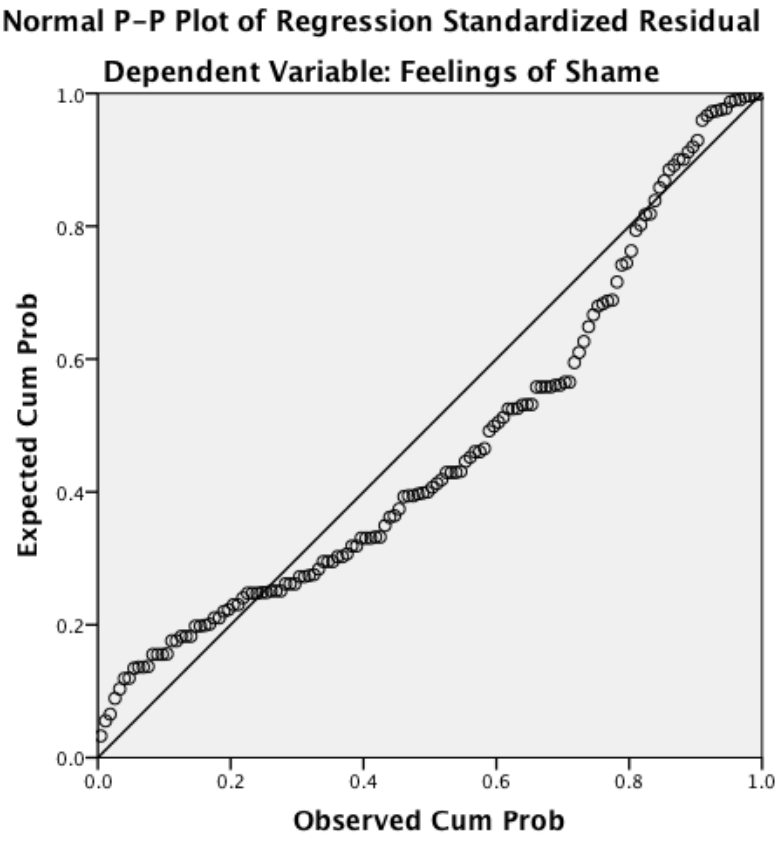

Figure 4. Normal probability plot of observed cumulative probability values against expected cumulative probability for regression of condition and shame-proneness on shame, indicating a likely departure from normality.

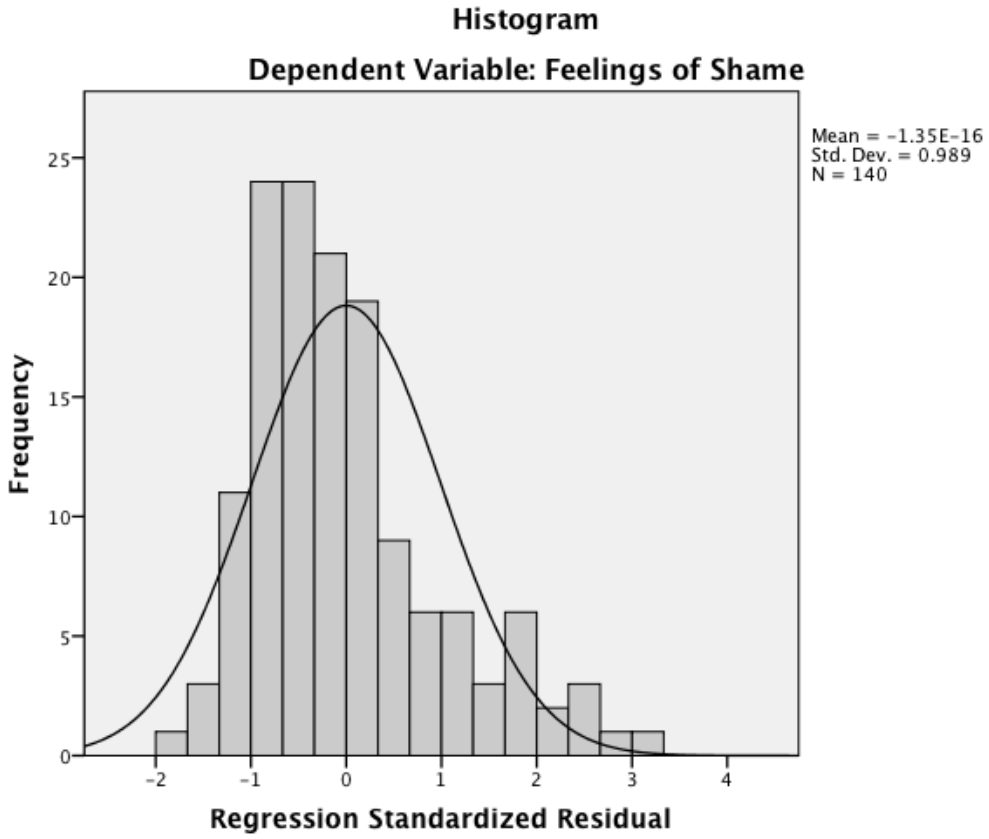

Figure 5. Frequency distribution of standardized residual values for regression of condition and shame-proneness on shame, indicating a departure from normality.

Table 5

Bootstrapped Moderated Regression of Condition and Shame-Proneness on Feelings of Shame

		Bootstrap				
	B	Bias	*SE B*	*p*	BCa 95% CI	
					Lower	Upper
Constant	6.87	.00	.20	.001	6.52	7.28
Condition	.58	.01	.40	.145	-.26	1.37
Shame-proneness	.14	.00	.03	.001	.08	.02
Condition X Shame-proneness	.12	.00	.06	.055	.01	.25

Note. $N = 140$. Bootstrap results are based on 1000 samples. BCa = bias corrected and accelerated; CI = Confidence Interval.
Total $F(3, 139) = 7.50$ ($p < .001$), Adjusted $R^2 = .12$

Table 6

Bootstrapped Moderated Regression of Condition and Shame-Proneness on Death Thought Accessibility

		Bootstrap				
	B	Bias	*SE B*	*p*	BCa 95% CI	
					Lower	Upper
Constant	1.76	.00	.09	.001	1.58	1.93
Condition	.113	.00	.18	.518	-.27	.48
Shame-proneness	-.01	.00	.01	.688	-.03	.02
Condition X Shame-proneness	-.03	.00	.03	.248	-.09	.03

Note. $N = 140$. Bootstrap results are based on 1000 samples. BCa = bias corrected and accelerated; CI = Confidence Interval.
Total $F(3, 139) = .525$ ($p > .10$), Adjusted $R^2 = -.01$

Pooled Sample Analyses

Given that there were no differences between groups for both demographic and non-demographic variables, it was determined that the two groups represented the same underlying population and could be pooled into a single sample for further analyses (with outliers placed back in to the pool, N = 150). Since the original causal hypotheses could no longer be tested, several new hypotheses were developed. First, based on the findings of other research (del Rosario & White, 2006; Tangney et al., 2007; Tracy & Robins, 2006), it was hypothesized that shame-proneness would significantly predict feelings of shame, even after controlling for feelings of guilt and guilt-proneness. Second, consistent with the original hypotheses of the present study, it was hypothesized that shame would significantly predict DTA scores, even after controlling for the effect of self-esteem. Third, as previously predicted, it was hypothesized that shame-proneness would moderate the relationship between shame and DTA.

