Compassion Focused Therapy for Shame-Prone Individuals:

An eight-week group therapy investigation

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Abstract

Shame is recognised as a particularly intense and painful experience that has profound negative psychological and behavioural consequences. Individuals highly prone to shame are notoriously difficult to treat and new interventions such as Compassion Focused Therapy (CFT) have been developed to help these individuals develop a more compassionate view of their self. The current research investigated the impact of CFT on nonverbal shame, trait shame, and psychological difficulties in 16 shame-prone clinical participants during an 8-week group therapy protocol administered by a clinical psychologist. The study manipulated and examined differences in the internalisation process, where some participants internalised a single compassionate person or animal, while others internalised the group as a compassionate force. Firstly, it was hypothesised that participants in both conditions would experience a reduction in nonverbal shame, trait shame, and psychological difficulties with therapy. Secondly, it was hypothesised that participants who received adapted CFT would experience greater reductions in nonverbal shame, trait shame, and psychological difficulties than participants who received standard CFT. To assess changes in trait shame, relationship functioning, self-compassion, intimacy fears, and empathy, participants completed a number of self-report measures pre-treatment, mid-treatment, post-treatment, and two months post-treatment. Nonverbal indicators of shame were coded using video recordings of the group therapy sessions. In both conditions, participants reported a significant reduction in trait shame and intimacy fears, and a significant increase in relationship functioning and self-compassion with therapy. On all outcome measures these improvements were found to stabilise after therapy had finished. The results found no significant change in nonverbal shame with therapy. In addition, no significant differences were found between the two conditions on any of the outcome measures, including nonverbal shame. Taken together, the results of the current research indicate support for hypothesis one, but not hypothesis two.

Introduction

Overview

Shame has been identified as ‘‘one of the most powerful, painful, and potentially destructive experiences known to humans’’ (Gilbert, 1997, p. 113). According to Gilbert (2003), shame has a certain ‘stickiness’ about it, which can pull individuals into a ruminative self-critical style. Experiences of shame are associated with confusion in thought and an inability to speak (de Hooge, Zeelenberg, & Breugelmans, 2010), whilst feelings of shame are characterized by a sense that others view the self in negative ways. In turn, this gives rise to feelings of anger, anxiety, worthlessness, inferiority, and a sense of self-inadequacy (de Hooge et al., 2010).

The predisposition to experience shame is universal and derived from natural human needs to be seen as attractive (Gilbert, 1997). However, while shame is considered to be a normal emotion that plays a role in regulating social interactions and interpersonal behaviour; it can cause widespread psychological difficulties if unregulated or experienced too intensively. Frequent and sustained experiences of shame have been associated with the development of a number of psychological difficulties including alcoholism (Bradshaw, 1988; Brown, 1991), depression (Andrews, 1995; Andrews, Qian, & Valentine, 2002; Kauffman, 1989; Matos & Pinto-Gouveia, 2010; Webb, Heisler, Call, Chickering, & Colburn, 2007), social anxiety (Cox, Rector, Bagby, Swinson, Levitt, & Joffe, 2000), post-traumatic stress disorder (Brewin, 2003; Leskela, Dieperink, & Thuras, 2002), borderline personality disorder (Linehan, 1993; Matos & Pinto-Gouveia, 2010), dissociative disorders (Dorahy, 2010), and anger and hostility (Tangney, Wagner, Fletcher & Gramzoq, 1992; Tangney & Dearing, 2002). Unregulated experiences of shame have also been found to be negatively related to disruptions in adult romantic relationships (Greenberg, 2008), insecure attachment (Karos, 2006; Wells & Hansen, 2003), poor communication (Gratch, 2010), and

sexual expression and satisfaction (Lombardi, 2007). Shame is also known to be extremely resistant to change, and individuals highly prone to shame are notoriously difficult to treat with traditional therapies (Gilbert, 2003). This is said to be due to the guardedness of those high in shame, the strategies employed by shame-prone individuals to defend against the discovery of shame (Gratch, 2010), and the tendency of shame-prone individuals to feel safer with a self-devaluating profile (Gilbert, 2003). In fact, some have gone so far as to argue that shame "is the bedrock of psychopathology" and "the gold to be mined therapeutically" (Miller, 1996, p. 151).

Given the frequent occurrence of shame in psychopathology, and the known difficulties associated with treatment, it is vital to explore possible treatment options when working with individuals highly prone to shame. This thesis investigates the reduction of trait shame and nonverbal shame among shame-prone clinical participants receiving Compassion Focused Therapy (CFT). The following review aims to elaborate on the central features of shame discussed above as well as integrate recent literature investigating shame. Firstly, the review will compare internal and external shame based on Gilbert's conceptualisations, and differentiate shame from the related affective experiences of guilt, embarrassment, and humiliation. The measurement of shame will then be examined, with a particular emphasis on nonverbal indicators of shame. Finally, the treatment of shame using CFT will be explored and empirically examined before the current research is described.

Conceptualising Shame

Shame is recognised as a particularly intense and painful experience that has profound negative psychological and behavioural consequences (Tangney & Dearing, 2002). Though usually considered an emotion, shame can also be conceptualised in terms of cognitions and beliefs about the self (e.g., that one is perceived by oneself and/or others as inferior, flawed, or inadequate); behaviours and actions (e.g., running away, hiding or engaging in submissive

and appeasement behaviour); evolved mechanisms (e.g., as a survival mechanism similar to the submissive behaviour expressed by animals); and interpersonal dynamic relationships (e.g., to be shamed or to be the shamer) (Gilbert, 1998). Shame is also said to occur at many different levels including the individual level, interpersonal level, and cultural level (Gilbert, 1998; Kaufman, 1989; Lewis, 1992). While some researchers believe there is a growing consensus about the definition of shame, there is little consistency in the literature. Therefore, to understand shame it is vital to differentiate between external and internal shame, and distinguish shame from the other closely related affective experiences of guilt, embarrassment, and humiliation.

Internal and External Shame. Gilbert and Proctor (2006) note that while there is no agreed upon definition of shame, it is often seen to involve two core components, referred to as internal and external shame. Internal or internalised shame is derived from how we appraise our self in our own minds (Gilbert, 2011). This is also sometimes referred to as proneness to shame (Cook, 1996). Internal shame occurs when shame affects and evaluations are internally focused, and the individual is judged by themselves as bad, undesirable, weak and inadequate (Gilbert, 1997, 2002, 2003). The feelings about oneself can vary from disappointment, frustration, and anger to disgust and contempt (Whelton & Greenberg, 2005). Gilbert (1998) suggested that internally driven shame is the "inner experience of the self as an unattractive social agent, under pressure to limit possible damage to self via escape or appeasement" (p. 22). Internal shame can be focused on specific aspects of the self (e.g., physical appearance), or on more general abilities or inner experiences (e.g., feeling less intelligent than others) (Gilbert, 2011). People may also experience internal shame about inner feelings, fantasies or images that are uncontrollable (e.g., unwanted intrusions). Two key components of internal shame are self-devaluation and self-criticism. These have been identified as the stream of negative thoughts, evaluations, and judgments about the self that

accompanies the negative feelings associated with internal shame (Gilbert, Clarke, Hempel, Miles, & Irons, 2004).

External or externalised shame occurs when one's evaluations and feelings are focused on the social and external environment, or more specifically how others see one or how one lives in the eyes of others (Gilbert, 1997). It is marked by thoughts and feelings that others view the self negatively (e.g., inferior, inadequate or bad) with feelings of anger or contempt. The self is also perceived to be seen by others as having characteristics that make one unattractive and therefore rejectable or vulnerable to attacks from others (Gilbert & Procter, 2006). External shame is said to emerge with the development of self-awareness (Lewis, 1992, 2003). Consistent with this view, Gilbert (2002) regards external shame as an involuntary response to the awareness that one has lost status and is devalued.

Shame and Guilt. Throughout the literature, there are several instances in which guilt has been used interchangeably with shame (Tangney, 1990, 1991). In fact, there is little consistency about how these two emotions should be defined, differentiated, and measured (Cohen, Wolf, Panter, & Insko, 2011; Tangney, Miller, Flicker, & Barlow, 1996; Tangney, Stuewig, & Mashek, 2007). Despite this, there is growing theoretical and empirical evidence to suggest that guilt and shame are in fact distinct affective experiences that have important and entirely different implications.

Early theorists (e.g., Ausubel, 1955; Benedict, 1946; Freud, 1896, 1953) focused on the private-public and internal-external dimensions of the two emotions. Shame was seen as a reaction to public disapproval of some personal shortcoming or as a reaction to criticism from others that arises when one's failures and shortcomings are put on public display, whereas guilt was associated with a private sense of having done something wrong or having behaved against one's conscience (Cohen et al., 2011). More recent psychological theories tend to differentiate shame and guilt in terms of the role of the self (e.g., Lewis, 1971, 1987;

Nathanson, 1987) or in terms of attributional patterns (Weiner, 1985). According to Lewis (1971), shame is said to arise from negative self-evaluations (e.g., "I am a bad person"). As the focus is on the entire self, shame is viewed as an affective state arising from internal, global, uncontrollable and stable attributions (Tangney, 1990). Guilt, on the other hand, is said to arise from negative self-evaluations of specific behaviours or transgressions. These specific behaviours often involve harm to someone or something, which leads one to perceive that they have done something "wrong" or "bad" (Tangney, 1991). As the focus is on a specific behaviour, guilt has been conceptualised as involving internal, specific, controllable, and less stable attributions.

Theoretically and experientially, the shame experience is quite different from the guilt experience. While many consider the guilt experience to be uncomfortable, it is not perceived to be debilitating for the individual involved. For example, although an individual may experience fleeting thoughts that he or she is a "bad" person during a guilt experience, the focus remains on a specific behaviour, thus his or her self-concept and identity remain essentially intact, and the self remains "able" (Tangney, 1990). In comparison to guilt, shame is believed to be a more intense and devastating experience in which the self, in addition to one's behaviour, is painfully scrutinised and negatively evaluated by others. The shame experience also involves a significant shift in self-perception (Tangney, 1990) which is often accompanied by feelings of worthlessness and powerlessness (Gramzow & Tangney, 1992). Consistent with this, participants in a study conducted by Tangney and colleagues (1993) rated shame experiences as significantly more painful and more difficult to describe than guilt experiences. Numerous studies have also shown that shame proneness, as opposed to guilt proneness, is associated with the development of a number of psychological difficulties (Makogen & Enikolopov, 2013).

Differences have also been found between the motivation of shame and guilt. Studies have found that shame elicits avoidance behaviour, such as a willingness to hide from others and engage in submissive and appeasement behaviour (Keltner, 1995). Guilt, on the other hand, is motivated by confession and reparation which may take the form of apologising, undoing the damage, or otherwise repairing the situation (Lindsay-Hartz, 1984; Lindsay-Hartz, de Rivera, & Mascolo, 1995; Roseman, Wiest, & Swartz, 1994; Woods & Proeve, 2014). Wicker, Payne, and Morgan (1983) found that people reported a higher tendency to hide after describing a shame experience than after describing a guilt experience. This finding was replicated by Tangney and colleagues (1993) in a study comparing shame, guilt and embarrassment. Participants reported that when feeling shame they were more likely to want to hide and less likely to want to confess, compared to when they were feeling guilt.

Shame and Embarrassment. A number of theorists (e.g., Darwin, 1872; Izard, 1977; Lazarus, 1991; Roseman et al., 1994; Tomkins, 1963, 1984) do not consider shame and embarrassment to be distinct emotions, and some have gone so far as to argue that embarrassment is a "mild form" of shame (Borg, Staufenbiel, & Scherer, 1988, p. 82; Lewis, 1990). Kaufman (1989) argued that embarrassment is an element of shame and stated "however mild or intense, embarrassment is not a different affect" (p. 24) from shame. In fact, the experiences of embarrassment and shame are in some ways very similar. For example, both are typically characterised by feelings of exposure and heightened self-awareness, and both are accompanied by feelings of distress, inappropriateness and inadequacy (Andrews, 1995). Despite this, there is evidence to suggest that shame and embarrassment may be distinct and different emotions.

In comparison to embarrassment, shame is believed to be a much more intense, devastating and shattering emotion (Crozier, 2014). For example, Buss (1980) has suggested that shame follows more serious failures and moral transgressions, whereas embarrassment

follows comparatively minor social transgressions. A number of additional differences between the two emotions were also cited by Buss (1980) including that embarrassment is more likely than shame to be accompanied by blushing, smiling, or feelings of foolishness and awkwardness; and less likely than shame to involve feelings of regret and depression (Tangney et al., 1996). More specifically, Buss (1980) suggested that the origin of these differences lies in the nature of the shame versus embarrassment-eliciting event. He went so far as to argue that "shame has moral implications, but embarrassment does not" (p. 161).

It has also been suggested that shame and embarrassment have different patterns of attributions for negative events (e.g., Short, 1979; Klass, 1990), where shame is the result of perceived deficiencies of one's core self, and embarrassment is the result of deficiencies in one's presented self (Tangney et al., 1996). Consequently, shame is associated with more global and enduring negative attributions about oneself, whereas embarrassment is associated with more transient, situation-specific failures. In a similar vein, Buss (1980) contrasted the enduring loss of self-esteem of shame with the temporary loss of self-esteem of embarrassment. Others theorists have argued that there is a public-private distinction between shame and embarrassment. For example, Edelman (1981) suggested that shame and embarrassment differ in the degree of public exposure that underlies each state, and indicated that shame, but not embarrassment, can be felt when alone. Despite the differences described above, in a recent review on the characteristics of shame and embarrassment Crozier (2014) stated no consensus has been reached on how shame and embarrassment differ.

Shame and Humiliation. Another emotion often confused with shame throughout the literature is humiliation. While some researchers (e.g., Lewis, 1976; Nathanson, 1992) tend to bracket shame and humiliation together; the two emotions involve quite different dynamics. Humiliation has been defined as an experience which involves some form or ridicule, scorn, contempt, or other degrading treatment at the hands of others (Klein, 1991). Klein (1991)

argued that when an individual is humiliated they may lose face, suffer damage to their identity and sense of self, and have their personal boundaries violated and personal space invaded. According to Miller (1988) "humiliation involves being put into a lowly, debased, and powerless position by someone who has, at that moment, greater power than oneself," whereas "shame involves primarily a reflection upon the self by the self," and a sense of personal inadequacy (p. 46).

Gilbert (1997) identified a number of similarities and differences between shame and humiliation. Similarities between the two emotions include sensitivity to put down/injury, a desire to protect oneself, and increased arousal. While both shame and humiliation focus on harm to the self; humiliation may be a less self-conscious and self-focused experience than shame. In shame the focus is on the self, for example, "I have brought this on myself, how could I have done or felt that?" whereas in humiliation the focus is on harm done by others, for example, "what have they done to me?" (Gilbert, 1997; Lewis, 1987). Klein (1991) argued that "people believe they deserve their shame; they do not believe they deserve their humiliation," (p. 117). Hence, in comparison to shame, humiliation involves a greater focus on others as bad, external rather than internal attributions for adverse events, a strong sense of injustice and unfairness, and an increased desire for revenge (Gilbert, 1997).

As demonstrated, there are a number of differences between shame and the closely related emotions of guilt, embarrassment, and humiliation. Research also suggests that shame can be conceptualised as a distinct affective experience (e.g., Gilbert, 1997; Klass, 1990; Lewis, 1971, 1987; Miller, 1988; Nathanson, 1987; Tangney et al., 1993). This is important to consider given the central focus of the current research is on the reduction of trait shame and nonverbal shame in shame-prone clinical participants receiving CFT. The following section will discuss methods of measuring shame, including both self-report measures of shame and nonverbal indicators of shame, as pertinent to the current research.

M**ethods of Measuring Shame**

Self-Report Measures of Shame. Shame is typically measured via self-report measures (Robins & Tracy, 2007) that can be divided into one of four categories; situation-based, scenario-based, statement-based and adjective-based (Tangney & Dearing, 2002). Situation-based scales consist of hypothetical situations or scenarios pre-selected because they elicit the specific emotion to be measured. Participants are asked to rate the extent to which they would feel a particular emotion (or set of emotions) in each situation or scenario. Scenario-based scales differ from situation-based scales in that they usually include multiple response options. In addition to feelings, the response options also typically refer to both behaviours and thoughts. Participants are asked to choose which set of responses they would most likely perform in a hypothetical situation or scenario or to rate how likely they would be to react in each of the ways described. Statement-based scales consist of sentences or phrases. Participants are asked to rate the degree to which they experience different feelings, cognitions or behaviours in response to the statement. Finally, adjective-based scales ask participants to rate the extent to which they experience different feelings. Many adjective-based scales were designed to assess either emotional traits or states (Robins & Tracy, 2007).

There are many benefits associated with using self-report measures of shame for research. They allow a large amount of data to be collected quickly and efficiently, which in turn reduces research costs. They also provide participants with a sense of privacy by not requiring them to verbally express their shame directly to the researcher (Menke, 2011). Consequently, this may increase the likelihood of participants responding honestly and reduce response bias. As with many things, however, there are also many limitations associated with using self-report measures of shame.

Andrews (1998) argues that it is difficult to tell whether self-report measures of shame measure shame or other related emotions (e.g., guilt, embarrassment and humiliation).

Whilst self-report measures of emotions require that participants be aware of their emotions (Tracy & Robins, 2007), many researchers have argued that shame is often experienced at an implicit level thus making it difficult for individuals to consciously report it (Else-Quest, Higgins, Allison, & Morton, 2012; Shaver & Mikulincer, 2005; Tracy & Randles, 2013; Tracy & Robins, 2007). In addition, participants are often unwilling to disclose their experiences of shame to researchers due to the associated pain that they feel (Lewis, 1971). Therefore, self-report measures may not capture the full extent of one's shameful emotions, and in some cases, participants may answer questions in a manner that will be viewed favourably by others. Some participants may also struggle to distinguish shame from other similar emotions, such as guilt (Andrews, 1998; Tangney & Dearing, 2002). Many self-report measures fail to take into account the complex relationship between shame and guilt and the likelihood that many situations or scenarios have the potential to elicit either of these two emotions (Andrews, 1998; Kugler & Jones, 1992). Another problem with self-report measures of shame is that they are often highly correlated with self-esteem (Cook, 1996) and thus may lack specificity. Finally, situation-based and scenario-based measures which utilise hypothetical situations or scenarios may lack ecological validity. Andrews (1998) suggests that the question remains of whether participant's responses actually reflect what they would do or feel in real-life situations or scenarios. One way to overcome the limitations described is through the use of observer ratings of nonverbal indicators of shame. While many may consider nonverbal ratings of shame to be expensive and time-consuming, they may be more difficult to consciously control and thus are crucial to an accurate assessment of an individual's emotional response to a particular situation or scenario (Ekman, 2003).

Observer Ratings of Nonverbal Indicators of Shame. Research has identified a number of nonverbal indicators of shame, including eye-gaze downward, head tilted downward, a slumped posture and a collapsed posture (e.g., Babcock & Sabini, 1990; Chung

& Robins, 2015; Izard, 1977; Keltner, 1995; Tracy & Robins, 2008). However, as with many constructs, the measurement of nonverbal shame varies across studies and researchers. These variations appear to be the result of differences in research questions and populations under investigation (Menke, 2011). Researchers also use different methods for eliciting shameful reactions. Perhaps more problematic, however, is that the nonverbal indicators of shame vary across studies. Even with this in mind, previous studies have shown that individuals from a number of countries including the United States, England, France, Germany, Greece, Japan, South Korea, Sweden, and Switzerland can recognize a shame expression (Chung & Robins, 2015; Izard, 1977; Keltner, 1995; Tracy & Robins, 2008) and distinguish it from similar emotions such as embarrassment and sadness, both of which share features with shame (Babcock & Sabini, 1990; Keltner, 1995). Furthermore, the distinction between shame and most other emotions can occur rapidly and efficiently utilising such markers (Tracy & Robins, 2008). In light of the above, it seems evident that shame is associated with innate, distinct, cross-culturally recognised nonverbal expressions.

One of the first people to describe facial expressions of shame was Charles Darwin (1872). He suggested shame is characterised by "the head being averted or bent down, with the eyes wavering or turned askant" (1872, p. 334), as well as by blushing, confusion of mind and collapsed posture. Other nonverbal indicators of shame identified by Darwin (1872) include turning away the whole body and awkward, nervous movements. Consistent with Darwin (1872), Carroll Izard (1977) identified facial expressions of shame via specific facial muscle movements and noted that shame is accompanied, on occasion, by blushing.

Around the same time as Izard's (1977) observations, Paul Ekman and Wallace Friesen (1978) developed the Facial Action Coding System (FACS), an emotion coding system based on Action Units comprised of distinct configurations of facial muscle movements. While the so-called "basic" emotions of anger, disgust, fear, happiness, sadness,

and surprise can be recognised from these Action Units, there is limited evidence to suggest there is a universal facial expression for "self-conscious" emotions such as shame (Tracy, Robins & Schriber, 2009). In fact, Ekman himself notes that he has not studied a facial or bodily representation of shame (Ekman, 2003). Despite this, the FACS continues to be used by several researchers to identify facial expressions of shame (e.g., Bonanno, Keltner, Noll, Putnam, Trickett, LeJune, & Anderson, 2002; Haidt & Keltner, 1999; Keltner, 1995). For example, a study conducted by Bonanno and colleagues (2002) used the Emotion Facial Action Coding System (EMFACS; Ekman & Rosenberg, 1997), a version of the FACS (Ekman & Friesen, 1978), to examine nonverbal expressions of shame among women with histories of childhood sexual abuse. Shame was identified when gaze down (Action Unit 54) co-occurred with head movement down (Action Unit 64) for at least one second but not longer than ten seconds. Participants who did not voluntarily disclose childhood sexual abuse were found to show the greatest facial shame.

Although Darwin (1872) and Izard's (1977) descriptions of gaze down and head movement down have been consistently identified as nonverbal indicators of shame, other researchers have suggested that the recognition of shame requires a combination of both facial and body movements, such as postural change. According to Martens (2012) "a prototypical shame expression should also include a slumped posture, making it as antithetical as possible to pride," (p. 390). Studies in recent years have supported all of these observations about shame (e.g., Tracy & Robins, 2004; Tracy & Robins, 2007, 2008; Tracy et al., 2009). For example, a study conducted by Tracy and colleagues (2008) found that shame recognition rates become slightly, though not significantly, higher when the display included a slumped posture in conjunction with a downward head tilt.

Numerous studies have examined nonverbal indicators of pride and shame among children during a success and failure task (Alessandri & Lewis, 1996; Belsky, Domitrovich,

& Crnic, 1997; Bennett, Sullivan & Lewis, 2005; Lewis, Alessandri & Sullivan, 1992). Two of these studies (Alessandri & Lewis, 1996; Lewis et al., 1992) consisted of children aged between three and five years old, with and without histories of maltreatment, while one consisted of children aged between three and seven years old with histories of neglect and physical maltreatment (Bennett et al., 2005). Shame was coded from videotapes using the children's facial, body and vocal behaviours. Following the coding system of Geppert (1986), shame was defined as body collapsed; corners of the mouth turned downward; lower lip tucked up; eyes lowered or askance, or withdrawal from the task situation; and negative self-evaluations. Three of these behaviours had to occur within 30 seconds of task failure for shame to be coded as present. Using this coding system shame behaviours were able to be discriminated from behaviours associated with pride. Across all studies, no shame was shown when children succeeded on the tasks, and no pride was shown when they failed. Stipek, Recchia and McClintic (1992) also used this measure but included an additional indicator in their study to assess shame among children aged between two and five years old. Avoidant posture was defined as "holding the head down, or turning to the side, or turning the back to the experimenter" (Stipek et al., 1992, p. 50). The decision was made to include this indicator as "while facial expressions might reflect mere disappointment, an attempt to shield the self from the experimenter's gaze is considered evidence of shame" (Stipek et al., 1992, p. 50). This suggests that posture is an important indicator of nonverbal shame that needs to be considered in research.

More recent research has focused specifically on postural changes as nonverbal indicators of shame (e.g., Tracy & Robins, 2004, 2007, 2008; Tracy et al., 2009) and found that expressions of shame can be distinguished from expressions of pride. These studies coded for two specific shame-relevant behaviours; chest narrowed and shoulders slumped. To date only one study (an unpublished Master's thesis) has assessed the three main nonverbal

indicators of shame; head down, collapsed posture, and avoidant posture (Menke, 2011). This study found that nonverbal shame amongst a sample of women with histories of child maltreatment could be reliably measured using these three indicators. Nonverbal shame was also found to be significantly correlated with self-reported shame and with concurrent posttraumatic stress disorder symptoms and diagnosis.

As Ekman and Friesen's (1978) widely used FACS does not incorporate action units for emotions such as shame which have a complex expression that involves the body, as well as the face, Tracy and Robins (2007), developed the Pride Coding System, a pride and shame behavioural coding scheme for assessing emotions from observable nonverbal behaviours. Based on the EMFACS (Ekman & Rosenberg, 1997), the Pride Coding System contains six head codes, four arms codes and four body codes that correspond with either pride or shame. Shame components are based on previous studies investigating nonverbal indicators of shame (e.g., Izard, 1977; Keltner, 1995; Lewis et al., 1992). These are identified as *head tilted forward/down, moving hands to cover face or part of face, hiding face by moving face or head, one or both arms limp at sides*; *chest narrowed inward,* and *shoulders slumped forward*. Not all shame components must be present for shame to be coded. However, the coding system suggests that greater than chance recognition of shame has been found when *head tilted forward/down* occurs with either *moving hands to cover face or part of face,* or *hiding face by moving face or head.*

The Pride Coding System has typically been used to code photographs of people demonstrating prototypical pride or shame expressions (Tracy & Robins, 2007; Tracy & Matsumoto, 2008). In a study conducted by Tracy and Matsumoto (2008) the shame components of the Pride Coding Scale were used to examine whether sighted, blind and congenitally blind individuals across cultures spontaneously display shame behaviours in response to victory and defeat at the Olympic or Paralympic games. Behavioural responses to

winning or losing a judo match were coded by three coders using photographs of the athletes taken immediately after match completion. Among both sighted and blind athletes, shame-relevant behaviours of *chest narrowed inward* and *shoulders slumped forward* were greater in response to losing than winning. Perhaps somewhat surprising, *head tilted forward/down* and *moving hands to cover face or part of face*, expressions previously found to be recognised as shame, were not associated with failure. This was attributed to the methodology of the study, and it was noted the photographer might have been unable to capture all facial and head movements of the athletes. Overall, the findings of this study give further evidence to suggest that shame is associated with innate, distinct, cross-culturally recognised expressions.

More recently, a study conducted by Randles and Tracy (2013) used two components of the Pride Coding System, *chest narrowed inward* and *shoulders slumped forward*, to examine whether shame about past addictive drinking (measured via nonverbal displays and self-report) predicted future drinking behaviours and changes in health among newly recovering alcoholics. Participants were video-recorded while they responded to the question "Describe the last time you drank and felt bad about it." Shame was coded (without audio) during the first 10 seconds of nonverbal behaviour. This brief window of time was chosen due to the labour-intensive process of coding and because there was a good deal of variance in the length of time that participant's spoke. The results found that nonverbal shame strongly predicted the likelihood of relapse, the severity of that relapse, and declines in health.

As demonstrated, research has identified a number of nonverbal indicators of shame, including eye-gaze downward, head tilted downward, a slumped posture and a collapsed posture (e.g., Babcock & Sabini, 1990; Chung & Robins, 2015; Izard, 1977; Keltner, 1995; Tracy & Robins, 2008). However, these studies of shame-related behaviour suffer from a number of limitations. While these studies utilise varying nonverbal indicators of shame, they frequently assess the occurrence of shame rather than the frequency or duration of shame

(Bennett, Sullivan, & Lewis, 2005; Bonanno et al., 2002; Lewis, 1992; Lewis & Alessandri, 1996; Stipek, Recchia, McClintic & Lewis, 1992). Furthermore, many of the studies fail to obtain self-report measures of shame, therefore little is known about the association between nonverbal indicators of shame and self-reported shame. Very few studies have examined nonverbal indicators of shame among adults high in shame and self-criticism. A number of the studies described have been conducted with children under seven years old where shame has been examined during a success and failure task (e.g., Alessandri & Lewis, 1996; Alessandri & Sullivan, 1992; Belsky et al., 1997; Bennett et al., 2005; Stipek et al., 1992). Those that have been conducted with adults have primarily focused on women with histories of abuse where semi-structured interviews have been conducted to elicit shameful responses (e.g., Menke, 2011). In these studies, one cannot be certain that shame was the only or even primary emotion shown (Keltner & Harker, 1998). No known studies have examined changes in nonverbal shame over time, or in a group therapy setting, and this gap in the literature forms the basis for the current research.

The Treatment of Shame

As previously mentioned, shame is known to be extremely resistant to change, and notoriously difficult to treat (Gilbert, 2003). Gilbert (2010) suggests that the healing of shame can be crucial to successful psychotherapy. Self-critical and self-attacking cognitions are often part of the shame experience (Gilbert & Miles, 2000) and these are considered to be an important target for intervention as they trigger, perpetuate and intensify emotional reactivity (Boersma, Hakanson, Salmonsson, & Johansson, 2015). Rector and colleagues (2000) suggest that depressed individuals highly prone to shame and self-criticism often do less well with standard Cognitive Behaviour Therapy (CBT) than low self-critical depressed individual's and note that the degree to which self-critical thinking can be modified is important to treatment outcome (Gilbert & Procter, 2006). Shame has also been found to

significantly interfere with key attributes of compassion and especially empathy (Tangney & Dearing, 2002), and some treatment studies have shown that high pre-treatment levels of self-criticism in general predict worse treatment outcomes (Cox et al. 2002; Marshall. Zuroff, McBride, & Bagby, 2008).

In light of the above, helping individuals who experience high levels of shame and self-criticism generate self-compassion and focus on feelings of warmth for the self, rather than self-criticism, may be a useful therapeutic endeavour (Gilbert & Irons, 2005). Self-compassion can be defined as being kind towards oneself in instances of pain or failure rather than avoiding or disconnecting from it (Neff, 2003). With its focus on acceptance, understanding, and affiliation, self-compassion is said to be a powerful treatment component when working with individuals high in shame (Gilbert, 2010). A growing body of research suggests that self-compassion is associated with improved psychological well-being and functioning (Neff, Rude & Kirkpatrick, 2007; Neff & Vonk, 2009; Zuroff, Santor, & Mongrain, 2005). In fact, new interventions have been developed to help individuals who are shame-prone focus on developing a more compassionate view of the self. Paul Gilbert's (2000) Compassion Focused Therapy (CFT) is one such intervention.

Compassion Focused Therapy (CFT)

CFT was developed by Gilbert (2000) in response to observations that individuals high in shame and self-criticism find it difficult to be kind, forgiving, supportive and reassuring to themselves (Gilbert, 2009). Shame and self-criticism are frequently associated with past experiences of abuse, bullying, high expressed emotion in the family, neglect and lack of affection (Kaufman 1989; Andrews 1998; Schore 1998). Gilbert (2000) observed that individuals who have experienced such adversities can become highly sensitive to threats of rejection or criticism from the outside world and can quickly become self-attacking (Gilbert & Procter, 2006). This led Gilbert (2000) to conclude that working with shame and self-

criticism requires a therapeutic focus on memories of such early experiences and therefore overlaps with therapeutic interventions developed for trauma (Brewin, 2003, 2006; Gilbert, 2005; Kaufman, 1989; Schore, 1998). It was also observed by Gilbert (2009) that individuals prone to high levels of shame and self-criticism often do poorly in CBT despite being able engage with cognitive and behavioural tasks, and generate positive alternatives for their negative thoughts and beliefs. This was attributed to difficulties with generating safeness or warmth in their relationships with themselves and others (Gilbert, 2009).

CFT is based on an evolutionary (Gilbert, 1989, 2010) and neuroscience model of affect regulation (Depue & Morrone-Strupinsky, 2005; Panksepp, 1998). It focuses on three specific affect regulation systems; threat and self-protection, incentive and resource-seeking, and soothing and contentment (Gilbert, 2014). The function of the threat and self-protection system is to detect and respond to threat. Activation of this system can give rise to attention focusing/bias, and negative emotions such as anger, anxiety and disgust (Leaviss & Uttley, 2015). These emotions trigger the autonomic nervous system, leading to fight, flight or freeze responses. The function of the incentive and resource-seeking system is to detect and respond to rewards and resources (e.g., food), and activate seeking-engagement strategies. Activation of this system is associated with the positive emotions of drive, excitement and vitality. The function of the soothing and contentment system is to detect sufficiency and safeness. It develops alongside the attachment system, and in particular one's ability to register and respond with calming and a sense of well-being to being cared for (Depue & Morrone-Strupinsky, 2005; Gilbert, 2009). Activation of this system gives rise to feelings of contentment, soothing, and affiliation (Gilbert, 2014).

CFT theorises that mental health difficulties often develop as the result of an imbalance in these three affect regulation systems (Gilbert, 2009, 2010). Whilst this is said to arise, be accentuated and maintained in a number of ways, CFT proposes that one of the most

common ways an imbalance occurs is when the internal, self-evaluative relationship is highly shame-prone and critical. It is hypothesised that these three affect regulation systems are poorly accessible in people with high shame and self-criticism as their threat and self-protection system leads them to perceive their inner and outer worlds as hostile. These considerations underlie CFT as it focuses on developing the soothing and contentment system, and people's ability to feel inner safeness and self-reassurance in response to self-criticism. For some people this system is difficult to access (e.g., due to environmental or biological factors, early histories characterised by abuse and neglect), and frightening to work with (Gilbert, 2009).

CFT uses a definition of compassion grounded in Buddhist tradition, which defines compassion as "a sensitivity to suffering in self and others, with a commitment to try to alleviate and prevent it," (The Dalai Lama, 1995, 2001). The key aspects and attributes of compassion in CFT are well-being, sensitivity, distress tolerance, empathy and non-judgement (Gilbert, 2009). Because individuals high in shame and self-criticism may have had little experience of being self-compassionate and receiving compassion from others, the underlying assumption of CFT is that these skills must be taught (Gilbert & Procter, 2006). CFT aims to help shame-prone individuals focus on reducing self-directed hostility and developing a more compassionate view of the self, so that derogatory self-directed criticism is reduced, associated feelings of shame are alleviated, and psychological well-being is improved. A focus on compassion influences all aspects of the treatment process including the therapeutic relationship, assessment and case formulation (Gilbert, 2007, 2010). While CFT describes the "underpinning theory and process of applying a compassion model to therapy," Compassionate Mind Training (CMT) refers to the "specific activities designed to develop compassionate attributes and skills," (Gilbert, 2009).

Compassionate Mind Training (CMT)

CMT is at the core of CFT (Leaviss & Uttley, 2015). It does not target specific core beliefs or schemas per se; rather it seeks to help individuals learn the skills required to develop the key aspects and attributes of compassion (Gilbert & Procter, 2006). These skills include compassionate attention and imagery, compassionate reasoning and thinking, compassionate behaviour, and compassionate feeling (Gilbert, 2009). CMT utilises a range of activities including mindful breathing, compassion-focused imagery, compassionate chair work, compassionate letter writing, and practicing compassionate behaviour and thinking (Woods & Proeve, 2014). The fundamental components of CMT are briefly outlined below.