Because the screening analyses described above were conducted with groups split by condition, new screening analyses were required for the pooled sample, which was likewise examined according to the iterative procedures described above. Six outliers were identified, and sample univariate distributions were significantly skewed and non-normal (i.e., $z \geq \pm 1.96$, or $p < .05$) for the shame (z = 8.04), guilt (z = 5.45), self-esteem (z = -2.20), and guilt-proneness (z = -3.38) measures, while kurtosis was non-normal for the shame measure (z = 4.76). Like the randomly assigned group samples, distributions of several measures demonstrated ceiling and floor effects, and log, square root, reciprocal, and

reverse score transformations failed to produce sufficiently normal distributions. Therefore 6 extreme outliers were removed (representing a 4% truncated sample), and bootstrapping was used for all further analyses. The final sample size for the pooled sample analyses was 144.

Bootstrapped confidence intervals for pooled-sample Pearson correlations between all research variables are presented in Table 7. Although TMT predicts a negative correlation between self-esteem and DTA, there was not a statistically significant correlation between DTA and self-esteem, nor did DTA share a statistically significant correlation with any other variable. Also despite expectations of a significant correlation between guilt and guilt-proneness, the correlation between these two measures was not statistically significant, suggesting that the concept of guilt-proneness may not be tenable.

Table 7

Pearson Correlation Coefficients and Bootstrapped 95% Confidence Intervals of Correlations Between Primary Research Measures

Measure	1	2	3	4	5	6
1. Self-Esteem (*CI*)	—					
2. Shame-proneness (*CI*)	-.45 (-.58, -.31)*	—				
3. Guilt-Proneness (*CI*)	-.08 (-.25, .09)	.27 (.11, .42)*	—			
4. Shame (*CI*)	-.60 (-.69, -.48)*	.32 (.20, .43)*	-.07 (-.13, .25)	—		
5. Guilt (*CI*)	-.43 (-.56, -.30)*	.24 (.09, .38)*	-.10 (-.07, .27)	.73 (.61, .82)*	—	
6. DTA (*CI*)	-.14 (-.29, .02)	-.01 (-.17, .13)	-.01 (-.19, .16)	.00 (-.15, .14)	.09 (-.12, .28)	—

Note. N = 144. Bootstrapped 95% confidence intervals are in parentheses, and are bias corrected and accelerated, based on 1000 simply-derived samples. RES = Rosenberg Self-Esteem Scale; TOSCA-3 = Test of Self-Conscious Affect – 3; SSGS = State Shame and Guilt Scale; DTA = Death Thought Accessibility.
* $p < .01$ (two-tailed)

To test the hypothesis that shame-proneness predicts feelings of shame after controlling for feelings of guilt and guilt-proneness, a multiple regression analysis was conducted with shame as a dependent variable and guilt, guilt-proneness, and shame-proneness as predictors. After computing the regression solution, VIF statistics were found to be close to 1, eigenvalue variance proportions relatively large, correlations between predictors small ($r < .2$), the Durbin-Watson statistic very close to 2, and a non-curved scatter evident on a standardized residual plot, suggesting that the assumptions of multicolinearity, independence of errors, and linearity were likely met. However, a standardized residual plot indicated significant heteroscedasticity, and a residual histogram revealed a non-normal distribution of residuals, indicating that the use of bootstrapping would be most appropriate.

As expected, bootstrapped regression revealed that shame-proneness significantly predicted feelings of shame even after the effect of guilt and guilt-proneness were accounted for (see Table 8), as evidenced by a statistically significant beta weight for shame-proneness. The same was true for guilt, which significantly predicted shame when guilt-proneness and shame-proneness were held constant. Interestingly, guilt-proneness was not found to be a significant predictor of shame after controlling for feelings of guilt, again calling the tenability of the guilt-proneness concept potentially into question.

Table 8

Bootstrapped Regression of Guilt, Guilt-Proneness, and Shame-Proneness on Shame

Variable	*B*	Bootstrap				
		Bias	*SE B*	*p*	BCa 95% CI	
					Lower	Upper
Constant	1.76	-.05	1.7	.322	-1.58	4.59
Guilt	.48	.00	.05	.001	.36	.58
Guilt-proneness	-.03	.00	.04	.399	-.12	.03
Shame-proneness	.08	.00	.03	.008	.05	.14

Note. $N = 144$. Bootstrap results are based on 1000 samples. BCa = bias corrected and accelerated; CI = Confidence Interval.
Total $F(3, 143) = 59.04$ ($p < .001$), Adjusted $R^2 = .55$

To test the second and third revised hypotheses (namely, that shame predicts increases in DTA, even after controlling for the effect of self-esteem, and that shame-proneness moderates the relationship between shame and DTA), a moderated multiple regression was conducted with DTA as a dependent variable and shame, self-esteem, and shame-proneness as independent variables, and shame X shame-proneness as a moderator term. All predictors were centered prior to computing the regression solution. VIF and Durbin-Watson statistics, eigenvalue variance proportions, and correlations between predictors were all within acceptable limits, suggesting that that the assumptions of multicolinearity and independence of errors were likely tenable. Standardized residual plots indicated linearity and homoscedasticity, although the normal probability plot and residual histogram revealed a non-normal distribution. Therefore, bootstrapping was used to compute the regression.

Results from the bootstrapped moderated regression revealed that shame did not predict DTA after controlling for the effect of self-esteem and shame-proneness, nor did the overall model predict DTA, $R^2 = .04$ ($p = .25$). The interaction term was also not statistically significant, indicating that shame-proneness did not moderate the relationship between shame and DTA. Detailed results of this analysis are presented in Table 9. Consistent with the TMT model, self-esteem emerged as a statistically significant (but negative) predictor of DTA when the effect of shame and shame-proneness were held constant, although the lack of statistical significance of the model and lack of correlation between self-esteem and DTA reduces the practical significance of this finding. Therefore, the

hypotheses that shame predicts increases in DTA, even after controlling for the effect of self-esteem, and that shame-proneness moderates the relationship between shame and DTA were both rejected as untenable.