Identification of Safety Strategies and Functional Analysis of Self-Criticism.

Self-criticism can serve many different functions (Driscoll, 1998; Gilbert & Procter, 2006). For shame-prone individuals, self-criticism is thought to be a safety and self-regulation strategy highly resistant to change (Gilbert & Procter, 2006). Rather than being identified as a distorted cognition or behaviour, self-criticism is framed in CMT as a safety behaviour (Kim, 2005; Salkovskis, 1996; Thwaites & Freeston, 2005); that is, self-criticism is the result of shame-prone individuals doing the best they can to regulate painful situations, memories, and emotions (Gilbert & Procter, 2006). During therapy, it is stressed that these automatic defences emerge as a result of evolved emotion systems and past experiences. Since many shame-prone individuals believe they are fundamentally bad or incompetent, a key component of therapy involves developing one's ability to 'stand back' and see these safety behaviours as automatic defences. According to Gilbert and Procter (2006), this is essential to a de-centring process, which aids empathy and understanding of one's distress and self-criticism. Without this understanding, CMT can be difficult for some individuals, especially those who are reluctant to give up self-criticism (Gilbert & Procter, 2006).

During therapy, a functional analysis of self-criticism takes place. Self-criticism is discussed and formulated as arising from early trauma, such as abuse and neglect, externally and internally focused basic fears, basic safety strategies/behaviours/beliefs that have developed to cope with internal and external threats, unintended consequences, and self-attacking for unintended consequences (Gilbert & Procter, 2006). The therapist helps participants be more in tune with the feelings associated with their memories, understand the development of safety strategies, learn compassionate acceptance and empathy for the origins and use of safety strategies, and develop compassionate imagery and mindful ways of responding to fears and safety strategies (Gilbert & Procter, 2006). Following the functional analysis of self-criticism, CMT seeks to develop compassionate empathy and acceptance for distress (Gilbert & Procter, 2006).

Development of Compassionate Images and Warmth using Imagery. A key aspect of CMT is guiding individuals to create their own images of warmth using imagery (Gilbert & Irons, 2004, 2005; Gilbert & Procter, 2006). This can be done in two ways. In the first way, individuals are asked to think or recall their own compassionate motives and feelings flowing *outwards* to others (e.g., imagine compassion and warmth for someone one cares about). According to Gilbert and Procter (2006), this approach is often used to help with unpleasant ruminations. In the second way, individuals are asked to choose their own image. Rather than the therapist providing individuals with a universal, compassionate image (e.g., a Buddha image), for generating feelings of compassion *flowing into* the self, individuals are asked to imagine their own ideal of caring. Ideal is defined as what is best for the individual, however; this ideal image must have the qualities of wisdom, strength, warmth and non-judgement/acceptance.

Imagery is used to try to create particular feelings and states of mind in order to facilitate people's ability to engage with shame (Gilbert, 2009). While some people generate

human-like images, others may have compassionate images, for example of a tree, the sea, an animal or a pet. They may also choose to embed their images in an image of a safe 'place,' for example a peaceful place such as the beach. Gilbert and Procter (2006) note that the key to the image is that it has a 'mind' that can understand the individual, and can communicate with them, and has the qualities of warmth, understanding and compassion. When an individual finds it difficult to generate alternative thoughts or feelings to their self-attacking, they are asked to focus on their compassionate image and imagine what that compassion part of them would feel, say and act towards them (Gilbert & Irons, 2004, 2005; Gilbert & Procter, 2006; Lee, 2005).

Empirical Support for Compassion Focused Therapy

There are a growing number of studies which support CFT in treating individuals high in shame and self-criticism. Rather than focusing on the effects of compassionate mind work, Gilbert and Irons (2004) examined how individuals experience self-criticism on a daily basis. Eight self-critical individuals from a depression support group attended four group sessions over a seven week period where they received training in self-soothing and self-compassion. Weekly monitoring diaries were used to record the triggers and forms of participant's self-criticism, participant's ability to generate and use compassionate imagery, and the types of imagery generated by participants. Whilst no significant change in self-criticism was found, there was a significant increase in self-soothing/self-compassion, and in the ease of generating these images and soothing oneself in a self-critical situation. Although this study did not directly examine CFT as a treatment intervention per se, it suggests that monitoring forms of self-criticism and self-soothing, thus increasing awareness, may prove valuable for individuals who experience high levels of shame and self-criticism.

In a pilot study conducted by Gilbert and Procter (2006), six participants high in self-criticism and shame attended twelve 2-hour group therapy sessions of CFT with a particular

focus on CMT. Weekly monitoring diaries were completed to record participant's experiences of self-critical and self-soothing thoughts and feelings. Participants showed overall improvements in mental health, including significant reductions in depression, anxiety, self-criticism, shame, inferiority and submissive behaviour. As captured in the diaries, there was also a significant increase in participant's ability to be self-soothing and focus on feelings of warmth and reassurance when distressed. Reliable follow-up data two months post-treatment was unable to be obtained as only four participants attended the follow-up session. Despite this, all participants had continued to practice developing compassionate thinking, behaviours and feelings. One limitation of this study is the small participant group (N = 6); however, as this was a pilot study such results demonstrate the potential benefits of utilising CFT and CMT when treating those high in shame and self-criticism (Gilbert & Procter, 2006).

More recently, Judge and colleagues (2012) investigated the benefits of a group-based CFT approach in individuals high in shame and self-criticism presenting with severe mental health difficulties to a community mental health team. Seven groups, each with an average of five participants per group (N = 42), received weekly sessions of CFT over a 12 to 14 week period. Questionnaires to assess self-criticism, shame, depression, anxiety and stress were completed pre- and post-treatment. Similar to the study conducted by Gilbert and Procter (2006) weekly monitoring diaries were also completed. The analyses revealed significant improvements post-treatment in scores for all of the study variables with the exception of the self-correction subscale. As captured in the diaries, CFT produced significant reductions in participant's self-critical thoughts, and significant improvements in participant's ability to generate self-soothing thoughts. The authors noted that these results, along with the participant feedback obtained from the study, indicate that CFT is an easily understood, well-tolerated, and helpful form of therapy that produces significant changes in objective measures

of mental health difficulties. This finding adds to the evidence base of support for CFT when treating individuals experiencing high levels of shame and self-criticism.

Whilst CFT was originally developed for treating individuals high in shame and self-criticism, it has received increasing interest as an intervention for a broad range of psychological difficulties including psychosis (Braehler, Gumley, Harper, Wallace, Norrie, & Gilbert, 2013; Laithwaite, O'Hanlon, Collins, Doyle, Abraham, Porter, & Gumley, 2009; Mayhew & Gilbert, 2008), bipolar affective disorder (Laithwaite et al., 2009), social anxiety disorder (Boersma et al., 2015), eating disorders (Gale, Gilbert, Read, & Goss, 2014**),** personality disorders (Lucre & Corten, 2013), and trauma (Ashworth, Gracey, & Gilbert, 2011; Beaumont, Galpin, & Jenkins, 2012; Beaumont & Hollins Martin, 2013; Bowyer, Wallis & Lee, 2014). Research has also been conducted with nonclinical samples (Shapira & Mongrain, 2010), smokers (Kelly, Zuroff, Foa, & Gilbert, 2010), and distressed chronic acne sufferers (Kelly, Zuroff, & Shapira, 2009). Beaumont and Hollins Martin (2015) conducted a narrative review of 12 research studies that have utilised CFT with clinical populations and concluded that overall these studies show significant psychological improvements in individuals diagnosed with a variety of mental health difficulties. Similarly, Leaviss and Uttley (2015) conducted a review of 14 studies to examine the effectiveness of CFT as a psychotherapeutic intervention. The findings from the included studies were, for the most part, favourable for CFT, and in particular seemed to be effective for people who were high in self-criticism. However, while the authors concluded that CFT is a promising intervention for mood disorders, particularly those high in self-criticism, they noted more large-scale, high-quality trials are needed before CFT can be considered evidence-based practice. Taken together, these findings indicate that individuals with a range of mental health difficulties referred for psychological intervention may benefit from receiving CFT.

While the research reviewed above is encouraging, there is much more to be learnt about CFT as a treatment option for individuals high in shame and self-criticism. For instance, the techniques used in CFT have been concluded as beneficial in the treatment of a number of psychological difficulties, including shame and self-criticism, yet much of the research has not examined specific mechanisms of change (Brewin, 2006). For example, internalisation of the therapist has been found to be an important part of effective psychotherapy (Mosher & Stiles, 2009) and this may aid in the development of compassionate images and warmth. Such investigation is vital to the development of CFT as an intervention as it is likely that specific aspects of the procedure elicit greater improvements than others. This forms a central aim of the current research.

The Current Research

The aim of the current research is to investigate the impact CFT has on nonverbal shame, trait shame, and psychological difficulties in shame-prone clinical participants. In addition, this research seeks to manipulate and examine the degree to which the therapy group, including the therapist, is internalised by participants using imagery and how this impacts on outcome measures. To examine this, participants in the current research received either standard CFT, where they were asked to internalise either a chosen ideal image and/or person which they imagined compassion flowing from and into the self, or adapted CFT, where they were asked to internalise the therapy group, including the therapist. Two hypotheses were derived for the current research. Firstly, it is hypothesised that participants in both conditions will experience a reduction in nonverbal shame, trait shame, and psychological difficulties with therapy. Secondly, it is hypothesised that participants who receive adapted CFT (i.e., internalisation of compassionate group) will experience greater reductions in nonverbal shame, trait shame, and psychological difficulties than participants who receive standard CFT (i.e., internalisation of compassionate other).

Method

Participants

Participants consisted of 16 shame-prone individuals who were recruited through referral from their mental health service provider after being assessed as having high levels of shame and self-criticism. To ensure adequate levels of trait shame, all participants completed the Shame, Guilt and Hostility-Inwards subscales of the Differential Emotions Scale (Appendix A; SG & HI-DEQ; Izard, Libero, Putnam & Haynes, 1993). Those with an average score on the nine items of three or above (indicating frequent experiences of shame), were invited to participate in the study.

Of the 16 participants, 56.25% (n = 9) were male and 43.75% (n = 7) were female. The age of participants ranged from 24-years to 57-years, with a mean of 39.44-years (SD = 9.89). In terms of ethnicity, 93.8% (n = 15) identified as New Zealand European and 6.3% (N = 1) identified as Irish. A number of participants (n = 11) reported currently using medication. Participants' current mental health problems as diagnosed by their referring practitioner included depressive disorder (n = 15), anxiety disorder (n = 12), bipolar affective disorder (n = 1), alcohol dependency (n = 1) and post-traumatic stress disorder (n = 1).

Measures

Multidimensional Relationship Questionnaire (MRQ; Snell, Schicke, & Arbeiter, 1996). The MRQ (Appendix B) was developed to provide a multidimensional self-report measure of psychological tendencies associated with intimate relationships. It consists of 12 intimacy-oriented subscales, each containing five items. In the current study, four subscales from the MRQ were used; Relationship Esteem, Relationship Motivation, Relationship Anxiety and Fear of Relationships. The Relationship Esteem subscale measures the extent to which people derive a sense of esteem from intimacy and the extent to which they feel confident about their intimate relationships. Relationship Motivation refers to the motivation

that an individual has to be involved in an intimate relationship. The items on the Relationship Anxiety subscale assess the level of tension, discomfort, and anxiety that people have around the intimate aspects of their life. Finally, the Fear of Relationships subscale measures the extent to which people are afraid of engaging in an intimate relationship.

Responses for each item of the MRQ are rated on a 5-point Likert scale ranging from 0 (*not at all characteristic of me*) to 4 (*very characteristic of me*). Total subscale scores range from zero to 20, with a higher score indicating a higher tendency to experience what the corresponding subscale measured. In college-age samples, the MRQ had high internal consistency and high test-retest reliability (Snell et al., 1996). The MRQ has also been shown to have good convergent validity with Hendrick's (1988) Relationship Assessment Scale, a self-report measure of relationship satisfaction (Snell et al., 1996).

Self-Compassion Scale (SCS; Neff, 2003). The SCS (Appendix C) is a self-report measure of self-compassion. It was developed to provide a valid and reliable measure of self-compassion as conceptualised in Buddhist psychology. The SCS consists of 26-items which assess three key components of self-compassion: Self-Kindness, Common Humanity and Mindfulness. Self-Kindness refers to being kind and caring towards oneself during times of suffering, failure and inadequacy, rather than being judgmental and self-critical. Common Humanity is the recognition that suffering and personal inadequacy is part of the shared human experience rather than something that happens to an individual in isolation. Mindfulness is defined as a non-judgemental, receptive state of mind in which an individual observes and holds their negative thoughts and feelings in mindful awareness, rather than over-identifying with them. Each component is composed of two different facets to form six subscales; Self-Kindness-Self-Judgement, Common Humanity-Isolation, and Mindfulness-Over-Identification.

Responses are rated on a 5-point Likert scale ranging from 1 (*almost never*) to 5 (*almost always*). Subscale scores were the sum of item responses. Negative subscale items (Self-Judgment, Isolation, and Over-identification) were reverse scored to calculate an overall self-compassion score for each participant. Higher total scores indicate greater self-compassion (Neff, 2003). In college-age samples, the SCS had high internal consistency, and good test-retest reliability, concurrent validity and discriminate validity (Neff, 2003; Neff et al., 2007). Convergent validity has been established with the Self-Criticism subscale of Blatt, D'Afflitti, and Quinlan's (1976) Depressive Experiences Questionnaire (DEQ).

The Risk in Intimacy Inventory (RII; Pilkington & Richardson, 1988). The RII (Appendix D) is a self-report measure of risk in relationships. It consists of 10 items which assess general attitudes or beliefs individuals have regarding intimacy. Responses are rated on a 6-point Likert scale ranging from 1 (*very strong disagreement*) to 6 (*very strong agreement*). Based on previous research (Pilkington & Richardson, 1988; Nezlek & Pilkington, 1994), the extent to which intimacy is perceived as risky is represented as the sum of responses to the ten items. Higher scores represent higher levels of risk in intimate relationships. In college-age samples, the RII had high internal consistency with Alpha coefficients for the 10-item scale ranging from 0.80 (Pilkington & Richardson, 1988) to 0.89 (Nezlek & Pilkington, 1994).

Test of Self-Conscious Affect - Version 3 (TOSCA-3; Tangney, Dearing, Wagner, & Gramzow, 2000). The TOSCA-3 (Appendix E) is a frequently used self-report measure of self-conscious emotions. It consists of 16 scenarios with responses yielding five subscales of Shame-proneness, Guilt-proneness, Externalization, Detachment/unconcern, Alpha pride, and Beta pride. Shame-proneness measures trait shame or the shame proneness of one making a negative evaluation of the global self. Similarly, Guilt-proneness measures trait guilt or the guilt proneness of someone making a negative evaluation of one's behaviour. The

Externalization subscale assesses proneness to blaming other people or circumstances for the consequences of one's actions. This is also referred to as proneness to an external locus of control. Detachment/unconcern refers to the degree of emotional involvement one has in the situation and its consequences. A low Detachment/unconcern subscale score indicates a lower degree or emotional involvement, or non-involvement, in the situation and its consequences. Alpha pride, also referred to as hubristic pride, measures pride in self. This component of pride fits with a more self-aggrandizing, egotistical conceptualization of pride and is related to arrogance and conceit (Tracy & Robins, 2007). Beta pride, also referred to as authentic pride, measures pride in one's current behaviour. This form of pride fits with the pro-social, achievement-oriented conceptualization of pride and is associated with confidence and accomplishment (Tracy & Robins, 2007).

The TOSCA-3 consists of 11 negative and five positive scenarios, each followed by four or five responses tapping different self-conscious emotions. Responses are rated on a 5-point Likert scale ranging from 1 (*not likely*) to 5 (*very likely*), based on how likely the participant is to react in the described situation. Participants' level of self-conscious affect is represented as the sum of the scores for each subscale.

Marlowe-Crowne Social Desirability Scale - Short Form C (M-C SDS; Crowne & Marlowe, 1960; Reynolds, 1982). The M-C SDS (Appendix F) is a self-report measure of social-desirability. It consists of 33 positively and negatively-keyed items, with 18 items keyed true and 15 items keyed false. Each of the items is dichotomous, allowing only *'true'* or *'false'* responses. The scale was developed using a number of personality inventories. Items were chosen on the basis that they describe culturally sanctioned and approved behaviours with low incidence rates, and have minimal psychopathology implications if responded to in either direction. A number of M-S SDS short-forms have been developed using college-age samples (Reynolds, 1982; Straham & Gerbasi, 1972). In the current

research, the 13-item short-form was used for the assessment of social-desirability response tendencies (Reynolds, 1982). A higher M-C SDS score indicates a greater tendency to respond in a socially desirable manner. Previous research has found this measure to have adequate reliability and good concurrent validity with the M-C SDS standard version (Reynolds, 1982).

Toronto Empathy Questionnaire (TEQ; Spreng, McKinnon, Mar & Levine, 2009). The TEQ (Appendix G) is a self-report measure of empathy. It was constructed using questionnaire items from several published self-report empathy measures, including the Interpersonal Reactivity Index (IRI; Davis, 1983), Hogan's Empathy Scale (Hogan, 1969), the Japanese Adolescent Empathy Scale (Hashimoto & Shiomi, 2002) and the Scale of Ethnocultural Empathy (Wang, Davidson, Yakushko, Savoy, Tan & Bleier 2003). The TEQ captures a wide range of attributes associated with the theoretical facets of empathy, such as emotional contagion, emotion comprehension, sympathetic physiological arousal, and conspecific altruism (Spreng et al., 2009). It consists of 16 items, each rated on a 5-point Likert scale from 0 (*never*) to 4 (*always).* The extent of participants' ability to be empathetic is represented as the sum of the 16 items. In three studies with college-age samples, the TEQ demonstrated high internal consistency, high test-retest reliability, and high concurrent validity (Spreng et al., 2009).