Table 9

Bootstrapped Moderated Regression of Shame, Self-Esteem, and Shame-Proneness on Death Thought Accessibility

Variable	*B*	Bootstrap				
		Bias	*SE B*	*p*	BCa 95% CI	
					Lower	Upper
Constant	1.77	.00	.10	.001	1.60	1.95
Shame	-.05	.00	.04	.276	-.14	.04
Self-Esteem	-.06	.00	.03	.017	-.11	-.01
Shame-proneness	-.02	.00	.02	.336	-.05	.01
Shame X Shame-proneness	.00	.00	.01	.991	-.01	.01

Note. $N = 144$. Bootstrap results are based on 1000 samples. BCa = bias corrected and accelerated; CI = Confidence Interval.
Total $F(4, 143) = 1.36$ ($p > .10$), Adjusted $R^2 = .01$

Follow-Up Data Collection

Given that previous studies (Agrawal & Duhachek, 2010; de Hooge, Zeelenberg, & Breugelmans, 2007, 2010; Dickerson et al., 2004) had used a shame manipulation highly similar to the one employed in the present study to successfully elicit feelings of shame, further consideration was given to the failure of the manipulation to produce measurable levels of shame. One possibility considered was that the shame measure may not have been sensitive enough to detect subtle emotion elicited by the procedure, or that the measure tapped into an aspect of shame different from the one elicited by the manipulation. This latter possibility is highlighted by the fact that previous research (Agrawal & Duhachek, 2010) employed a different measure of shame than the one used in the present study, raising the potential of low concurrent validity among different shame measures. Another possibility is that the manipulation had the paradoxical effect of reducing feelings of shame rather than increasing them; indeed, writing about an emotional event has been shown to facilitate a sense of resolution about the negative aspects of the event (Pennebaker & Seagal, 1999), and the process of writing about a shame event may have reduced feelings of shame so as to be undetectable. This may be especially true for participants who spent a great deal of time completing the DTA measure, since time may have allowed feelings of shame to dissipate; indeed, other research that successfully employed a similar procedure (de Hooge, Zeelenberg, & Breugelmans, 2010) did not have participants complete additional measures between the manipulation and shame measure.

To test these possibilities, two research assistants who were blind to the purposes of the study were trained to rate the narratives written by shame condition participants on a 5-point scale along three dimensions: shame, guilt, and resolution (see Appendix M). Because control condition participants were instructed to write about the mundane details of the previous day, the narratives produced by these participants were unlikely to involve significant emotional content and were excluded from follow-up analyses. Consistent with contemporary theories of self-conscious emotion (M. Lewis, 1991, 1992, 2008; Tracy & Robins, 2007b), shame was operationalized as the extent to which the author, while writing the narrative, felt a sense that his/herself is bad, flawed, or that he/she is a failure, to the point of wanting to withdraw or hide from others. Conversely, guilt was operationalized as the extent to which the author, while writing the narrative, felt a sense that he/she had done the wrong thing, felt badly about his/her actions, or felt badly about the real or imagined harm caused to others. Resolution was operationalized as the extent to which the author, while writing the narrative, felt a sense of no longer being 'stuck' in the grip of the negative emotions of the event, so that unresolved issues were absent and replaced by a sense of growth from the event (cf. Pals, 2006). This conceptualization of resolution was based on the work of Pennebaker and colleagues (Pennebaker, 1997; Pennebaker & Segal, 1999; Graybeal, Sexton, & Pennebaker, 2002) and similar to the one used by Pals (2006), who employed observers to rate the degree of emotional resolution expressed in written narratives. Specifically, Pennebaker and Segal consider resolution to result "in

less rumination and eventually [allow] disturbing experiences to subside gradually from conscious thought" (p. 1243).

After training in the theoretical and conceptual background for each scaled item, raters independently completed ratings of shame, guilt, and resolution for 10 initial shame-condition narratives. Initial scores were compared between raters item-by-item, with interrater disagreements of 2 points or greater discussed and resolved as a group led by the primary researcher. The remaining narratives from shame condition participants were then independently rated. Time to complete the DTA measure was also tallied by subtracting participant's reported start time from the completion time. It was hypothesized that (a) ratings of shame would be weakly correlated with the shame measure used in the study, suggesting that the SSGS shame scale taps into a different aspect of shame than was elicited by the manipulation; (b) resolution would moderate the relationship between shame and DTA, explaining the failure of the manipulation to produce measurable levels of shame; and, (c) time to complete the DTA measure would be negatively associated with feelings of shame, as time may have reduced the residual feelings of shame elicited by the manipulation.

To also further examine whether the manipulation sufficiently highlighted the aspects of shame that were of particular interest in the present study (that is, sense of failure or rejection, painful exposure, loss of social standing, and wanting to withdraw or hide), the primary researcher reviewed shame condition narratives. Based on the primary researcher's understanding of shame derived from previous scholarship (Gilbert, 1998, 2007; Gilbert, Pehl, & Allan, 1994; H. B. Lewis, 1971;

M. Lewis, 2008; Martens, Tracy, & Shariff, 2012; Schore, 1991, 1998, 2002), narratives were read and rated as either containing (or not containing) a description of failure or rejection, painful exposure, desire to withdraw or hide, or loss of social standing, as these features were described in the manipulation instructions; narratives could include all, some, or none of these features. Approximately 50% of shame condition narratives described failure or rejection, 65% painful exposure, 60% a desire to withdraw or hide, and 50% a loss of social standing, and approximately 10% of narratives did not describe any hypothesized aspect of shame at all. This suggests that many narratives did not describe events that were entirely consistent with the intended manipulation.

Follow-Up Results

Inter-rater reliability for rated shame, rated guilt, and rated resolution of shame condition narratives was assessed using two-way mixed, consistency, average-measures intra-class correlation (ICC; McGraw & Wong, 1996) to assess the degree that raters provided consistency in ratings across narratives (Hallgren, 2012). The ICC was in the excellent range (see Cicchetti, 1994) for ratings of shame (ICC = .89), guilt (ICC = .90), and resolution (ICC = .94), indicating that raters had a high degree of agreement and that average ratings were suitable for further analysis. The psychometric properties of the average ratings are presented in Table 10. No outliers were identified using the *Z*-score method described above. Ratings were normally distributed for shame but positively skewed for guilt and resolution, and transformations produced unacceptable distributions. Therefore, bootstrapping was used for all further follow-up analyses.

Table 10

Psychometric Properties of Secondary Research Ratings

Measure	*M*	*SD*	ICC	Range	
				Potential	Actual
Rated Shame	2.80	.96	.89	1-5	1-5
Rated Guilt	1.36	.75	.90	1-5	1-4.5
Rated Resolution	1.42	.82	.94	1-5	1-5

Note. $N = 76$. ICC = Two-way mixed, consistency, average-measures intra-class correlation. Variables are based on average ratings across two raters.

As hypothesized, the bootstrapped correlation between shame ratings and the SSGS shame scale was not significant, 95% CI [-.12, .40], nor was there a significant correlation between rated guilt and the SSGS guilt scale, 95% CI [-1.5, .40]. Bootstrapped regression on DTA of rated shame as a predictor and resolution as a moderator also revealed that rated shame was not a statistically significantly predictor of DTA, and that resolution did not moderate the relationship between DTA and rated shame or scores on the SSGS shame scale. This indicates that any relationship between shame and DTA was not influenced by the degree of resolution participants expressed about the event, and the hypothesis that resolution may be a confounding variable in the manipulation was therefore not supported. Surprisingly however, bootstrapped regression of rated guilt on DTA found that resolution significantly moderated the relationship between guilt and DTA (see Table 11). Inspection of the frequencies for resolution revealed that most shame condition narratives were rated as very low in resolution (i.e., < 1, or "not at all – there has been no resolution or barely a trace"; $N = 61$ or 40.7% of total), and very low in guilt (i.e., < 1, or "not at all – no feeling of guilt or barely a trace"; $N = 62$ or 41.3% of total). Therefore, for ease of graphical illustration and demonstration, participants were divided into four groups based on level of guilt and level of resolution (i.e., no resolution/low guilt, no resolution/high guilt, some resolution/low guilt, and some resolution/high guilt) and plotted based on mean death-related words (see Table 12). As illustrated in Figure 6, the lower the level of resolution about the event, the less

likely guilt predicted DTA, while higher levels of resolution were associated with lower DTA only when guilt was also higher.

Contrary to expectations, bootstrapped correlations between time to complete DTA measure and shame (both rated shame and scores on the SSGS shame scale) were not statistically significant, 95% CI [-.13, .33] and [-.09, .27] respectively, suggesting that time spent completing the DTA measure was not likely a factor in the amount of shame felt by participants; consequently, the final follow-up hypothesis was also deemed untenable.

Table 11

Bootstrapped Moderated Regression of Rated Guilt and Rated Resolution on Death Thought Accessibility

Variable	*B*	Bootstrap				
		Bias	*SE B*	*p*	BCa 95% CI	
					Lower	Upper
Constant	1.85	-.02	.12	.001	1.58	1.96
Rated Guilt	-.08	.01	.10	.436	-.31	.16
Rated Resolution	.15	.01	.11	.180	-.06	.38
Interaction	-.51	-.01	.12	.001	-.75	-.27

Note. $N = 76$. Bootstrap results are based on 1000 samples. BCa = bias corrected and accelerated; CI = Confidence Interval.
Total $F(3, 75) = 1.93$ ($p > .10$), Adjusted $R^2 = .04$

Table 12

Mean Death-Thought Accessibility of Illustrative Groups Based on Levels of Rated Guilt and Rated Resolution

	Low Guilt	High Guilt
No Resolution (*N*)	1.81 (53)	1.75 (8)
Some Resolution (*N*)	2.27 (9)	1.50 (6)

Note. Groups are used for illustrative purposes only, as analyses were based on continuous variables.

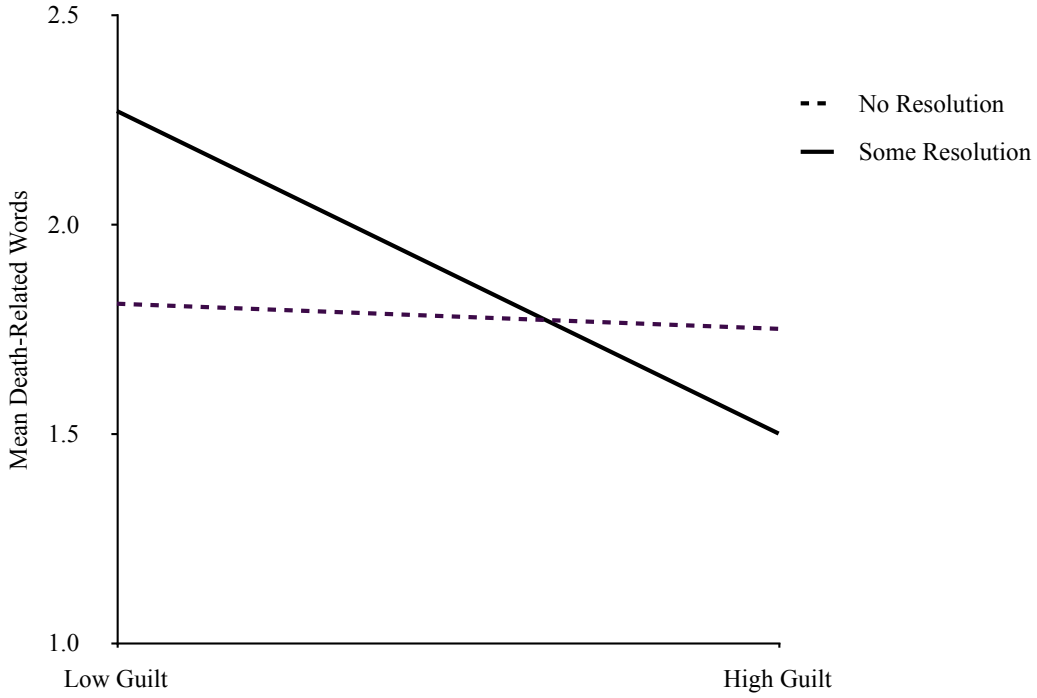

Figure 6. Illustrative representation of interaction between level of guilt and resolution as rated by observers for mean number of death-related words. Note that categories (i.e., Low/High Guilt; No/Some Resolution) are not precisely representative of the results (which were based on continuous variables) and are provided for ease of illustration only.

Discussion

This study sought to examine the potential causal relationship between shame and death-thought accessibility (DTA), employing an experimental design with shame as an independent variable and DTA as a dependent variable. In addition, shame-proneness was proposed to act as a moderating variable on the potential relationship between state shame and DTA. Measures of state shame, state guilt, and self-esteem were also used to check the effect of the manipulation and to serve as control variables. It was hypothesized that DTA would be significantly greater in shame induction participants than in control participants, and that shame-proneness would significantly moderate the relationship between shame and DTA.

While follow-up analyses provided some evidence that the SSGS shame scale might tap into a different aspect of shame than the one elicited by the procedure, the lack of difference between conditions on multiple measures suggests that the manipulation was of insufficient strength to test the main hypotheses. Because the manipulation failed to produce measurable levels of shame, the results of this study were insufficient to rule out either of the causal hypotheses; namely, that feelings of shame increase DTA, and that shame-prone individuals are more likely than others to experience increases in DTA when confronted with a shame-eliciting event. However, pooled sample analyses did not show a statistically significant relationship between shame and DTA (after controlling for self-esteem and shame-proneness), and observer ratings of the written narratives from the shame condition also failed to identify a statistically

significant association between shame ratings and DTA, even after controlling for degree of resolution of the narrative event. These findings provide some evidence against the hypothesis that shame causes an increase in DTA.