Pride Coding System (Tracy & Robins, 2007). The Pride Coding System (Appendix H) is a pride and shame behavioural coding scheme similar to the Emotion Facial Actions Coding System (EFACS) for assessing "basic" emotions from observable nonverbal behaviours. It contains six head codes, four arm codes and four body codes that correspond with either pride or shame. Shame components are based on previous studies investigating nonverbal indicators of shame (Izard, 1971; Keltner, 1995; Lewis et al., 1992). These are identified as *head tilted forward/down*; *moving hands to cover face or part of face, hiding*

face by moving face or head, *one or both arms limp at sides*, *chest narrowed inward*, and *shoulders slumped forward*. Not all shame components must be present for shame to be coded, however, a greater than chance recognition of shame has been found when *head tilted forward/down* occurs with either *moving hands to cover face or part of face,* or *hiding face by moving face or head*. The intensity of each behaviour is rated on a 5-point Likert scale ranging from 1 (*visible but very mild intensity*) to 5 (*extreme intensity*). If the behaviour or movement is not present, it is given a score of zero. The Pride Coding System has typically been used to code photographs of people demonstrating prototypical pride or shame expressions (Tracy & Robins, 2007; Tracy & Matsumoto, 2008). In a previous study interrater reliability alphas for each of the shame components were all found to be above 0.75 indicating strong agreement between coders (Tracy & Matsumoto, 2008).

Procedure

Group Therapy Sessions. Following recruitment to the study, participants were randomly assigned to one of two therapy conditions. The primary difference between the two conditions was the internalisation process during therapy, where some participants internalised a single compassionate person or animal, while others internalised the group as a compassionate force. Participants in the first condition received standard Compassion Focused Therapy (CFT) and followed Gilbert and Procter's (2006) notions around internalisation of compassion. During therapy, participants internalised a chosen ideal image and/or person which they imagined compassion flowing from and into the self. According to Gilbert and Procter (2006) this ideal image or person should have the qualities of "wisdom, strength, warmth and non-judgement/acceptance that is given to the person (i.e., to experience the image coming with warmth for and directing it at, the self)" (p. 363). Participants in the second condition received adapted CFT (CFT-A) that involved internalisation work around the group. More specifically, the group was internalised as

offering compassion, warmth and support such that participants internalised an image of people in the group and the actual group itself (for example, the room where the therapy session was held). It was expected that each of the conditions would be run twice, however, due to time and resource constraints only the standard CFT condition was repeated. Therapy was administered by a clinical psychologist over an 8-week period with one 90-minute session per week. Each group therapy session was videotaped with participants consent. Two video cameras (front and back) were utilised to provide a full view of the group.

Participants completed the MRQ, SCS, RII and TOSCA-3 before the commencement of therapy to provide baseline measures. During therapy, participants were required to complete a daily diary of shameful and self-critical thoughts, and their attempts to utilise self-compassion. The first three weeks of therapy focused on psychoeducation about the nature of emotions, self-compassion, self-criticism and shame, and the ways in which self-compassion can aid feelings of self-criticism and shame. During week four, participants were taught to apply the mindfulness skills learned to their experiences of self-criticism, and to utilise them while imagining either the chosen ideal image and/or person (CFT) or therapy group (CFT-A) showing them compassion. Mid-therapy assessments were conducted, and participants completed the SCS, TOSCA-3, M-C SDS and TEQ. Weeks five and six focused on self-compassion and mindfulness exercises. These exercises incorporated potential barriers to being self-compassionate and how to overcome them. The aim of week seven was to develop participants' ability to be self-compassionate during times when they may be inclined to be self-critical. To achieve this goal, participants in the two therapy conditions were given different tasks to complete. The CFT group were assigned the 'empty chair' task. Participants were required to mentally place themselves in a chair and become aware of what they needed to hear from their compassionate image. Following this, participants created wallet cards or posters depicting compassionate statements or ways to improve their current

ability to be compassionate towards the self. The CFT-A group were assigned the 'lucky dip envelope' task. Participants were required to write an anonymous statement about each member of the group. These were then placed in the appropriately named envelope for the individual to take away and read outside of the therapy session. During the final therapy session, participants were instructed to write a compassionate letter to the self, reminding them of the techniques they had learned during the eight weeks of therapy, to keep utilising them in future and the steps needed to improve their current state of self-compassion. Post-treatment assessments were conducted, and 15 participants completed the MRQ, SCS, RII, TOSCA-3, M-C SDS and TEQ. Twelve participants completed follow-up assessments two months post-therapy.

Coding of Group Therapy Sessions. Nonverbal indicators of shame were coded by two coders using both the front and back camera videos of the group therapy sessions. Coding was conducted blind, in that the coder was unaware of the therapy condition (CFT or CFT-A; before reviewing the internalisation sessions), or the therapy phase (beginning, middle or end). Three out of the 24 group therapy sessions (12.5%) were unable to be coded due to poor video quality or recording failures.

Five shame components from the Pride Coding System (Tracy & Robins, 2007) were used in the current study to code nonverbal shame. These were *head tilted forward/down*, *moving hands to cover face or part of face, hiding face by moving face or head*, *chest narrowed inward,* and *shoulders slumped forward*. Due to the fact participants were seated for the entirety of the therapy session it was decided the shame component *one or both arms limp at sides* would not be coded. Coding occurred when participants were asked either directly or indirectly by the therapist or other group members to speak during the therapy session. Coding also occurred when participants spoke spontaneously in the therapy session, for example when they began speaking after another participant had finished speaking.

Agreement statements with no elaboration were not coded. The coding segment of nonverbal shame started once the participant began speaking and stopped 10 seconds after the participant finished speaking.

At the end of each coding segment, the five nonverbal indicators of shame were rated on a six-point Likert scale ranging from 0 to 5. This was based on the scale used in the Pride Coding System; however, the duration of the behaviour was coded rather than the intensity of the behaviour. A score of 0 indicated the behaviour did not occur during the coding segment. A score of 1 indicated the behaviour was evident for approximately 20% of the coding segment. A score of 2 indicated the behaviour was evident for approximately 40% of the coding segment. A score of 3 indicated the behaviour was evident for approximately 60% of the coding segment. A score of 4 indicated the behaviour was evident for approximately 80% of the coding segment. A score of 5 indicated the behaviour was evident for more than 90% of the coding segment.

After each therapy session had been coded, average nonverbal shame scores were created for each participant in the group to provide an indication of the levels of nonverbal shame. Firstly, average nonverbal shame scores were calculated for each of the five nonverbal shame indicators. For example, a participant's average *head tilted forward/down* shame score was the average of all the ratings for *head tilted forward/down* across the therapy session. Secondly, an overall average nonverbal shame score was calculated by averaging the scores for all five indicators. For example, if a participant had an average *head tilted forward/down* score of 4, an average *moving hands to cover face or part of face* score of 1, an average *hiding face by moving face or head* score of 2, an average *chest narrowed inward score* of 5, and an average *shoulders slumped forward* score of 3, their overall average nonverbal shame score for the therapy session would be 3.

According to the Pride Coding Scale, not all shame components must be present for shame to be coded, but greater than chance recognition of shame has been found when *head tilted forward/down* occurs with either *moving hands to cover face or part of face* or *hiding face by moving face or head.* Therefore, a greater than chance recognition of shame score was calculated for each participant for each therapy session. This was calculated as a percentage. For example, if in a therapy session a participant's behaviour was coded in 15 coding segments, and in three of these coding segments *head tilted forward/down* occurred with either *moving hands to cover face or part of face* or *hiding face by moving face or head*, the participant would be given a greater than chance recognition of shame score of 20%.

Data Analysis

All data gathered was coded and entered into the Statistical Package for Social Sciences 23 (SPSS Inc., Chicago, Illinois) program. Descriptive statistics analyses utilised analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA). Statistical significance was set at the $p < 0.05$ level, and Wilks' Lambda was used.

To assess the reliability of the scales, Cronbach's alpha was calculated for each of the self-report measures (MRQ, SCS, RII, TOSCA-3, M-C SDS and TEQ) at pre-treatment, mid-treatment, post-treatment and follow-up. To assess interrater reliability for the nonverbal shame components, a series of Cohen's kappa (κ) coefficients were conducted between two coders on six (28.57%) of the 21 group therapy sessions that videos were available for. A total of 389-time segments were coded by both coders. Reliability analyses included the two coder's original scores. Consensus coding resolved coding disagreements. Consensus scores were used for all analyses apart from the reliability analyses.

Considering both Group 1 and Group 3 received standard Compassion Focused Therapy (CFT condition), a mixed two-way (group by time) MANOVA was conducted for each of the measures assessed pre-treatment and post-treatment (MRQ, SCS, and TOSCA-3)

to determine if the groups differed on the measures or could be merged for the final analysis. As the RII does not contain subscale scores, a mixed two-way (group by time), ANOVA was conducted for this measure.

To determine if any significant differences existed across age for the two treatment conditions, CFT and CFT-A, a one-way between subjects ANOVA was conducted. Inferential statistics across conditions were not calculated for gender, ethnicity, marital status, living arrangement and occupation due to the relatively small sample size.

For each of the self-report outcome measures (MRQ, SCS, and TOSCA-3) a mixed two-way (condition by time) MANOVA was conducted to examine if participants' subscale scores changed over time (pre-treatment, mid-treatment, post-treatment and follow-up), across the two treatment conditions (CFT, CFT-A). A mixed two-way (condition by time) ANOVA was conducted for the self-report measures which did not contain subscale scores (RII, M-C SDS, and TEQ) as well as for participants' SCS Overall score.

Therapy sessions 1 (start of treatment) and 4 (mid-treatment) were not used for nonverbal shame analyses as coding was unable to be completed due to poor video quality or recording failures for both Group 1 and Group 3. Consistent with the self-report measures completed pre-treatment, mid-treatment, and post-treatment, therapy sessions 2, 5 and 8 were used for analyses. A mixed two-way (condition by time) MANOVA was conducted to examine if participants' scores on each of the nonverbal shame indicators (*head tilted forward/down, moving hands to cover face or part of face, hiding face by moving face or head, chest narrowed inward,* and *shoulders slumped forward*) changed over time (therapy sessions 2, 5 and 8), across the two treatment conditions. Finally, a mixed two-way (condition by time) ANOVA was conducted to examine if participants' overall nonverbal shame score (average of all five nonverbal shame indicators) and greater than chance recognition of shame score (when *head tilted forward/down* occurred with either *moving hands to cover face or*

part of face or *hiding face*) changed over time (therapy sessions 2, 5 and 8), across the two treatment conditions.

Post-hoc analyses in the form of repeated-measures t-tests were conducted for measures or subscales where multivariate or univariate results showed a significant effect of condition or time. Bonferroni corrections were used to account for multiple comparisons. No violations of sphericity were found.

Results

Reliability Analyses

The reliability of the MRQ, SCS and TOSCA-3 subscales in the current sample were adequate (see Tables A1, A2 and A3; Appendix I). The reliability of the RII, M-C SDS and TEQ in the current sample were also found to be satisfactory (see Tables A4, A5 and A6; Appendix I). Reliability analyses for each of the nonverbal indicators of shame demonstrated that the group therapy videos were coded with at least 85% agreement. There was very good agreement between the two coders on the nonverbal indicators of shame; *head tilted forward/down*, $\kappa = 0.86$ (95% CI, 0.82 to 0.90), $p < 0.001$; *moving hands to cover face or part of face*, $\kappa = 0.93$, (95% CI, 0.89 to 0.97), $p < 0.001$; *hiding face by moving face or head*, $\kappa = 0.87$, (95% CI, 0.72 to 1.02), $p < 0.001$; *chest narrowed forward*, $\kappa = 0.92$, (95% CI, 0.86 to 0.97), $p < 0.001$; and *shoulders slumped forward*, $\kappa = 0.87$, (95% CI, 0.82 to 0.92), $p < 0.001$.

To further verify the accuracy of the reliability system, a value was calculated to indicate when the coders differed by more than one point on their rating of the nonverbal indicators. For the nonverbal shame indicator *head tilted forward/down*, 98.9% of the segments coded by both coders were within one point. For the nonverbal shame indicator, *moving hands to cover face or part of face*, 100% of the segments coded by both coders were within one point. For the nonverbal shame indicator *hiding face by moving face or head*, 100% of the segments coded by both coders were within one point. For the nonverbal shame indicator *chest narrowed forward*, 98.2% of the segments coded by both coders were within one point. For the nonverbal shame indicator *shoulders slumped forward*, 96.1% of the segments coded by both coders were within one point.

Group Demographic Information – Pre-Treatment

See Table 1 for demographic information for the three groups. Group 1 (CFT condition) consisted of three males (60%) and two females (40%), with ages ranging from 29- to 57-years old (M = 42.00, SD = 10.10 years). All five participants identified as New Zealand European. Participants' relationship status included 'single' (60%), 'married/living together' (20%) and 'separated/divorced' (20%). Two participants (40%) lived at home with their spouse/partner, and three participants (60%) lived with other people. Three participants (60%) reported they had full or part-time employment, one participant (20%) was receiving health benefits from the government, and one participant (20%) was unemployed.

Group 2 (CFT-A condition) consisted of three males (60%) and two females (40%), with ages ranging from 24- to 51-years old (M = 38.60, SD = 10.11 years). Four participants (80%) identified as New Zealand European and one participant (20%) identified as Irish. All five participants reported their relationship status as 'married/living together,' and that they currently live with their partner/spouse. Four participants (80%) reported they had full or part time employment and one participant (20%) was a student.

Group 3 (CFT condition) consisted of three males (50%) and three females (50%), with ages ranging from 24- to 51-years old (M = 38.00, SD = 10.95 years). All six participants identified as New Zealand European. Participants' relationship status included 'single' (16.7%), 'married/living together' (33.3%) and 'separated/divorced' (50%). One participant (16.7%) lived at home with their family of origin, two participants (33.3%) lived at home with their spouse/partner, and three participants (50%) lived alone. Four participants (66.7%) reported they had full or part time employment, one participant (16.7%) was unemployed and one participant (16.7%) was a student.

Table 1

Demographic information for the three groups pre-treatment

Variable	Group 1 N (%) or M (SD)	Group 2 N (%) or M (SD)	Group 3 N (%) or M (SD)
N	5	5	6
Gender			
Male	3 (60%)	3 (60%)	3 (50%)
Female	2 (40%)	2 (40%)	3 (50%)
Age			
Age in years	42.00 (10.10)	38.60 (10.11)	38.00 (10.95)
Range	29-57	24-51	24-51
Ethnicity			
NZ European	5 (100%)	5 (100%)	5 (100%)
Irish		1 (20%)	
Relationship status			
Single	3 (60%)		1 (16.7%)
Married/living together	1 (20%)	5 (100%)	2 (33.3%)
Separated/divorced	1 (20%)		3 (50%)
Living situation			
Home – family of origin			1 (16.7%)
Home with spouse/partner	2 (40%)	5 (100%)	2 (33.3%)
Living independently with others	3 (60%)		
Living independently alone			3 (50%)
Occupation			
Full or part time employment	3 (60%)	4 (80%)	4 (66.7%)
On health benefits	1 (20%)		
No employment	1 (20%)		1 (16.7%)
Student		1 (20%)	1 (16.7%)

Comparison between Group 1 and Group 3

MRQ. There was no significant multivariate main effect of group (Group 1, Group 3) on participants' MRQ subscale scores, $\Lambda = 0.46$, F (4, 5) = 1.48, $p = 0.335$, partial $\eta^2 = 0.54$. There was also no significant multivariate main effect of time on participants' MRQ subscale scores, $\Lambda = 0.27$, F (4, 5) = 3.39, $p = 0.107$, partial $\eta^2 = 0.73$. In addition, there was no

significant multivariate interaction effect between group and time on participants' MRQ subscale scores, $\Lambda = 0.84$, F (4, 5) = 0.25, $p = 0.900$, partial $\eta^2 = 0.17$. See Table 2 for descriptive statistics.

Table 2

Mean MRQ scores across Group 1 and Group 3

		Pre-treatment		Post-treatment	
MRQ Subscale	N	M	SD	M	SD
Relationship Esteem					
Group 1	5	6.20	3.90	9.20	3.56
Group 3	5	6.80	4.87	9.00	5.92
Total	10	6.50	4.17	9.10	4.61
Relationship Motivation					
Group 1	5	12.20	1.92	12.00	4.95
Group 3	5	9.00	5.66	9.80	6.87
Total	10	10.60	4.33	10.90	5.76
Relationship Anxiety					
Group 1	5	12.20	9.44	9.60	8.84
Group 3	5	10.60	4.04	9.40	6.58
Total	10	11.40	6.90	9.60	7.35
Fear of Relationships					
Group 1	5	11.60	7.13	9.80	7.29
Group 3	5	12.60	5.18	10.80	4.09
Total	10	12.10	5.90	10.30	5.60

Note: One participant from Group 3 did not complete the MRQ post-treatment.

SCS. There was no significant multivariate main effect of group on participants' SCS subscale scores, $\Lambda = 0.27$, F (6, 3) = 1.37, $p = 0.430$, partial $\eta^2 = 0.73$. There was also no significant multivariate main effect of time on participants' SCS subscale scores, however this approached significance, $\Lambda = 0.06$, F (6, 3) = 8.49, $p = 0.054$, partial $\eta^2 = 0.94$. In addition, there was no significant multivariate interaction effect between group and time on

participants' SCS subscale scores, $\Lambda = 0.15$, F (6, 3) = 2.74, $p = 0.22$, partial $\eta^2 = 0.85$. See Table 3 for descriptive statistics.

Table 3

Mean SCS scores across Group 1 and Group 3

		Pre-treatment		Post-treatment	
SCS Subscale	N	M	SD	M	SD
Self-Kindness					
Group 1	5	1.68	0.54	2.76	1.38
Group 3	5	1.68	0.46	3.12	0.52
Total	10	1.68	0.47	2.94	1.00
Self-Judgement					
Group 1	5	4.60	0.42	3.56	1.23
Group 3	5	4.12	0.33	2.96	0.71
Total	10	4.36	0.44	3.26	1.00
Common Humanity					
Group 1	5	1.85	0.55	3.05	0.94
Group 3	5	1.45	0.21	3.55	0.37
Total	10	1.65	0.44	3.30	0.72
Isolation					
Group 1	5	4.55	0.37	3.25	1.43
Group 3	5	4.20	0.67	3.15	0.52
Total	10	4.38	0.54	3.20	1.01
Mindfulness					
Group 1	5	2.15	0.52	3.00	0.77
Group 3	5	2.25	0.47	3.60	0.22
Total	10	2.20	0.47	3.30	0.62
Over-Identification					
Group 1	5	4.30	0.41	3.10	1.35
Group 3	5	4.55	0.21	2.95	0.72
Total	10	4.43	0.33	3.03	1.02

Note: One participant from Group 3 did not complete the SCS post-treatment.

RII. There was no significant main effect of group on participants' RII score, F (1, 8) = 0.005 p = 0.943, partial η^2 = 0.001. There was, however, a significant main effect of time on participants' RII score, Λ = 0.51, F (1, 8) = 7.71, p = 0.024, partial η^2 = 0.49, with participants showing less risk in intimate relationships at the end of treatment compared to the beginning of treatment. Furthermore, there was no significant interaction effect between group and time on participants' RII score, Λ = 0.93, F (1, 8) = 0.57, p = 0.471, partial η^2 = 0.07. See Table 4 for descriptive statistics.

Table 4

Mean RII scores across Group 1 and Group 3

		Pre-treatment		Post-treatment	
RII Score	N	M	SD	M	SD
Group 1	5	40.20	17.77	35.40	16.95
Group 3	5	42.60	9.86	34.20	4.15
Total	10	41.40	13.61	34.80	11.65

Note: One participant from Group 3 did not complete the RII post-treatment.

TOSCA-3. There was no significant multivariate main effect of group on participants' TOSCA-3 subscale scores, Λ = 0.24, F (6, 3) = 1.57, p = 0.382, partial η^2 = 0.76. There was, however, a significant multivariate main effect of time on participants' TOSCA-3 subscale scores, Λ = 0.03, F (6, 3) = 14.20, p = 0.026, partial η^2 = 0.97. Univariate analysis showed that the TOSCA subscales of Shame-proneness, F (1, 8) = 5.85, p = 0.042, partial η^2 = 0.42; Detachment/unconcern, F (1, 8) = 7.243, p = 0.027, partial η^2 = 0.48; and Alpha pride, F (1, 8) = 8.45, p = 0.020, partial η^2 = 0.51, reduced over the course of treatment. There was no significant multivariate interaction effect between group and time on participants' TOSCA-3 subscale scores, Λ = 0.71, F (6, 3) = 0.20, p = 0.953, η^2 = 0.29. See Table 5 for descriptive statistics.

Table 5

Mean TOSCA-3 scores across Group 1 and Group 3

		Pre-treatment		Post-treatment	
TOSCA-3 Subscale	N	M	SD	M	SD
Shame-proneness					
Group 1	5	61.40	6.58	56.50	11.17
Group 3	5	51.60	7.37	43.40	8.56
Total	10	56.50	8.37	50.00	11.68
Guilt-proneness					
Group 1	5	65.80	11.78	68.40	5.32
Group 3	5	66.00	8.88	65.40	1.52
Total	10	66.20	9.84	66.90	4.01
Externalisation					
Group 1	5	36.00	9.38	33.60	12.12
Group 3	5	38.00	3.54	38.20	6.42
Total	10	37.00	6.77	35.90	9.46
Detachment					
Group 1	5	23.40	5.13	26.20	6.50
Group 3	5	29.00	6.82	35.60	4.39
Total	10	26.20	6.41	30.90	7.20
Alpha pride					
Group 1	5	11.60	5.08	15.00	2.83
Group 3	5	18.80	2.28	20.60	2.79
Total	10	15.20	5.31	17.80	3.97
Beta pride					
Group 1	5	13.00	3.67	15.60	1.82
Group 3	5	19.20	1.79	20.80	3.49
Total	10	16.10	4.25	18.20	3.79

Note: One participant from Group 3 did not complete the TOSCA-3 post-treatment.

As no significant group or interaction differences were found on any of the four measures completed pre-treatment and post-treatment, Group 1 and Group 3 were merged and the remainder of the analyses compared the two treatment conditions; CFT and CFT-A.

Condition Demographic Information – Pre-Treatment

There was no significant difference across treatment conditions (CFT, CFT-A) for age, F (1, 15) = 0.05, p = 0.828. Due to the relatively small sample size (N = 12), inferential statistics across conditions were not calculated for gender, ethnicity, marital status, living arrangement and occupation. The raw data for these variables is presented in Table 6.

Table 6

Demographic information for the two conditions pre-treatment

Variable	CFT N (%) or M (SD)	CFT-A N (%) or M (SD)
N	11	5
Gender		
Male	6 (54.5%)	3 (60%)
Female	5 (45.5%)	2 (40%)
Age		
Age in years		38.60 (10.11)
Range	24-57	24-51
Ethnicity		
NZ European	11 (100%)	5 (100%)
Irish		1 (20%)
Relationship status		
Single	4 (36.4%)	
Married/living together	3 (27.3%)	5 (100%)
Separated/divorced	4 (36.4%)	
Living situation		
Home – family of origin	1 (9.1%)	
Home with spouse/partner	4 (36.4%)	5 (100%)
Living independently with others	3 (27.3%)	
Living independently alone	3 (27.3%)	
Occupation		
Full or part time employment	7 (63.6%)	4 (80%)
On health benefits	1 (9.1%)	
No employment	2 (18.2%)	
Student	1 (9.1%)	1 (20%)

Outcome Measures

MRQ. A mixed two-way (condition by time) MANOVA was conducted to examine if participants' scores on each of the MRQ subscales (Relationship Esteem, Relationship Motivation, Relationship Anxiety, and Fear of Relationships) differed from pre-treatment to post-treatment and follow-up, across the two treatment conditions (see Table 7 for descriptive statistics). There was no significant multivariate main effect of treatment condition on participants' MRQ subscale scores, $\Lambda = 0.55$, F (4, 7) = 1.46, $p = 0.311$, partial $\eta^2 = 0.45$. There was also no significant multivariate main effect of time on participants' MRQ subscale scores, $\Lambda = 0.25$, F (8, 3) = 1.10, $p = 0.521$, partial $\eta^2 = 0.75$. In addition, there was no significant multivariate interaction effect between treatment condition and time on participants' MRQ subscale scores, $\Lambda = 0.38$, F (8, 3) = 0.61, $p = 0.743$, partial $\eta^2 = 0.62$, indicating that participants' scores on each of the MRQ subscales did not differ over time and with regard to which treatment condition participants were in. Although the multivariate effect of time was not significant, the univariate effects did show significance on two subscales, with the small sample size (N = 12) likely not reflecting this in the multivariate analysis. These univariate results show a significant effect for Relationship Anxiety, F (2, 20) = 10.33, $p = 0.001$, partial $\eta^2 = 0.51$, and Relationship Esteem, F (2, 20) = 5.33, $p = 0.014$, partial $\eta^2 = 0.35$, across time.

Post hoc analyses on the Relationship Anxiety subscale across the three time points showed a significant reduction in Relationship Anxiety from pre-treatment (M = 11.80, SD = 5.73) to post-treatment (M = 9.13, SD = 6.02), t (14) = 4.04, $p = <0.001$. There was also a significant reduction in Relationship Anxiety from pre-treatment (M = 12.75, SD = 4.39) to follow-up (M = 9.16, SD = 5.18), t (11) = 3.74, $p = 0.003$. However, there was no significant difference in Relationship Anxiety from post-treatment (M = 9.75, SD = 5.14) to follow-up (M = 9.17, SD = 5.18), t (11) = 0.69, $p = 0.506$.

Table 7

Mean MRQ scores across CFT and CFT-A conditions at pre-treatment, post-treatment and follow-up

		Pre-treatment		Post-treatment		Follow-up	
MRQ Subscale	N	M	SD	M	SD	M	SD
Relationship Esteem							
CFT	7	6.00	4.58	7.86	4.85	7.71	5.68
CFT-A	5	3.20	3.11	5.20	2.95	7.20	3.96
Total	12	4.83	4.13	6.75	4.22	7.50	4.83
Relationship Motivation							
CFT	7	9.57	4.31	8.85	4.74	10.71	5.82
CFT-A	5	13.00	4.58	13.00	4.00	13.00	4.47
Total	12	11.00	4.57	10.58	4.76	11.67	5.21
Relationship Anxiety							
CFT	7	12.86	5.55	10.86	6.51	9.71	6.94
CFT-A	5	12.60	2.61	8.20	1.92	8.40	0.55
Total	12	12.75	4.39	9.75	5.14	9.17	5.18
Fear of Relationships							
CFT	7	13.71	5.56	11.14	4.89	9.57	5.62
CFT-A	5	10.00	4.30	10.40	3.78	10.40	1.14
Total	12	12.17	5.21	10.83	4.34	9.92	4.23

Post hoc analyses on the Relationship Esteem subscale across the three time points found a significant increase in Relationship Esteem from pre-treatment (M = 5.40, SD = 4.07) to post-treatment (M = 7.80, SD = 4.44), t (14) = -3.21, p = 0.006. There was also a significant increase in Relationship Esteem from pre-treatment (M = 4.83, SD = 4.13) to follow-up (M = 7.50, SD = 4.83), t (11) = -2.55, p = 0.027. But again, there was no significant difference in Relationship Esteem from post-treatment (M = 6.75, SD = 4.22) to follow-up (M = 7.50, SD = 4.83), t (11) = -0.89, p = 0.394. Taken together, these results indicate that participants report a reduction in Relationship Anxiety and an increase in Relationship Esteem with therapy, but that these effects stabilise after therapy finishes.

SCS. A mixed two-way (condition by time) ANOVA was conducted to examine if participants' SCS Overall score (a measure of overall self-compassion) differed from pre-treatment to mid-treatment, post-treatment and follow-up, across the two treatment conditions (see Table 8 for descriptive statistics). There was no significant main effect of treatment condition on participants' SCS Overall score, F (1, 10) = 1.47, p = 0.254, partial η^2 = 0.13. A significant main effect of time was found, Λ = 0.20, F (3, 8) = 10.67, p = 0.004, partial η^2 = 0.80, indicating that participants' SCS Overall score changed with therapy regardless of what treatment condition participants were in. There was no significant multivariate interaction effect between treatment condition and time on participants' SCS Overall score, Λ = 0.90, F (3, 8) = 0.31, p = 0.818, partial η^2 = 0.10, indicating that participants' SCS Overall score did not differ with regard to which treatment condition participants were in.

Table 8

Mean SCS overall total scores across CFT and CFT-A conditions at pre-treatment, mid-treatment, post-treatment and follow-up

		Pre-treatment		Mid-treatment		Post-treatment		Follow-up	
SCS Overall Score	N	M	SD	M	SD	M	SD	M	SD
CFT	7	1.85	0.18	2.46	0.49	2.94	0.65	2.90	0.63
CFT-A	5	2.10	0.22	2.86	0.31	3.09	0.36	3.09	0.66
Total	12	1.95	0.23	2.63	0.46	3.00	0.54	2.98	0.62

Post hoc analyses across the four time points showed a significant increase in participants' SCS Overall score from pre-treatment (M = 1.84, SD = 0.30) to mid-treatment (M = 2.52, SD = 0.52), t (15) = -6.52, p = <0.001, and post-treatment (M = 3.04, SD = 0.69), t (14) = -5.55, p = <0.001. There was also a significant increase in participants' SCS Overall score from pre-treatment (M = 1.95, SD = 0.23) to follow-up (M = 2.98, SD = 0.62), t (11) = -5.50, p = <0.001. In addition, there was also a significant increase in participants' SCS Overall score from mid-treatment (M = 2.52, SD = 0.54) to post-treatment (M = 3.04, SD = 0.69), t (14) = -2.29, p = 0.038. There was no significant difference in participants' SCS

Overall score from mid-treatment (M = 2.63, SD = 0.46) to follow-up (M = 2.98, SD = 0.62), t (11) = -2.09, p = .061, or from post-treatment (M = 3.00, SD = 0.54) to follow-up (M = 2.98, SD = 0.62), t (11) = 0.16, p = 0.878. These results indicate that participants report an increase in overall self-compassion with therapy, but that these effects stabilise after therapy finishes.

A mixed two-way (condition by time) MANOVA was conducted to examine if participants' scores on each of the SCS subscales (Self-Kindness, Self-Judgement, Common Humanity, Isolation, Mindfulness, and Over-Identification) differed from pre-treatment to mid-treatment, post-treatment and follow-up, across the two treatment conditions (see Table 9 for descriptive statistics). There was no significant multivariate main effect of treatment condition on participants' SCS subscale scores, Λ = 2.96, F (6, 5) = 1.98, p = 0.236, partial η^2 = 0.70. A significant multivariate main effect of time was found, Λ = 0.21, F (18, 72) = 2.88, p = <0.001, partial η^2 = 0.40, indicating that participants' SCS subscale scores changed during treatment regardless of what treatment condition participants were in. This was further supported by no significant multivariate interaction effect being found between treatment condition and time on participants' SCS subscale scores, Λ = 0.53, F (18, 72) = 0.99, p = 0.482, partial η^2 = 0.19. Univariate results show a significant effect for Self-Kindness, F (3, 30) = 15.29, p = <0.001, partial η^2 = 0.61, Self-Judgement, F (3, 30) = 8.04, p = <0.001, partial η^2 = 0.45, Common Humanity, F (3, 30) = 6.96, p = <0.001, partial η^2 = 0.41, Isolation, F (3, 30) = 6.24, p = 0.002, partial η^2 = 0.38, Mindfulness, F (3, 30) = 18.73, p = <0.001, partial η^2 = 0.65, and Over-Identification, F (3, 30) = 7.39, p = <0.001, partial η^2 = 0.43, across time.

Table 9

Mean SCS scores across CFT and CFT-A conditions at pre-treatment, mid-treatment, post-treatment and follow-up

		Pre-treatment		Mid-treatment		Post-treatment		Follow-up	
SCS Subscale	N	M	SD	M	SD	M	SD	M	SD
Self-Kindness									
CFT	7	1.80	0.48	2.60	0.38	2.71	0.75	3.03	0.71
CFT-A	5	1.76	0.67	2.84	0.85	3.04	0.82	3.04	0.74
Total	12	1.79	0.54	2.70	0.60	2.85	0.76	3.03	0.69
Self-Judgement									
CFT	7	4.23	0.34	3.91	0.78	3.26	0.86	3.29	0.91
CFT-A	5	4.12	0.48	3.36	0.52	3.68	0.76	3.00	0.76
Total	12	4.18	0.39	3.68	0.73	3.43	0.81	3.17	0.83
Common Humanity									
CFT	7	1.71	0.44	2.57	0.64	3.32	0.62	2.96	0.95
CFT-A	5	2.35	0.72	3.00	0.64	3.20	0.54	3.20	0.93
Total	12	1.98	0.63	2.75	0.65	3.27	0.57	3.06	0.91
Isolation									
CFT	7	4.18	0.53	3.71	0.88	3.40	0.79	3.32	0.76
CFT-A	5	3.75	0.35	3.20	0.33	3.20	0.48	2.85	0.70
Total	12	4.00	0.50	3.50	0.73	3.31	0.66	3.13	0.74
Mindfulness									
CFT	7	2.32	0.37	3.11	0.50	3.36	0.45	3.29	0.68
CFT-A	5	2.45	0.57	3.20	0.21	3.65	0.14	3.35	0.70
Total	12	2.38	0.45	3.15	0.39	3.48	0.38	3.31	0.66
Over-Identification									
CFT	7	4.32	0.35	3.82	0.73	3.10	0.84	3.29	0.59
CFT-A	5	4.10	0.68	3.35	0.38	3.55	0.60	3.20	0.62
Total	12	4.23	0.49	3.63	0.64	3.29	0.75	3.25	0.58

Post hoc analyses on the Self-Kindness subscale across the four time points found a significant increase in Self-Kindness from pre-treatment (M = 1.66, SD = 0.54) to mid-treatment (M = 2.54, SD = 0.64) t (15) = -6.47, p = <0.001. There was also a significant increase in Self-Kindness from pre-treatment (M = 1.71, SD = 0.52) to post-treatment (M = 2.97, SD = 0.92), t (14) = -4.50, p = <0.001. In addition, there was a significant increase in

Self-Kindness from pre-treatment (M = 1.78, SD = 0.54) to follow-up (M = 3.03, SD = 0.69), *t* (11) = -5.50, *p* = <0.001. No significant difference in Self-Kindness was found from mid-treatment (M = 2.57, SD = 0.64) to post-treatment (M = 2.97, SD = 0.92), *t* (14) = -1.58, *p* = <0.136. There was also no significant difference in Self-Kindness from mid-treatment (M = 2.70, SD = 0.60) to follow-up (M = 3.03, SD = 0.69), *t* (11) = -2.01, *p* = 0.069. Furthermore, there was no significant difference in Self-Kindness from post-treatment (M = 2.85, SD = 0.76) to follow-up (M = 3.03, SD = 0.69), *t* (11) = -1.23, *p* = 0.243. Taken together these results indicate that participants report an increase in Self-Kindness with therapy, especially during the first half of therapy, but that these effects stabilise after therapy finishes.