Although additional research that employs a more effective shame manipulation is needed to fully rule out the shame/DTA hypothesis, reasons for the lack of correlational relationship between shame and DTA must be considered. One possible explanation for the insignificance of the main findings is that the manipulation failed to elicit intense feelings of shame as a consequence of the manipulation itself, the context of the procedure, or both. The manipulation was chosen to maximize the intensity of shame while minimizing potential harm. While it is likely that using a group of confederates to publicly shame a participant in an experimental setting would produce measurable feelings of shame, such a manipulation would have a higher chance of producing lasting feelings of shame that persist beyond the experiment, and therefore may exceed the acceptable level of risk for an ethically-designed study. Indeed, direct threats to social connectedness have been shown to increase death thought accessibility (Mikulincer et al., 2002; Taubman–Ben-Ari & Katz–Ben-Ami, 2008), as have implicit threats to social standing (such as giving negative feedback about scores on an IQ test; Hayes, Schimel, Faucher, & Williams, 2008). However, recalling past shame experiences is less likely to elicit the same levels of shame as the original event (or a novel event designed for this purpose). This likely lessens the potential impact of the manipulation, and across many participants, may have, in this case, resulted in a lack of measurable increase in shame.

Nonetheless, it is even more likely that the context of the procedure attenuated the intensity of shame elicited by the manipulation, since the procedure involved writing about the event in the presence of a group of peers, many of whom were likely to be strangers. Indeed, the presence of strangers has been shown to inhibit the expression of emotion, particularly negative emotion (Buck, Losow, Murphy, & Costanzo, 1992). While direct negative appraisal by strangers tends to elicit shame (Gruenwald, Kemeny, Aziz, & Fahey, 2004), the presence of non-evaluative peer strangers is more likely to inhibit participants from fully experiencing negative affect. In this way, the administration of the procedure in a classroom setting was likely a major confound in the present study that was not adequately considered or controlled for when planning and executing the design. This, therefore, represents the most glaring shortfall of the present study that should be addressed by any future replication. Future research that employs a written narrative to elicit shame should ensure that participants have privacy during the manipulation and when measures are administered to maximize the potential for participants to experience the affective elements of the writing process. Participants should also be assured that they will not be observed during the manipulation and encouraged to allow any feelings that they may have about the event to be experienced in the moment. A replication of this study may also include a random subset of the experimental group that receives the shame manipulation in the presence of strangers to directly examine the effect of social presence on the manipulation and the possibility that strangers may attenuate the intensity of any affective response.

Despite this, the finding that observer ratings of shame were not associated with SSGS shame scale scores should also be considered, given that observer ratings were based on a conceptualization of shame closely aligned with the intended manipulation. This finding suggests that the SSGS shame scale may measure a different aspect of shame than that produced by the manipulation. In addition, the lack of correlation between the SSGS shame scale and the DTA measure further suggest that this aspect of shame may not be involved in terror management processes. This has implications for the present study, since the specific anxiety-buffering processes that were hypothesized to be threatened by shame may not be well represented by the SSGS shame scale. For example, several of the SSGS shame items highlight a desire to disappear or be less visible (e.g., "I want to sink into the floor and disappear" or "I feel small"), therefore reflecting the defensive or self-protective aspects of shame that may be adaptive to the extent that they reduce exposure to attack. Conversely, the hypothesized relationship between shame and DTA is that shame reduces the protective qualities afforded both by personal relationships (i.e., feeling connected to others) and by social status (i.e., self-esteem); only one item on the SSGS reflects the sense of reduced social status brought on by shame (i.e., "I feel humiliated, disgraced"), and none of the SSGS shame scale items reflect a reduced sense of social connectedness. In this way, the specific aspect of shame hypothesized to increase DTA may not have been sufficiently detected by the SSGS shame scale.

Likewise, the manipulation may not have sufficiently highlighted the intended aspect of shame by asking participants to recall an instance of failure,

rejection, and social withdrawal rather than an instance of explicitly threatened social status and connectedness to others. Indeed, an unstructured review of shame condition narratives suggested that as many as half of the participants did not write about an event that involved a sense of loss of social standing, failure, or rejection. Future research intended to replicate this study should modify the manipulation to more explicitly describe a set of potential triggers for shame that involve a loss of social standing (for example, being publicly stripped of an award for cheating) or connectedness to others (for example, breakup of a significant romantic relationship as a result of infidelity). However, it should be noted that although the present study asked participants to explicitly consider aspects of the event that involved shame (such as painful exposure, rejection, failure, and a desire to hide), approximately 40-50% of participants did not write about these aspects. Future research might also include methods to increase the salience of these aspects through more structured means, such as by having participants respond to multiple, specific questions about the event (for example, "Describe the ways in which you failed to live up to the standards you and others aspire to," or, "Take a moment to think about how painful it was to have this negative aspect of yourself exposed to others").

Another shortcoming of the current study is that information on the ethnicity of the participants was not collected, and therefore an analysis of the potential relationship between ethnicity and the variables of interest was not made possible. Future research should include collect information on the ethnicity of participants to further tease out any possible relationship to shame or DTA. In

addition, future research may also include a measure of acculturation or cultural identification, since some have argued that cultural values play an integral role in the construction of shame (Kitayama & Markus, 1994; Kitayama, Markus, & Kurokawa, 2000; Kitayama, Markus, & Matsumoto, 1995; Scheff, 1990, 2003; Shweder, 2003).

Although the present study failed to provide sufficient evidence to support the shame/DTA hypothesis, pooled sample analyses provided some weak support of the DTA hypothesis and of previous TMT research (such as Hayes, Schimel, Faucher, & Williams, 2008) by showing a negative (but not statistically significant) correlation between self-esteem and DTA. These findings give some credence to previous TMT studies by showing that self-esteem may be predictive of DTA even when self-esteem is not experimentally manipulated. For example, although people with high dispositional self-esteem tend to exhibit less worldview defense than those with low dispositional self-esteem (Harmon-Jones et al., 1997), the present findings give some credence to the external validity of the DTA hypothesis, given that most of the support for the hypothesis has been based on laboratory research rather than naturalistic observational data. The present data may also suggest that people with naturally high self-esteem also tend to be less susceptible to unconscious thoughts of death, such that dispositional self-esteem may protect against the anxiety of mortality awareness. However, it should be emphasized that this association was not statistically significant, and therefore may have been due to chance alone.

Follow-up analyses also surprisingly revealed that narratives laden with guilty feelings were associated with lower levels of DTA when there was also a strong sense of resolution described in the narrative. While this suggests that resolving (or making sense of) a guilty situation may bolster one's protection against DTA, it is impossible to make causal attributions because follow-up analyses were not based on experimental manipulation. However, it is possible that the resolution of a situation in which one has erred may provide the opportunity to modify future behaviour, essentially increasing one's sense that emotions and outcomes can be controlled through action (such as changing to be a better person, leading to increased self-esteem and self-efficacy). The possibility that having a sense of control over future life events is a protective factor against the anxiety of mortality awareness is echoed in the findings of Greenberg and colleagues (1990) and Weise, Arciszewski, Verlhiac, Pyszczynski, and Greenberg (2012), who found that individuals high in authoritarianism (i.e., high regard for authority, rigidity, and conventionality) tend to respond especially negatively toward dissimilar others when mortality is made salient. More explicitly, individuals with a personality style that strongly endorses a predictable, ordered conceptualization of reality tend to readily enact this belief when the anxiety of mortality awareness is heightened. In the same way, making a guilty but resolved situation salient may likewise highlight the predictable, ordered aspects of emotional life and provide some protection against death anxiety.