Post hoc analyses on the Self-Judgement subscale across the four time points showed a significant decrease in Self-Judgement from pre-treatment (M = 4.26, SD = 0.44) to mid-treatment (M = 3.76, SD = 0.82), *t* (15) = -2.99, *p* = 0.009. There was also a significant decrease in Self-Judgement from pre-treatment (M = 4.28, SD = 0.45) to post-treatment (M = 3.40, SD = 0.92) *t* (14) = 3.60, *p* = 0.003. In addition, there was a significant decrease in Self-Judgement from pre-treatment (M = 4.23, SD = 0.49) to follow-up (M = 3.17, SD = 0.83), *t* (11) = 3.37, *p* = 0.006. A significant decrease in Self-Judgement was also found from mid-treatment (M = 3.68, SD = 0.72) to follow-up (M = 3.12, SD = 0.83), *t* (11) = -3.15, *p* = 0.009. No significant difference in Self-Judgement was found from mid-treatment (M = 3.80, SD = 0.83) to post-treatment (M = 3.40, SD = 0.92), *t* (14) = 1.39, *p* = 0.187. There was also no significant difference in Self-Judgement from post-treatment (M = 3.43, SD = 0.81) to follow-up (M = 3.17, SD = 0.83), *t* (11) = 1.26, *p* = 0.235. These results again suggest participants increase in Self-Judgement with therapy, but these effects stabilise after therapy finishes.

Post hoc analyses on the Common Humanity subscale across the four time points found a significant increase in Common Humanity from pre-treatment (M = 1.91, SD = 0.61)

to mid-treatment (M = 2.66, SD = 0.77), *t* (15) = -4.08, *p* = <0.001. There was also a significant increase in Common Humanity from pre-treatment (M = 1.88, SD = 0.63) to post-treatment (M = 3.27, SD = 0.65), *t* (14) = -5.22, *p* = <0.001. Furthermore, there was a significant increase in Common Humanity from pre-treatment (M = 1.98, SD = 0.63) to follow-up (M = 3.06, SD = 0.63), *t* (11) = -3.50, *p* = 0.005. There was no significant difference in Common Humanity from mid-treatment (M = 2.68, SD = 0.78) to post-treatment (M = 3.27, SD = 0.65), however this approached significance, *t* (14) = -2.12, *p* = 0.052. No significant difference was found in Common Humanity from mid-treatment (M = 2.75, SD = 0.65) to follow-up (M = 3.06, SD = 0.91), *t* (11) = -0.83, *p* = 0.426, or from post-treatment (M = 3.27, SD = 0.57) to follow-up (M = 3.06, SD = 0.91), *t* (11) = -0.81, *p* = 0.435. These results indicate that participants report an increase in Common Humanity with therapy, especially during the first half of therapy, but that these effects stabilise after therapy finishes.

Post hoc analyses on the Isolation subscale across the four time points showed a significant decrease in Isolation from pre-treatment (M = 4.14, SD = 0.56) to mid-treatment (M = 3.69, SD = 0.75), *t* (15) = -3.26, *p* = 0.005. There was also a significant decrease in Isolation from pre-treatment (M = 4.17, SD = 0.56) to post-treatment (M = 3.20, SD = 0.85), *t* (14) = 3.82, *p* = 0.002. In addition, there was also a significant decrease in Isolation from pre-treatment (M = 4.00, SD = 0.50) to follow-up (M = 3.13, SD = 0.74), *t* (11) = -3.817, *p* = 0.003. No significant difference in Isolation was found from mid-treatment (M = 3.68, SD = 0.78) to post-treatment (M = 3.20, SD = 0.85), *t* (14) = -1.654, *p* = 0.120, or from mid-treatment (M = 3.50, SD = 0.73) to follow-up (M = 3.13, SD = 0.74), *t* (11) = -1.807, *p* = 0.098. There was also no significant difference in Isolation from post-treatment (M = 3.13, SD = 0.66) to follow-up (M = 3.13, SD = 0.74), *t* (11) = 0.836, *p* = 0.421. These results

indicate decreases in Isolation with therapy, in particular during the first half of therapy, but that these effects become constant after therapy finishes.

Post hoc analyses on the Mindfulness subscale across the four time points showed a significant increase in Mindfulness from pre-treatment (M = 2.22, SD = 0.54) to mid-treatment (M = 2.97, SD = 0.68), t (15) = -5.73, p = <0.001. There was also a significant increase in Mindfulness from pre-treatment (M = 2.28, SD = 0.50) to post-treatment (3.42, SD = 0.53), t (14) = -5.86, p = <0.001, and from pre-treatment (M = 2.38, SD = 0.45) to follow-up (M = 3.31, SD = 0.66) t (11) = -5.85, p = <0.001. No significant difference in Mindfulness was found from mid-treatment (M = 3.00, SD = 0.69) to post-treatment (M = 3.42, SD = 0.53), t (14) = -1.63, p = 0.125, nor from mid-treatment (M = 3.15, SD = 0.39) to follow-up (M = 3.31, SD = 0.66), t (11) = -0.85, p = 0.412. Furthermore, there was no significant difference in Mindfulness from post-treatment (M = 3.48, SD = 0.38) to follow-up (M = 3.31, SD = 0.66), t (11) = 1.10, p = 0.296. These results indicate an increase in Mindfulness with therapy, especially during the first half of therapy, but that these effects stabilise after therapy finishes.

Post hoc analyses on the Over-Identification subscale across the four time points showed a significant decrease in Over-Identification from pre-treatment (M = 4.33, SD = 0.46) to mid-treatment (M = 3.59, SD = 0.57), t (15) = -4.10, p = <0.001. There was also a significant decrease in Over-Identification from pre-treatment (M = 4.32, SD = 0.48) to post-treatment (M = 3.20, SD = 0.92), t (14) = 4.00, p = <0.001. Furthermore, there was a significant decrease in Over-Identification from pre-treatment (M = 4.23, SD = 0.49) to follow-up (M = 3.25, SD = 0.57), t (11) = -5.13, p = <0.001. No significant difference in Over-Identification was found from mid-treatment (M = 3.60, SD = 0.59) to post-treatment (M = 3.20, SD = 0.92), t (14) = 1.524, p = 0.150, or from mid-treatment (M = 3.63, SD = 0.64) to follow-up (M = 3.25, SD = 0.57), t (11) = 1.77, p = 0.105. Again, there was no

significant difference in Over-Identification from post-treatment (M = 3.29, SD = 0.75) to follow-up (M = 3.25, M = 0.57), t (11) = 0.158, p = 0.878. These results indicate an increase in Over-Identification with therapy, in particular during the first half of therapy, but that these effects become constant after therapy finishes.

RII. A mixed two-way (condition by time) ANOVA was conducted to examine if participants' scores on the RII differed from pre-treatment to post-treatment and follow-up, across the two treatment conditions (see Table 10 for descriptive statistics). There was no significant main effect of treatment condition on participants' RII score, F (1, 10) = 1.72, p = 0.219, partial η^2 = 0.15. A significant main effect of time was found, Λ = 0.29, F (2, 9) = 10.81, p = 0.004, partial η^2 = 0.71, indicating that participants' RII score changed with therapy, regardless of what treatment condition they were in. Finally, there was no significant interaction effect found between treatment condition and time on participants' RII score, Λ = 0.89, F (2, 9) = 0.57, p = 0.585, partial η^2 = 0.11.

Table 10

Mean RII scores across CFT and CFT-A conditions at pre-treatment, post-treatment and follow-up

		Pre-treatment		Post-treatment		Follow-up	
RII Total Score	N	M	SD	M	SD	M	SD
CFT	7	45.71	5.94	35.86	4.49	38.00	6.19
CFT-A	5	37.40	13.67	31.20	12.95	32.40	10.06
Total	12	42.25	10.27	33.92	8.82	35.67	8.13

Post hoc analyses across the three time points showed a significant reduction in intimacy fears from pre-treatment (M = 40.07, SD = 13.27) to post-treatment (M = 33.60, SD = 11.76), t (14) = 3.93, p = 0.002, and from pre-treatment (M = 42.25, SD = 10.27) to follow-up (M = 35.67, SD = 8.13), t (11) = 2.97, p = 0.013. No significant difference in intimacy fears was found from post-treatment (M = 33.92, SD = 8.82) to follow-up (M = 35.67, SD =

8.13), t (11) = -1.08, p = 0.304. These results suggest that participants report a decrease in their RII score, or intimacy fears, with therapy, but that these effects stabilise after therapy finishes.

TOSCA-3. A mixed two-way (condition by time) MANOVA was conducted to examine if participants' scores on each of the TOSCA-3 subscales (Shame-proneness, Guilt-proneness, Externalisation, Detachment, Alpha pride, and Beta pride) differed from pre-treatment to mid-treatment, post-treatment and follow-up, across the two treatment conditions (see Table 11 for descriptive statistics). There was no significant multivariate main effect of treatment condition on participants' TOSCA-3 subscale scores, $\Lambda = 0.37$, F (6, 5) = 1.40, p = 0.364, partial $\eta^2 = 0.63$. There was also no significant multivariate main effect of time on participants' TOSCA-3 subscale scores $\Lambda = 0.39$, F (18, 72) = 1.58, p = 0.090, partial η^2 = 0.27. In addition, no significant multivariate interaction effect was found between treatment condition and time on participants' TOSCA-3 subscale scores $\Lambda = 0.49$, F (18, 72) = 1.12, p = 0.353, partial $\eta^2 = 0.21$, indicating that participants' scores on each of the TOSCA-3 subscales did not differ over time and with regard to which treatment condition participants were in.

Although the multivariate effect of time was not significant, the univariate effects did show significance on two subscales, with the small sample size (N = 12) likely not reflecting this at the multivariate level. These univariate results show a significant effect for Shame-proneness, F (3, 30) = 6.87, p = <0.001, partial $\eta^2 = 0.41$, and Detachment/unconcern F (3, 30) = 4.17, p = 0.014, partial $\eta^2 = 0.29$, across time.

Post hoc analyses on the Shame-proneness subscale across the four time points showed a significant reduction in Shame-proneness from pre-treatment (M = 55.06, SD = 8.14) to mid-treatment (M = 50.44, SD = 10.87), t (15) = 3.08, p = 0.008. There was also a significant reduction in Shame-proneness from pre-treatment (M = 54.47, SD = 8.06) to post-treatment

(M = 47.33, SD = 10.63) t (14) = 3.93, p = 0.002. In addition, there was a significant reduction in Shame-proneness from pre-treatment (M = 52.83, SD = 7.91) to follow-up (M = 45.67, SD = 9.90), t (11) = 3.81, p = 0.003. There was no significant difference in Shame-proneness from mid-treatment (M = 49.60, SD = 10.70) to post-treatment (M = 47.33, SD = 10.63), t (14) = 1.38, p = 0.188, or from mid-treatment (M = 47.92, SD = 10.47) to follow-up (M = 45.67, SD = 9.90) t (11) = 1.20, p = 0.254. Furthermore, there was no significant difference in Shame-proneness from post-treatment (M = 45.17, SD = 10.78) to follow-up (M = 45.67, SD = 9.90), t (11) = -0.267, p = 0.795. These results indicate that participants report a reduction in Shame-proneness with therapy, especially during the first half of therapy, but that these effects stabilise after therapy finishes.

Post hoc analyses on the Detachment/unconcern subscale across the four time points showed no significant difference in Detachment/unconcern from pre-treatment (M = 26.94, SD = 6.02) to mid-treatment (M = 28.31, SD = 6.78), t (15) = -0.96, p = 0.35). There was a significant increase in Detachment/unconcern from pre-treatment (M = 26.87, SD = 6.22) to post-treatment (M = 31.13, SD = 5.91) t (14) = -3.01, p = 0.009, and from pre-treatment (M = 27.58, SD = 5.85) to follow-up (M = 31.92, SD = 4.54), t (11) = -2.60, p = 0.024. Furthermore, there was a significant increase in Detachment/unconcern from mid-treatment (M = 28.47, SD = 6.99) to post-treatment (M = 31.13, SD = 5.91), t (14) = -2.54, p = 0.024, and from mid-treatment (M = 28.83, SD = 6.10) to follow-up (M = 31.92, SD = 4.54), t (14) = -2.30, p = 0.042. No significant difference in Detachment/unconcern was found from post-treatment (M = 32.08, SD = 3.65) to follow-up (M = 31.92, SD = 4.54), t (11) = 0.17, p = 0.869. These results indicate an increase in Detachment/unconcern with therapy but that these effects flatten out after therapy finishes. The results also suggest that changes in Detachment/unconcern occur throughout the entire course of therapy.

Table 11

Mean TOSCA-3 scores across CFT and CFT-A conditions at pre-treatment, mid-treatment, post-treatment and follow-up

		Pre-treatment		Mid-treatment		Post-treatment		Follow-up	
TOSCA-3 Subscale	N	M	SD	M	SD	M	SD	M	SD
Shame-proneness									
CFT	7	54.57	8.96	52.43	10.44	47.43	13.23	49.14	9.91
CFT-A	5	50.40	6.23	41.60	7.23	42.00	5.96	40.80	8.47
Total	12	52.83	7.91	47.92	10.47	45.67	10.78	45.67	9.90
Guilt-proneness									
CFT	7	67.29	7.23	63.86	3.80	66.71	2.21	66.57	2.70
CFT-A	5	61.40	5.59	56.00	7.94	56.40	6.73	56.00	10.05
Total	12	64.83	7.00	60.58	6.87	62.42	6.88	62.17	8.39
Externalisation									
CFT	7	37.00	6.88	36.29	10.16	37.57	9.34	36.71	9.83
CFT-A	5	32.80	7.36	32.40	8.14	33.60	5.86	31.20	5.17
Total	12	35.25	7.09	34.67	9.19	35.92	8.02	34.42	8.39
Detachment									
CFT	7	27.14	5.98	28.43	6.90	32.43	4.54	30.86	3.80
CFT-A	5	28.20	6.30	29.40	5.50	31.60	2.30	33.40	5.50
Total	12	27.58	5.85	28.83	6.10	32.08	3.65	31.92	4.54
Alpha pride									
CFT	7	16.86	3.85	18.29	3.20	19.14	3.72	19.00	4.04
CFT-A	5	17.80	3.70	18.00	2.35	18.40	1.95	17.80	2.28
Total	12	17.25	3.64	18.17	2.76	18.83	3.01	18.50	3.34
Beta pride									
CFT	7	17.43	3.15	19.43	3.41	19.57	3.65	18.00	3.16
CFT-A	5	17.20	4.21	17.40	1.95	18.40	2.19	18.60	1.82
Total	12	17.33	3.45	18.58	2.97	19.08	3.06	18.25	2.60

M-C SDS. A mixed two-way (condition by time) ANOVA was conducted to examine if participants' scores on the M-C SDS differed from mid-treatment to post-treatment and follow-up, across the two treatment conditions (see Table 12 for descriptive statistics). There was no significant main effect of treatment condition on participants' M-C SDS score, *F* (1,

10) = 0.11, p = 0.752, partial η^2 = 0.01. There was also no significant main effect of time on participants' M-C SDS score, Λ = 0.72, F (2, 9) = 1.80, p = 0.220, partial η^2 = 0.29. In addition, there was no significant interaction effect found between treatment condition and time on participants' M-C SDS score, Λ = 0.82, F (2, 9) = 1.00, p = 0.405, partial η^2 = 0.18, indicating that participants' scores on the M-C SDS did not differ over time and with regard to which treatment condition participants were in.

Table 12

Mean M-C SDS scores across CFT and CFT-A conditions at mid-treatment, post-treatment and follow-up

		Mid-treatment		Post-treatment		Follow-up	
M-C SDS Total Score	N	M	SD	M	SD	M	SD
CFT	7	7.43	1.90	7.43	1.90	8.29	2.21
CFT-A	5	8.00	1.00	6.80	2.28	7.40	1.52
Total	12	7.67	1.56	7.17	1.99	7.92	1.93

TEQ. A mixed two-way (condition by time) ANOVA was conducted to examine if participants' scores on the TEQ differed from mid-treatment to post-treatment and follow-up, across the two treatment conditions (see Table 13 for descriptive statistics). There was no significant main effect of treatment condition on participants' TEQ score, F (1, 10) = 0.41, p = 0.536, partial η^2 = 0.04. There was also no significant main effect of time on participants' TEQ score, Λ = 0.85, F (2, 9) = 0.793, p = 0.482, partial η^2 = 0.15. Furthermore, there was no significant interaction effect found between treatment condition and time on participants' TEQ score, Λ = 0.97, F (2, 9) = 0.13, p = 0.873, partial η^2 = 0.03, indicating that participants' scores on the TEQ did not change over time and with regard to which treatment condition participants were in.

Table 13

Mean TEQ scores across CFT and CFT-A conditions at mid-treatment, post-treatment and follow-up

		Mid-treatment		Post-treatment		Follow-up	
TEQ Total Score	N	M	SD	M	SD	M	SD
CFT	7	42.71	9.71	44.57	7.46	43.43	8.06
CFT-A	5	45.80	4.09	46.60	5.41	46.20	5.45
Total	12	44.00	7.75	45.42	6.49	44.58	6.95

Nonverbal Shame. A mixed two-way (condition by time) ANOVA was conducted to examine if participants' overall nonverbal shame score (the average of all five nonverbal shame indicators) differed from therapy session 2 to therapy session 5 (mid-treatment), and therapy session 8 (post-treatment), across the two treatment conditions (see Table 14 for descriptive statistics). There was no significant main effect of treatment condition on participants' overall nonverbal shame score, F (1, 10) = 2.92, p = 0.118, partial η^2 = 0.23. There was also no significant multivariate main effect of time on participants' overall nonverbal shame score, Λ = 0.80, F (2, 9) = 1.11, p = 0.371, partial η^2 = 0.19. In addition, no significant multivariate interaction effect was found between treatment condition and time on participants' overall nonverbal shame score, Λ = 0.70, F (2, 9) = 0.70, p = 0.197, partial η^2 = 0.30, indicating that participants' overall nonverbal shame score did not change over time and with regard to which treatment condition participants were in.

Table 14

Mean overall nonverbal shame scores across CFT and CFT-A conditions at therapy session 2, session 5 and session 8

		Session 2		Session 5		Session 8	
	N	M	SD	M	SD	M	SD
Overall nonverbal shame score							
CFT	7	1.00	0.95	0.95	0.45	0.87	0.40
CFT-A	5	0.59	0.41	0.25	0.11	0.81	0.60
Total	12	0.83	0.77	0.67	0.49	0.85	0.47

A mixed two-way (condition by time) MANOVA was conducted to examine if participants' scores on each of the nonverbal shame indicators (*head tilted forward/down, moving hands to cover face or part of face, hiding face by moving face or head, chest narrowed inward,* and *shoulders slumped forward*) differed from therapy session 2 to therapy session 5 (mid-treatment), and therapy session 8 (post-treatment), across the two treatment conditions (see Table 15 for descriptive statistics). There was no significant multivariate main effect of treatment condition on participants' nonverbal shame scores, $\Lambda = 0.53$, F (5, 6) = 1.08, $p = 0.458$, partial $\eta^2 = 0.47$. There was also no significant multivariate main effect of time on participants' nonverbal shame scores, $\Lambda = 0.08$, F (1, 10) = 1.16, $p = 0.626$, partial $\eta^2 = 0.92$. In addition, no significant multivariate interaction effect was found between treatment condition and time on participants' nonverbal shame scores, $\Lambda = 0.10$, F (1, 10) = 0.89, $p = 0.685$, partial $\eta^2 = 0.90$, indicating that participants' scores on each of the nonverbal shame indicators did not differ over time and with regard to which treatment condition participants were in.

A mixed two-way (condition by time) ANOVA was conducted to examine if participants' greater than chance recognition of shame score (when *head tilted forward/down* occurred with either *moving hands to cover face or part of face* or *hiding face*) differed from therapy session 2 to therapy session 5 (mid-treatment), and therapy session 8 (post-treatment), across the two treatment conditions (see Table 16 for descriptive statistics). There was no significant main effect of treatment condition on participants' greater than chance recognition of shame score, F (1, 10) = 0.00, $p = 0.989$, partial $\eta^2 = 0.00$. There was also no significant multivariate main effect of time on participants' greater than chance recognition of shame score, $\Lambda = 0.67$, F (2, 9) = 2.23, $p = 0.163$, partial $\eta^2 = 0.33$. In addition, no significant multivariate interaction effect was found between treatment condition and time on participants' greater than chance recognition of shame score, $\Lambda = 0.57$, F (2, 9) = 3.37, p =

0.081, partial $\eta^2 = 0.43$, thus indicating that participants' greater than chance recognition of shame score did not differ over time and with regard to which treatment condition participants were in.

Table 15

Mean nonverbal shame scores across CFT and CFT-A conditions at therapy session 2, session 5 and session 8

		Session 2		Session 5		Session 8	
Nonverbal shame indicator	N	M	SD	M	SD	M	SD
Head tilted forward/down							
CFT	7	1.35	0.94	1.10	0.92	1.20	0.87
CFT-A	5	1.53	0.62	0.63	0.53	1.30	0.80
Total	12	1.42	0.79	0.90	0.79	1.24	0.80
Moving hands to cover face or part of face							
CFT	7	0.29	0.35	0.16	0.24	0.29	0.27
CFT-A	5	0.23	0.16	0.02	0.04	0.32	0.48
Total	12	0.26	0.28	0.10	0.19	0.30	0.35
Hiding face by moving face or head							
CFT	7	0.07	0.13	0.02	0.41	0.04	0.10
CFT-A	5	0.09	0.20	0.02	0.04	0.03	0.07
Total	12	0.08	0.15	0.02	0.04	0.04	0.09
Chest narrowed inward							
CFT	7	1.39	1.80	1.13	1.05	1.21	0.91
CFT-A	5	0.53	0.69	0.16	0.37	1.10	1.28
Total	12	1.03	1.46	0.72	0.95	1.16	1.02
Shoulders slumped forward							
CFT	7	1.91	1.90	2.31	1.51	1.63	0.97
CFT-A	5	0.60	0.80	0.44	0.54	1.31	1.18
Total	12	1.36	1.62	1.53	1.51	1.50	1.02

Table 16

Mean greater than chance recognition of shame scores across CFT and CFT-A conditions at therapy session 2, session 5 and session 8

		Session 2		Session 5		Session 8	
	N	M (%)	SD	M (%)	SD	M (%)	SD
Greater than chance recognition of shame score							
CFT	7	8.86	11.38	7.00	7.02	11.71	11.27
CFT-A	5	14.80	4.27	3.60	8.05	9.00	7.28
Total	12	11.33	9.30	5.58	7.32	10.58	9.51

Discussion

The aim of the current research was to investigate the impact CFT has on nonverbal shame, trait shame, and psychological difficulties in shame-prone clinical participants. In addition, the research manipulated and examined differences in the internalisation process, where some participants internalised a single compassionate person or animal (standard CFT), while others internalised the group as a compassionate force (adapted CFT). Firstly, it was hypothesised that participants in both conditions would experience a reduction in nonverbal shame, trait shame, and psychological difficulties with therapy. Secondly, it was hypothesised that participants who received adapted CFT would experience greater reductions in nonverbal shame, trait shame, and psychological difficulties than participants who received standard CFT. As expected, participants in both conditions reported a significant reduction in trait shame and psychological difficulties with therapy. Significant improvements were evident on the MRQ, SCS, RII and TOSCA-3 outcome measures, and these improvements were found to stabilise after therapy had finished. Unexpectedly, the results found no significant change in nonverbal shame as measured by the Pride Coding System. In addition, no significant differences were found between the CFT and CFT-A conditions on any of the outcome measures completed at pre-treatment, mid-treatment, post-treatment, and follow-up. There was also no significant difference in nonverbal shame between the two conditions at therapy session 2, therapy session 5 (mid-treatment) and therapy session 8 (post-treatment). Taken together, the results of the current research indicate support for hypothesis one, but not hypothesis two.

Overall Findings – Hypothesis One

MRQ. It was predicted that participants in both conditions would experience an improvement in relationship functioning with therapy. Analyses of the Relationship Anxiety subscale of the MRQ revealed a significant reduction in Relationship Anxiety from pre-

treatment to post-treatment, and from pre-treatment to follow-up. No significant change in Relationship Anxiety was found from post-treatment to follow-up. Analyses of the Relationship Esteem subscale of the MRQ showed a significant improvement in Relationship Esteem from pre-treatment to post-treatment and pre-treatment to follow-up. Again, there was no significant change in Relationship Esteem from post-treatment to follow-up. No significant difference in Relationship Motivation or Relationship Fear was found across time. Taken together, these results indicate that participants report a reduction in Relationship Anxiety and an increase in Relationship Esteem with CFT, but that these effects stabilise after therapy finishes.

Previous studies investigating CFT have not measured psychological tendencies associated with intimate relationships. Unregulated experiences of shame, however, have been found to be negatively related to disruptions in adult romantic relationships (Greenberg, 2008), insecure attachment (Karos, 2006; Wells & Hansen, 2003), poor communication (Gratch, 2010), and sexual expression and satisfaction (Lombardi, 2007). Research has also shown that treating oneself with care and compassion is a powerful way to enhance interpersonal wellbeing (Neff & Dahm, 2015). Neff and Beretvas (2012) found that self-compassionate individuals were described by their partners as being more emotionally connected, accepting, and autonomy-supporting while being less detached, controlling, and verbally or physically aggressive than those lacking self-compassion. Consistent with this finding, the results of the current research suggest that CFT may improve some aspects of relationship functioning (e.g., Relationship Anxiety and Relationship Esteem). As this is the first study to investigate the impact of CFT on relationship functioning, further research in this area is required.

SCS. It was expected that participants in both conditions would experience an improvement in self-compassion with therapy. The results of the current research revealed a

significant increase in overall self-compassion from pre-treatment to mid-treatment, post-treatment and follow-up, as well as a significant increase in self-compassion from mid-treatment to post-treatment. There was no significant change in self-compassion from mid-treatment to follow-up or from post-treatment to follow-up. Analyses of the Self-Kindness, Common Humanity, and Mindfulness subscales found a significant increase from pre-treatment to mid-treatment, post-treatment and follow-up. Similarly, analyses of the Isolation and Over-Identification subscales showed a significant decrease in each subscale from pre-treatment to mid-treatment, post-treatment and follow-up. No significant changes for any of these subscales were found from mid-treatment to post-treatment or follow-up, or from post-treatment to follow-up. Finally, analyses of the Self-Judgment subscale found a significant decrease in Self-Judgment from pre-treatment to mid-treatment, post-treatment and follow-up, and from mid-treatment to follow-up. No significant change in Self-Judgment was found from mid-treatment to post-treatment, or from post-treatment to follow-up. Overall, these results suggest that participants report an increase in overall self-compassion, Self-Kindness, Common Humanity, and Mindfulness, and a decrease in Self-Judgment, Isolation and Over-Identification during therapy, especially during the first half of therapy, but that these effects stabilise after therapy finishes.

Given a focus on compassion influences all aspects of the CFT treatment process including the therapeutic relationship, assessment and case formulation (Gilbert, 2007, 2010), it was expected that individuals in both conditions would develop self-compassion with therapy. While the results support this hypothesis, previous studies investigating CFT in treating shame-prone individuals have examined the impact of CFT on self-criticism but not on self-compassion (Gilbert & Procter, 2006; Judge et al., 2012). Studies which have used the SCS to measure self-compassion (Beaumont et al., 2012; Boersma et al., 2015; Laithwhaite et al., 2009) were conducted with different clinical samples and only reported changes in overall

self-compassion (i.e., changes on each of the six SCS subscales were not reported). Consistent with the results of the current research, Boersma and colleagues (2015) found a significant increase in overall self-compassion from pre-treatment to post-treatment for five individuals suffering from social anxiety who received eight weekly sessions of CFT. Similarly, a study conducted by Beaumont and colleagues (2012) found that trauma victims who received 12 weeks of both CBT and CMT had significantly higher self-compassion scores than participants who received 12 weeks of CBT. Taken together, the results of the current research add to the empirical evidence that CFT is a promising approach to address difficulties with self-compassion.

The results of the current research, however, are contrary to findings from a study conducted by Laithwhaite and colleagues (2009) who found no significant change in self-compassion at mid-treatment, post-treatment, or follow-up. The authors noted, however, that the SCS median score in their forensic clinical sample was comparable with norms developed on a general student population (Neff, 2003), and concluded that the self-report of compassion may be different for individuals who have lacked the experience of compassion from others during their lifetime (Laithwhaite et al., 2009). According to Gilbert and Procter (2006) individuals raised in insecure, stressful, or threatening environments are likely to have an insufficiently developed self-soothing system and few internalised models of compassion to draw upon. This may account for the reason why studies investigating CFT in treating shame-prone individuals have examined the impact of CFT on self-criticism, but not on self-compassion (Gilbert & Procter, 2006; Judge et al., 2012).

Studies conducted with similar clinical samples (Gilbert & Procter, 2006; Judge et al., 2012) have used the Forms of Self-Criticizing/Attacking and Self-Reassuring Scale (FSCRS; Gilbert et al., 2004) to measure the forms and styles of people's critical and reassuring self-evaluative responses to a setback or disappointment. Both Gilbert and Procter (2006), and

Judge and colleagues (2012) found a significant reduction in self-criticism focused on inadequacy and self-hatred, and a significant increase in self-reassurance, from pre-treatment to post-treatment. The self-reassurance measure of the FSCRS taps into ways of being more positive and compassionate to oneself. These are important findings given that CFT emphasises the importance of being able to self-soothe using the compassionate skills taught throughout the course of therapy (Gilbert & Procter, 2006). Although the FSCRS is not a measure of self-compassion per se, these findings are consistent with the results of the current research and suggest that CFT may help shame-prone individuals develop self-compassion.

RII. It was predicted that participants in both conditions would experience an improvement in intimacy fears with therapy. The results of the current research revealed a significant reduction in participant's intimacy fears from pre-treatment to post-treatment, and from pre-treatment to follow-up. There was no significant change in intimacy fears from post-treatment to follow-up. These results suggest that participants report a decrease in intimacy fears with therapy, but that these effects flatten out after therapy finishes. As with the MRQ, previous studies investigating CFT have not measured intimacy fears. Again, the results suggest that CFT may improve some aspects of relationship functioning and have little impact on others. As this is the first study to investigate the impact of CFT on intimacy fears, future research is needed before more definite conclusions can be drawn.

TOSCA-3. It was expected that participants in both conditions would experience a reduction in trait shame with therapy. Analyses of the Shame-proneness subscale of the TOSCA-3 showed a significant reduction in Shame-proneness from pre-treatment to mid-treatment, post-treatment and follow-up. No significant change in Shame-proneness was found from mid-treatment to post-treatment or follow-up, or from post-treatment to follow-up. Similarly, analyses of the Detachment/unconcern subscale revealed a significant increase in Detachment/unconcern from pre-treatment to both post-treatment and follow-up, and from

mid-treatment to both post-treatment and follow-up. No significant change in Detachment/unconcern was found from pre-treatment to post-treatment, or from post-treatment to follow-up. No significant differences in Guilt-proneness, Externalization, Alpha pride and Beta pride were found across time. These results indicate that participants report a reduction in Shame-proneness, especially during the first half of therapy, and an increase in Detachment/unconcern with therapy, but that these effects stabilise after therapy finishes.

The Shame-proneness subscale of the TOSCA-3 was used in the current research to measure trait shame or the shame proneness of one making a negative evaluation of the global self. Previous studies conducted with similar clinical samples (Gilbert & Procter, 2006; Judge et al., 2012) have not used the TOSCA-3 to examine the impact of CFT on trait shame. However, Judge and colleagues (2012) found a significant reduction in internal shame (sometimes referred to as proneness to shame) from pre-treatment to post-treatment as measured by the Internalized Shame Scale (ISS; Cook, 1996). This is consistent with the findings of the current research.

The Other as Shamer Scale (OAS; Goss, Gilbert, & Allan, 1994), a measure of external shame, has been used in numerous studies investigating CFT (e.g., Bowyer et al., 2014; Gilbert & Procter, 2006; Judge et al., 2012; Laithwhaite et al., 2009; Lucre & Corten, 2013). Gilbert and Procter (2006), and Judge and colleagues (2012) found a significant reduction in external shame from pre-treatment to post-treatment as measured by the OAS. The results of the current research are consistent with these previous findings and suggest that CFT may be beneficial when treating those high in shame and self-criticism. Interestingly, the therapy seems to be more specifically targeting shame, with no evident reductions in guilt or changes in both forms of pride or externalization.

The Detachment/unconcern subscale of the TOSCA-3 was used in the current research to measure the degree of emotional involvement participants have in a situation and

its consequences. Fontaine and colleagues (2001) suggest that a proneness to Detachment/unconcern can be adaptive, especially for intrapersonal functioning (e.g., the ability to be aware of and understand emotions, feelings and ideas). They also note that a detached reaction is incompatible with a shame reaction due to the internal processes involved in the two reactions (Fontaine et al., 2001). Consistent with this, Tangney and colleagues (1990, 1995) predicted and found a negative relationship between Detachment/unconcern and Shame-proneness in a series of studies with adults. The current research also found a negative relationship between the Detachment/unconcern and Shame-proneness subscales of the TOSCA-3, as participants reported an increase in Detachment/unconcern and a decrease in Shame-proneness with therapy. This suggests that as individuals high in shame and self-criticism experience an increase in intrapersonal functioning, they experience a reduction in shame. Neff and Dahm (2015) consider intrapersonal functioning to be a core component of compassion. In line with this, the results of the current research suggest that CFT may assist shame-prone individuals to develop the ability to be aware of and understand their emotions, feelings and ideas.

M-C SDS. The M-C SDS has frequently been used in research as an adjunct measure to assess the impact of social reliability on self-report measures specific to the primary purpose of the investigation (Reynolds, 1982). The M-C SDS was used in the current research for this reason. There was no significant difference found in participants' M-C SCS scores across time, indicating that participants' tendency to respond to self-report measures in a socially desirable manner did not change over the course of therapy.

According to Edens and colleagues (2001), there is no "categorical standard for differentiating between social desirable and non-socially desirable responding," (p. 249). Therefore, it is difficult to determine whether participants consistently responded in a socially desirable manner across time. However, a higher M-C SDS score indicates a greater tendency

to respond in a socially desirable manner. The M-C SDS mid-treatment, post-treatment, and follow-up scores obtained in the current research are higher than those reported with student populations (Ballard, 1992; Leo & Thorpe, 2000; Reynolds, 1982; Zook & Sipps, 1985) and military trainees (Robinette, 1991). This indicates that participants in the current research had a greater tendency to respond in a socially desirable manner. This is perhaps not surprising given participants were recruited through referral from their mental health service provider after being assessed as having high levels of shame and self-criticism. Taken together, it is unknown whether social desirability bias was a large factor in the results obtained.