Additionally, high-guilt/high-resolution events may also provide the opportunity for amends to be made with important attachment figures, thereby

strengthening the DTA-buffering effect of these close relationships (c.f., Florian, Mikulincer, & Hirschberger, 2002). Indeed, there is some evidence that mortality salience leads individuals in high-commitment relationships to be more forgiving of a hurtful interpersonal offence than those in low commitment relationships (Van Tongeren, Green, Davis, Worthington, & Reid, 2013). Future research may shed more light on the possibility that resolution of a guilty event may lead to forgiveness (and thereby reduce DTA) by experimentally manipulating both guilt and resolution in real or imagined conflicts in close interpersonal relationships, observing the outcome on forgiveness and DTA. Nonetheless, the findings of the present study raise the possibility that guilt, rather than shame, may play a more central role in TMT processes that previously realized.

Finally, consistent with previous research (Claesson & Sohlberg, 2002; del Rosario & White, 2006; Tangney & Dearing, 2002), the results showed that shame-proneness significantly predicts feelings of shame when guilt and guilt-proneness are statistically controlled. It appears that individuals who are high in shame-proneness are indeed more likely to experience feelings of shame in everyday life, and that the construct validity of the shame-proneness scale of the TOSCA-3 is therefore supported to some extent. However, the results also showed that guilt was not significantly predicted by guilt-proneness, which is somewhat consistent with the findings of Tangney et al. (1995), who found that guilt-proneness (unlike shame-proneness) was not significantly predictive of the long-term negative effects of guilt. Fontaine, Luyten, de Boeck, and Corveleyn (2001) also found that the TOSCA guilt-proneness scale was weakly correlated

with several measures of feelings of guilt after controlling for shame-proneness. When considered in the context of these studies, the present findings provide further evidence that the construct of guilt-proneness may not be as valid or robust as that of shame-proneness.

Conclusion

Shame is frequently associated with maladaptive psychological outcomes and is commonly experienced by those who seek counselling and psychotherapy, highlighting the need for therapists and theorists to elucidate and understand this complex emotion. This dissertation has suggested that terror management theory may offer a theoretical expansion of shame in the context of existential concerns, hypothesizing that shame threatens the social self and leads to an increase in mortality awareness. However, the findings of the experimental study conducted to test this possibility were insufficient, primarily due to the failure of the manipulation to produce measurable feelings of shame. This is likely due to problems with the procedure, which was performed in a group setting and likely attenuated the affective response of participants to the manipulation. Despite this, the results may provide some evidence that individuals who are naturally high in self-esteem may also tend to exhibit lower mortality awareness, consistent with previous experimental findings. The results also suggested that resolution of a guilty situation might provide some protection against mortality awareness; however, this finding was correlational in nature, and future research is needed to confirm this possibility. Nonetheless, it is hoped that this dissertation provides some foundation for future research that can better shed light on the potential relationship between self-conscious emotion and terror management processes.

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APPENDICIES

Appendix A

Screening Questionnaire

Thank you for your interest in this study being conducted at the University of Alberta. For this study, we are interested in the relationship between people's past experiences, emotion, and performance on verbal tasks.

In exchange for completion of several questionnaires at the end of your class, you will be provided with $10 in cash. The entire study should take you about 30 minutes to complete.

Any information that we collect from you will be kept on a secure storage device or locked filing cabinet that is only accessible to the researcher. If you are selected for our study, you will also be assigned a participant number to further protect your confidentiality, and your name will not be linked to your responses on the questionnaires.

In order to be eligible, we require that you meet a few criteria. Please let me know if these conditions apply to you by answering with either a yes or a no. If you are unsure, please ask the researcher for clarification.

- ◯ **Are you 18 years of age or older?**
- ◯ **Have you completed grade 9 or higher in an English-speaking school?**
- ◯ **Are you willing and able to travel to remain after the end of your class to complete a 30-minute questionnaire?**

Appendix B

Sample of the Test of Self-Conscious Affect-3 (TOSCA-3)[7]

Instructions: Below are situations that people are likely to encounter in day-to-day life, followed by several common reactions to those situations. As you read each scenario, try to imagine yourself in that situation. Then indicate how likely you would be to react in each of the ways described. We ask you to rate *all* responses because people may feel or react more than one way to the same situation, or they may react different ways at different times.

For example:

You wake up early one Saturday morning. It is cold and rainy outside.

a) You would telephone a friend to catch up on news. (1) - 2 - 3 - 4 - 5
not likely very likely

b) You would take the extra time to read the paper. 1 - 2 - 3 - 4 - (5)
not likely very likely

c) You would feel disappointed that it's raining. 1 - 2 - (3) - 4 - 5
not likely very likely

d) You would wonder why you woke up so early. 1 - 2 - 3 - (4) - 5
not likely very likely

[7] Adapted from Tangney, Dearing, Wagner, and Gramzow (2000).

Appendix C

Sample of the State Shame and Guilt Scale (SSGS)[8]

Instructions: The following are some statements which may or may not describe how you are feeling *right now.* Please rate each statement using the 5-point scale below. Remember to rate each statement based on how you are feeling *right at this moment.*

	Not feeling this way at all	Feeling this way somewhat	Feeling this way very strongly
1. I feel good about myself.	1 - - - - 2 - - - - 3 - - - - 4 - - - - 5		

[8] Adapted from Marschall, Saftner, and Tangney (1994).

Appendix D

Sample of the Rosenberg Self-Esteem Scale (RES)[9]

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you **strongly agree**, circle **SA**. If you **agree** with the statement, circle **A**. If you **disagree**, circle **D**. If you **strongly disagree**, circle **SD**.

	STRONGLY AGREE	AGREEE	DISAGREE	STRONGLY DISAGREE
1. I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD

[9] Adapted from Rosenberg (1965).

Appendix E

Death Thought Accessibility Measure[10]

Instructions: The next page contains a list of words that are not complete. You are to fill in the blanks to create full words. Please fill in the blanks with **the first word that comes to mind.** Write one letter per blank. Some words may be plural.

For example:

1. BAS _ _

Could be completed as:

1. BAS I C

You will be timed for this task, so please work as quickly as you can without making mistakes.

Please observe the time on the clock at the front of the room. Write this time in the space below and then turn the page immediately to begin.

Current time: _____

[10] This title read *Verbal Performance Task* in the research version. Adapted from Greenberg et al. (1994).

1. BUR _ _ D
2. PLA _ _
4. WAT _ _
5. DE _ _
6. MU _ _
7. _ _ NG
8. B _ T _ LE
9. M_ J _ R
10. F L _ P
11. GRA _ _
12. CHA _ _
13. KI _ _ ED
14. TAB _ _
15. W _ _ DOW
16. SK _ _ L
17. TR _ _
18. P _ P _ R
19. COFF _ _
20. POST _ _
21. R _ DI _

Please write the current time here: _____

Thank you. Please turn the page.

Appendix F

Study Information Sheet

Principal Researcher: Carlton T. Duff, MA ****@ualberta.ca

Research Supervisor: Dr. K. Jessica Van Vliet ****@ualberta.ca

You are invited to participate in a research project that is focused on adults who a) are18 years of age or older, b) have completed grade 9 or higher in an English-speaking school, and c) are willing and able to travel to the University of Alberta to complete a 30-minute questionnaire. We are interested in the possible relationship between people's past experiences, emotions, and performance on verbal tasks. The results of this study will help us better understand how people see themselves and experience the world around them.

The study consists of three separate questionnaires that include measures of wellbeing and demographic information. Participants will also complete a brief verbal performance task. Your participation should take approximately 30 minutes and you will receive $10.00 for your participation in this study. The consent form that includes participants' names will be kept separate from the anonymous questionnaires and both will be locked in a secure area.

The researcher in this study complies with the University of Alberta Standards for the Protection of Human Research participants. It is important to understand that this project is completely voluntary. This means that you may choose to participate or stop your participation at any time throughout the study without any penalty. If you are a university student, your decision to participate or not has no impact on the grade that you will receive in any course, and none of your instructors will be made aware of your decision. Many people will find participating to be a positive experience as it involves thinking about things in a unique and in-depth way. However, some people may find participation to be unpleasant or upsetting. Should you experience discomfort and wish to end your participation, you will be free to do so at any time. Support resources such as counselling will also be made available to you upon request.

The data from this study may be used in published scientific literature, presented at relevant conferences and symposiums, or may be used for educational purposes. The data will be used to describe people *in general* and never to single out or identify one person in particular. If you have any questions or concerns regarding this project or if you would like a copy of this report upon its completion, please feel free to contact the principal researcher Carlton Duff at (***) ***-**** (****@ualberta.ca) or the supervisor of this research, Dr. Jessica Van Vliet at (***) ***-**** (****@ualberta.ca).

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB at (***) ***-****.

Appendix G

Consent Form

Principal Researcher: Carlton T. Duff, MA ****@ualberta.ca

Research Supervisor: Dr. K. Jessica Van Vliet ****@ualberta.ca

Objectives: We are interested in the relationship between past experiences, emotions, and the ability to think quickly on verbal tasks.

Procedure: In this study, you will be asked to fill out several questionnaires that ask questions about your demographic information, emotional state, and past experiences. You will also be asked to complete a task that involves solving word puzzles. By examining the various responses to these questions over many participants we are attempting to understand how people's experiences and emotions relate to their performance on verbal tasks. We anticipate that the time to complete these questionnaires will be different among participants, but it should take you a total of 20-40 minutes. You will receive $10.00 for participating in this research. You are free to choose to participate and to stop your participation in this study at any time without penalty. Although your name will appear on this consent form, it will be kept confidential and separate from your answers on the questionnaires to make sure that your answers remain anonymous. Both the consent form and the questionnaires will be locked in separate, secure areas. The data from this study may be used in published scientific literature, presented at relevant conferences and symposiums, or may be used for educational purposes. The data will be used to describe people *in general* and never to single out or identify one person in particular, and data will be kept for 5 years after the conclusion of the study. **All questionnaire responses that you provide will be kept strictly confidential and will never be tied to your name in any way.**

If you have any questions or concerns about this study or wish to receive a summary of the results when the research is finished, you can contact the Principal Investigator, Carlton Duff at (***) ***-**** (****@ualberta.ca), the supervisor of this research, Dr. Jessica Van Vliet at (***) ***-**** (****@ualberta.ca), or the Chair of the University of Alberta Research Ethics Board at (***) ***-****.

I, _____, understand the procedure described above and that I can choose to refuse participation in this study. I understand that my identity will be kept completely confidential and that my name will not be used anywhere except on this form, which will be kept separate from my answers on the questionnaire to ensure anonymity. I understand that only the researchers for this study will review my answers and that I am free to withdraw from the study at any time without penalty. I understand that this data may be used for presentations and in published research articles. Finally, I understand that if I experience any kind of distress from this study and would like to seek counselling, referrals will be made available to me.

_____ _____

(signature) (date)

_____

(witness)

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB at (***) ***-****.

Appendix H

Shame Condition Questionnaire[11]

Instructions: Please think about a negative event in your life that made you feel very badly about yourself - something that involved **failure** or **rejection**. Please focus on a time when you felt so badly about some aspect of yourself that **you wanted to withdraw or hide yourself from others**. It is best to choose something that you have not talked about with others in much detail. Remember, what you write here will remain completely confidential, and the researcher will not know who specifically wrote it.

Please write down your experience of the event in as much detail as possible. It is important that you write down as much as you can remember about what the experience was like for you. For example, who was present at the time of the event? What might other people have thought about you at the time? What negative aspect of yourself was exposed to others? Please try your best to write about your deepest thoughts and feelings about the event.

Please spend only **five minutes** writing about your experience.

Please turn the page… ⇨

[11] This title read *Past Experiences Questionnaire* in the research version.

Appendix I

Control Condition Questionnaire[12]

Instructions: Please think about the events you have experienced over the last 24 hours. Please focus on the specific details of your activities and schedule, thinking about the facts and circumstances as objectively as possible. Remember, what you write here will remain completely confidential, and the researcher will not know who specifically wrote it.

Please write down your experience of the events in as much detail as possible. It is important that you write down as much as you can remember about the facts and circumstances. For example, who was present over the course of the day? What did you talk with others about? What did you think about? Please try your best to write about your thoughts as objectively as possible.

Please spend only **five minutes** writing about your experience.

Please turn the page… ⇨

[12] This title read *Past Experiences Questionnaire* in the research version.

Appendix J

Demographic Questionnaire

Instructions: The following questions are intended to tell us about the qualities of people participating in this study. All answers are strictly confidential and are used only in aggregated form (will not be used to identify you personally). For each question, you will be asked to either fill in a bubble (○) or a blank (_____).

Important: Please take your time to answer each question carefully and completely.

1. How did you find out about this research study? *Please choose only one.*

○ Through a flyer or poster on a bulletin board.
○ Through an advertisement in a newspaper.
○ Through an online advertisement.
○ Through a classroom presentation.
○ Through a posted flyer elsewhere *(please specify where)*: _____
○ Other *(please specify)*: _____

2. What is your gender? *Please choose only one.*

○ Male
○ Female
○ Other *(please specify)*: _____

3. What is your age?

_____ years old

4. What is your present marital status? *Please choose only one.*

○ Never married
○ Married/common-law
○ Divorced/Separated
○ Widowed
○ Other *(please specify)*: _____

5. What is the highest level of education you have completed? *Please choose only one.*

○ Elementary School
○ High School
○ Diploma
○ Bachelor's Degree
○ Master's Degree
○ Doctoral Degree or MD

6. What is your current occupation?

_____

7. What is your annual <u>household</u> income (if single, your personal income)? *Please choose only one.*

◯ Less than $30,000
◯ $30,001 – $45,000
◯ $45,001 – $59,999
◯ $60,000 – $74,999
◯ $75,000 – $89,999
◯ $90,000 – $104,999
◯ $105,000 – $119,999
◯ More than $200,000

8. How many children do you have? *Please choose only one.*

◯ None
◯ 1
◯ 2
◯ 3
◯ 4
◯ 5
◯ 6 or more

8. Do you consider yourself religious or spiritual? *Please choose only one.*

◯ Yes, religious
◯ Yes, spiritual
◯ Yes, religious and spiritual
◯ No, I do not consider myself religious or spiritual

Thank you, you have now finished.

Please place this booklet inside the envelope and give it to the researcher.

Appendix K

Debriefing Handout

Project Title: Examining the Effect of Shame on Death-Related Thoughts

Principal Researcher: Carlton T. Duff, MA ****@ualberta.ca

Research Supervisor: Dr. K. Jessica Van Vliet ****@ualberta.ca

Thank you for participating in this study. By answering these questionnaires, you have provided us with information about existential issues such as anxiety, death, identity, and relationships, as well as information about the emotion of shame.

More specifically, you contributed to a growing body of research examining how human beings deal with the knowledge that they will one day die. According to a well-researched theory of personality and social psychology called *terror management theory*, one of the ways that humans manage their anxiety about death is to think of themselves as part of the larger culture. It is thought that having a sense of belonging in the larger social group makes people feel safer and helps them to reduce their thoughts and anxiety about death.

Research also tells us that when people feel shame, they have a strong desire to withdraw or hide from others. This suggests that people don't feel safe around others when they experience shame. Our study is testing the possibility that when people feel shame, they don't feel safe and therefore aren't able to manage their anxiety about death as well. While some participants wrote about their experience over the last 24 hours, others were asked to write about an experience where they felt shame. Other research on terror management theory has shown that when people's close relationships are threatened, they tend to think about death more often. Therefore, we expect to find that when people feel shame, they will have more thoughts of death than those who do not feel shame. Similar to other research in this area, our study uses a word puzzle to measure how easily death thoughts come to mind.

If we find the results that we expect, it will have important implications for how we understand emotions like shame and how counsellors work with people experiencing shame. This is especially true for therapists, because counsellors do not typically expect clients to have thoughts of death when such clients are dealing with shame.

If you have any questions or would like a summary of the results when the study is complete, you can contact the Principal Investigator, Carlton Duff at (***) ***-**** (****@ualberta.ca) or the supervisor of this research, Dr. Jessica Van Vliet at (***) ***-**** (****@ualberta.ca). Thank you once again for your time and contribution to this research.

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Appendix L

Counselling Resources in Edmonton

This resource list has been provided for you to use in the unlikely event that you experience emotional distress or other discomfort as a result of your participation in this study. Should you have any questions about your participation in this study, you may also contact the Principal Investigator, Carlton Duff at (***) ***-**** (****@ualberta.ca), the supervisor of this research, Dr. Jessica Van Vliet at (***) ****-**** (****@ualberta.ca), or the Chair of the University of Alberta Research Ethics Board at (***) ***-****.

The **Mobile Adult Mental Health Crisis Response Team** provides mobile crisis assessment and referral services to all Edmonton residents. Call (780) 482-0222 for more information.

Edmonton Mental Health Services provides individual counselling, assessment and treatment. They are located on the 5th floor of 9942 108 St.. You can also call (780) 427-4444.

The Support Network Community Referral Line is a community resource that connects you with information about community services, including support groups and counseling. Dial 211.

The Support Network also offers free walk-in single session counselling and referral services. They are located at #301 11456 Jasper Ave., or can be reached at (780) 482-4357 (HELP).

Edmonton YWCA Counselling Services offers sliding-scale individual counselling. Call (780) 423-9922.

The Family Centre provides in-home parent support, as well as sliding-scale individual counselling for adults. They are located at #20 9912 106 St., and can be called at (780) 423-2831.

The Psychologists ' Association of Alberta has an online self-serve referral service to match clients with psychologists. This service can be found at http://www.psychologistsassociation.ab.ca/pages/doctor_search_agreement

If you are a student at the University of Alberta, the **U of A Student Services** provides free counselling for students. They can be reached at (780) 492-5205 or in room 2-600 SUB.

The **University of Alberta Clinical Services Counselling Centre** provides individual counselling by counselling students to members of the general public for a one-time fee of $50. Call (780) 492-3746 to arrange an appointment.

For all emergencies: Dial 911 immediately.

Appendix M

Narrative Rating Questionnaire

1. To what extent did the author, **while writing this narrative**, appear to feel **shame**, a sense that his/her self is bad, flawed, or that he/she is a failure, to the point of wanting to withdraw or hide from others?

1 = not at all – no feeling of shame or barely a trace
2 = a little bit – a little bit of shame is evident
3 = somewhat – shame is evident to a moderate degree (more than just a little, but not a lot)
4 = quite a bit – strong feelings of shame are evident
5 = extremely – very strong feelings of shame are clear and apparent

2. To what extent did the author, **while writing this narrative**, appear to feel **guilt,** a sense that he/she has done the wrong thing, feels badly about his/her actions, and feels badly about the real or imagined harm caused to others?

1 = not at all – no feeling of guilt or barely a trace
2 = a little bit – a little bit of guilt is evident
3 = somewhat – guilt is evident to a moderate degree (more than just a little, but not a lot)
4 = quite a bit – strong feelings of guilt are evident
5 = extremely – very strong feelings of guilt are clear and apparent

3. To what extent did the author, **while writing this narrative**, appear to experience a sense of **emotional resolution** about the event?

   Note: emotional resolution is a sense of no longer being 'stuck' in the grip of the negative emotions of the event, so that there are no unresolved issues and a sense that the person has grown from the event.

1 = not at all – there has been no resolution or barely a trace
2 = a little bit – a little bit of emotional resolution is evident
3 = somewhat – emotional resolution is evident to a moderate degree (more than just a little, but not a lot)
4 = quite a bit – strong sense of emotional resolution is evident
5 = extremely – very strong sense of resolution is clear and apparent