TEQ. During CFT, a de-centring process aids the development of empathy and understanding of distress and self-criticism (Gilbert & Procter, 2006). Therefore, it was expected that participants in both conditions would experience an improvement in empathy with therapy. The results showed no significant difference in participant's TEQ scores across time, indicating that participants' ability to be empathetic did not change with therapy.

There are a number of possible explanations for the lack of findings in the current research. Firstly, the TEQ was only administered at mid-treatment, post-treatment and follow-up. Therefore, participants may have developed the ability to be more empathetic from pre-treatment to post-treatment, or from pre-treatment to follow-up, which was evident in most of the other scales. Secondly, previous research has found shame to significantly interfere with key attributes of compassion and especially empathy (Tangney & Dearing, 2002). Participants in the current research consisted of 16 shame-prone individuals who were recruited after being assessed as having high levels of shame and self-criticism. Only participants with an average score of three or above on the SG & HI-DEQ (indicating frequent experiences of shame), were invited to participate in the study. Therefore, participants' ability to develop empathy over the course of therapy may have been impacted by their high levels of trait shame pre-treatment. Although, given participants reported a reduction in shame-proneness with therapy it would be

expected that participants would also report an increase in empathy. In addition, Laithwhaite and colleagues suggest that the self-report of compassion may be different for individuals who have lacked the experience of compassion from others during their lifetime (Laithwhaite et al., 2009). It seems likely that the self-report of empathy may also be different for individuals who have lacked the experience of empathy from others and consequently this may account for the lack of findings in the current research.

Nonverbal Shame. Given that CFT has been found to reduce self-reported shame (Gilbert & Procter, 2006; Judge et al., 2012) it was hypothesised that participants in both conditions would experience a reduction in nonverbal shame with therapy. The results of the current research showed no significant change in overall nonverbal shame across time. In addition, the results showed no significant change in participants' scores on each of the nonverbal shame indicators (*head tilted forward/down, moving hands to cover face or part of face, hiding face by moving face or head, chest narrowed inward,* and *shoulders slumped forward*) across time. There was also no significant change in participants' greater than chance recognition of shame score (coded when *head tilted forward/down* occurred with either *moving hands to cover face or part of face* or *hiding face*) across time. Taken together, the results indicate that participants in the current research did not experience a reduction in nonverbal shame with therapy.

The current research is the first known study to examine nonverbal indicators of shame among individuals high in shame and self-criticism in CFT. It is also the first known study to examine changes in nonverbal shame over time and in a group therapy setting. Five components of the Pride Coding System (Tracy & Robins, 2007) were used in the current study to code nonverbal shame. While this coding system has typically been used to code photographs of people demonstrating prototypical pride or shame expressions (Tracy & Robins, 2007; Tracy & Matsumoto, 2008), the results of the current research suggest that

nonverbal shame can be reliability identified using this measure. Consistent with previous research (Tracy & Matsumoto, 2008), all five nonverbal shame indicators were reliably measured, indicating strong agreement between the two coders.

There are a number of possible explanations for the lack of findings in the current research. Firstly, while the distinction between shame and most other emotions can occur rapidly and efficiently (Tracy & Robins, 2008), one cannot be certain that shame was the only or even primary emotion shown by participants. Although there is a clear distinction between the definition of shame, guilt, embarrassment and humiliation, it may be that these closely related emotions share similar nonverbal indicators. Previous research (Menke, 2011) has found that stronger displays of head down movements, and higher levels of nonverbal shame overall, are associated with greater self-reported shame, indicating that the two measures are assessing the same phenomenon. While it was hoped that the current study would also explore the association between nonverbal shame and self-reported shame across time, this was not possible due to the small sample size, missing self-report measures, and the fact that three out of the 24 group therapy sessions (12.5%) were unable to be coded due to poor video quality or recording failures. Secondly, contextual constraints on displays of nonverbal shame may have contributed to the lack of findings. For example, in the current research nonverbal indicators of shame were coded using both the front and back camera videos of the group therapy sessions. Whilst it was hoped that this would provide a full view of all participants, in some videos it was difficult to identify participants' postural changes.

It is also possible that the coding system itself may explain the lack of findings. After each therapy session had been coded, average nonverbal shame scores were created for each participant in the group to provide an indication of the levels of nonverbal shame. Firstly, average nonverbal shame scores were calculated for each of the five nonverbal shame indicators. Secondly, an overall average nonverbal shame score was calculated by averaging

the scores for all five indicators. It is possible that some participants displayed high levels of nonverbal shame during some coding segments, but low levels of shame during other coding segments. Naturally, when calculating an average score higher scores are masked by accompanying lower scores. Therefore, participants may have experienced a reduction in nonverbal shame that is not reflected in the results.

There was also a good deal of variance in the length of time that participants spoke, and therefore a good deal of variance in the length of nonverbal shame coding segments. Coding occurred when participants were asked either directly or indirectly by the therapist or other group members to speak during the therapy session. Coding also occurred when participants spoke spontaneously in the therapy session, for example when they began speaking after another participant had finished speaking. The coding segment started once participants began speaking and stopped 10 seconds after participants finished speaking. It is possible that during long coding segments participants' head, arm and body movements were coded as nonverbal shame when they were representative of something else, for example, disengagement. Furthermore, although participants were recruited through referral from their mental health service provider after being assessed as having high levels of shame and self-criticism, it may be that the group therapy sessions themselves did not induce a shame reaction from participants. Taken together, it is possible that the lack of findings in the current research may be related to the coding system used. However, it is also possible that the coding system reflected an accurate assessment, with shame being subjectively reported as reduced over therapy, but without more objective reductions. This may indicate a demand characteristic with participants wanting to show the researchers their shame reduced. It seems unlikely this was the case given the M-C SDS scores gave no indication of this and other metrics of functioning did not reduce (e.g., guilt). It seems more likely that participants

reported subjective reductions, but that this was not evident at a behavioural, non-voluntary or even physiological level. This is not uncommon in the emotion literature.

Overall Findings – Hypothesis Two

It was hypothesised that participants who received adapted CFT would experience greater reductions in nonverbal shame, trait shame, and psychological difficulties than participants who received standard CFT. Unexpectedly, no significant differences were found between the CFT and CFT-A conditions on any of the self-report outcome measures completed at pre-treatment, mid-treatment, post-treatment and follow-up (MRQ, SCS, RII, TOSCA-3, M-C SDS and TEQ). There was also no significant difference in nonverbal shame between the two conditions at therapy session 2, therapy session 5 (mid-treatment) and therapy session 8 (post-treatment). Taken together, the results indicate that group-focused internalisation of compassion does not elicit greater reductions in nonverbal shame, trait shame, and psychological difficulties than standard CFT.

This is the first known study to manipulate and examine the degree to which the therapy group, including the therapist, was internalised by participants using imagery. While no significant differences were found between the two conditions, it may be that other aspects of the procedure elicit greater improvements than others, for example the length of treatment. Additionally, group-focused internalisation of compassion may help to increase group attendance and participation. In the current research, all six participants (100%) in the CFT-A group attended all eight therapy sessions compared to two participants (40%) in CFT Group 1 and one participant (20%) in CFT Group 3. Future research would benefit from investigating this possibility.

Practical and Theoretical Considerations

The primary implication of the current research is the demonstration that group-based CFT is an effective treatment for individuals highly prone to shame and self-criticism. This

also has clinical implications as shame is known to be extremely resistant to change and difficult to treat with traditional therapies (Gilbert, 2003, 2009). The current research replicates the findings of previous studies conducted with similar clinical samples (Gilbert & Procter, 2006; Judge et al., 2012), indicating that CFT is both effective, and able to be successfully delivered in a group setting. This also has clinical implications as group-based treatment maximises cost-effectiveness and resources (e.g., therapist time). It also allows many individuals who need treatment to receive this at the same time, thus reducing barriers to treatment access. The findings of the current research also suggest that CFT can be implemented effectively as an intervention for individuals highly prone to shame and self-criticism independent of the CFT developers (Gilbert & Procter, 2006).

More generally, the current research may aid in the treatment of psychological difficulties. Frequent and sustained experiences of shame have been associated with the development of a number of psychological difficulties including alcoholism (Bradshaw, 1988; Brown, 1991), depression (Andrews, 1995; Andrews et al., 2002; Kauffman, 1989; Matos & Pinto-Gouveia, 2010; Webb et al., 2007), social anxiety (Cox et al., 2000), post-traumatic stress disorder (Brewin, 2003; Leskela et al., 2002), borderline personality disorder (Linehan, 1993; Matos & Pinto-Gouveia, 2010), dissociative disorders (Dorahy, 2010), and anger and hostility (Tangney et al., 1992; Tangney & Dearing, 2002). Specifically, clinicians should be aware of the nonverbal indicators of shame, including head, arm and body movements. The current research provides support for these clinical observations as reliability analyses for each of the nonverbal indicators of shame demonstrated that the group therapy videos could be coded with at least 85% agreement.

The current research also contributes to the nonverbal shame literature in a number of ways. It is one of a few studies to examine nonverbal indicators of shame among adults high in shame and self-criticism. The majority of studies to date have been conducted with

children under seven years old where shame has been examined during a success and failure task (e.g., Alessandri & Lewis, 1996; Belsky, et al., 1997; Bennett, et al., 2005; Lewis, et al., 1992; Stipek et al., 1992). Those that have been conducted with adults have primarily focused on women with histories of abuse where semi-structured interviews have been conducted to elicit shameful responses (e.g., Bonanno et al., 2002; Menke, 2011). Clinically, understanding nonverbal indicators of shame among individuals high in shame and self-criticism may assist in the assessment and treatment of these individuals.

Finally, the current research is also the first known study to examine changes in nonverbal shame over time, and in a group therapy setting. Over the course of therapy, participants in the current research reported a reduction in self-reported shame but not nonverbal shame. Theoretically, it may be that nonverbal shame is more difficult to consciously control. This also has important clinical implications as an individual receiving therapy, either as an individual or as part of a group, may indicate a reduction in shame via self-report measures, but not via their head, arm and body movements. Therefore, nonverbal ratings of shame may be crucial to an accurate assessment of an individual's emotional response to a particular situation or scenario (Ekman, 2003).

Methodological Considerations

A strength of the current research is the use of a naturalistic clinical sample. Furthermore, participants were recruited through referral from their mental health service provider after being assessed as having high levels of shame and self-criticism, meaning they were representative of the target audience of the treatment. Participants in the current sample were also not excluded by psychological comorbidities or use of medication. This is an additional strength of the current research and gives the findings more external validity. It is also consistent with previous research conducted with similar samples (Gilbert & Procter, 2006; Judge et al., 2012).

Another key strength is the group-based treatment approach. Compared to individual therapy, such as CBT, group-based CFT represents a time-efficient, cost-effective way of delivering treatment for individuals prone to high levels of shame and self-criticism. This is important to consider given shame is known to be extremely resistant to change and individuals highly prone to shame are notoriously difficult to treat with traditional therapies (Gilbert, 2003, 2009). The process of sharing common experiences and developing compassion as a group also seems beneficial in the process of reducing shame. However, it should be noted that due to the high level of avoidance associated with shame (e.g., Nathanson, 1992), a group forum for therapy can be an inhibitor for attendance in those who are prone to high levels of shame. For example, Judge and Colleagues (2012), found that prior to commencing group-based CFT shame-prone individuals were ambivalent about attending due to being preoccupied with social judgment, having concerns about not fitting in, and being recognised and shamed by other group members.

Follow-up assessments of each of the self-report measures were conducted two months after the termination of therapy. While it would be ideal to include longer follow-up times in future research to gain a more comprehensive understanding of changes in trait shame and psychological functioning over time, the inclusion of a follow-up session is a strength of the current research. Very few CFT studies have included a follow-up session at all (Gilbert & Irons, 2004; Gilbert & Procter, 2006; Laithwhaite et al., 2009; Lucre & Corten, 2013; Mayhew & Gilbert, 2008). In addition, 12 participants (75%) attended the follow-up session meaning that sufficient data was able to be obtained for follow-up analyses.

The current research also has several methodological limitations including a relatively small sample size (N = 16). This means that the findings of the current research may not be generalizable or representative of the target population. It was also expected that each of the conditions would be run twice, however, due to time and resource constraints only the

standard CFT condition was able to be repeated. Two groups (n = 10) received standard CFT and 1 group (n = 6) received adapted CFT making the conditions uneven. As no significant differences were found on any of the four measures completed pre-treatment and post-treatment, the two CFT groups were able to be merged for analyses.

Another limitation of the current research was the use of self-report outcome measures. It is likely that this method of administration, especially within a group setting with the therapist present, impacted the way that participants completed the various self-report questionnaires (Bowling, 2005). However, to account for this, the M-C SCS was used as a measure of social-desirability response tendencies. Shame-proneness was also assessed using both a self-report measure (TOSCA-3) and an observational measure (the Pride Coding System), and this is an additional strength of the current research.

Although all 16 participants completed treatment only nine participants (56%) attended all eight therapy sessions. While this meant that some self-report measures were not completed by all participants, it also meant that some participants missed out on key aspects of CFT. Consequently, some participants may have been unable to benefit from treatment fully. In addition, not all of the self-report outcome measures were completed pre-treatment, mid-treatment, post-treatment and follow-up. For example, the M-C SDS and TEQ were only administered at mid-treatment, post-treatment and follow-up, meaning that pre-treatment scores were not obtained. Furthermore, three of the 24 group therapy sessions (12.5%) were unable to be coded due to poor video quality or recording failures.

As an open trial, there was no control group against which to compare the results. Without this, one cannot be certain that the improvements in trait shame and psychological functioning found are fully attributable to the effects of the intervention. It is possible that these improvements may be due to other factors, for example, natural time progression. However, it is unlikely that these improvements would have occurred otherwise given that on

all self-report outcome measures the effects stabilised after therapy had finished. Although this strongly suggests that the findings of the current research are a product of CFT specifically, a follow-up study with a control group is necessary to confirm this.

Another limitation of the current research is that it did not utilise a self-report measure of either depression or anxiety. This would have been valuable given 15 participants (94%) were diagnosed with a depressive disorder and 12 participants (75%) were diagnosed with an anxiety disorder by their referring practitioner. Numerous studies investigating CFT (e.g., Beaumont et al., 2012; Bowyer et al., 2014; Gilbert & Procter, 2006; Judge et al., 2012; Laithwaite et al., 2009; Lucre & Corten, 2013) have found significant reductions in depression and anxiety as measured by the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983), Beck Depression Inventory – II (BDI-II; Beck, Steer, & Brown, 1996), Beck Anxiety Inventory (BAI; Beck & Steer, 1990), and the Depression, Anxiety and Stress Scale (DASS 21; Antony, Bieling, Cox, Enns, & Swinson, 1998). Gilbert and Procter (2006) found significant reductions in depression and anxiety from pre-treatment to post-treatment as measured by the HADS. Similarly, Judge and colleagues (2012) found significant reductions in depression and anxiety from pre-treatment to post-treatment as measured by the BDI-II and BAI. Similar to the current research, both of these studies investigated the benefit of group-based CFT in individuals high in shame and self-criticism.

Considerations for Future Research

Future research could incorporate a larger sample size, and randomization to either an active, non-CFT comparison group or waitlist-control group. This would improve the reliability and generalizability of findings. A longer follow-up period would also be useful for future research. This would allow researchers to look at how treatment effects are maintained in the long-term and investigate the ways in which individuals highly prone to shame and self-criticism can maintain a more compassionate attitude to themselves and others.

Some treatment studies have shown that high pre-treatment levels of shame and depression can influence how compassion-focused therapies are received (Cox et al. 2002; Judge et al., 2012; Marshall et al., 2008). Only one CFT study to date, however, has examined the relationship between baseline symptom severity and post-treatment outcomes. Judge and colleagues (2012) found that higher scores on depression and external shame measures at baseline were associated with greater improvements on the FSCRS post-treatment, while higher scores on anxiety were associated with fewer improvements in soothing thoughts. This indicates that CFT might be particularly helpful for individuals who have high levels of external shame and depression before commencing therapy. Future research would benefit from investigating this possibility. It would also be worthwhile to explore the relationship between symptom severity at baseline and changes in self-compassion at post-treatment given numerous studies have examined the impact of CFT on self-criticism but not self-compassion.

Future research could also examine whether one's environment (e.g., safe and secure versus harsh and critical) impacts upon their progress throughout the course of therapy and their ability to maintain a more compassionate attitude towards themselves and others in the long-term. According to Gilbert and Procter (2006), individuals who are raised in safe, secure environments and who experience supportive and validating relationships with caregivers should be more able to relate to themselves in a caring and compassionate manner. For this reason, it may be that individuals who experience a safe and secure environment throughout the course of therapy do better overall.

Another possibility in future studies would be to alter the number of sessions. In previous studies, clinical participants high in shame and self-criticism have received 12 to 14 sessions of CFT and reported improvements in mental health, including significant reductions in depression, anxiety, self-criticism, shame, stress, inferiority and submissive behaviour

(Gilbert & Procter, 2006; Judge et al., 2012). Participants in the current research only received eight sessions of CFT and reported improvements in psychological functioning, including a significant reduction in shame, and significant improvements in relationship functioning and self-compassion. Therefore, it may be worthwhile to compare a short course of CFT with a long course of CFT to identify the optimal length of treatment.

Gilbert and Proctor (2006) note that while there is no agreed upon definition of shame, it is often seen to involve two core components; negative views of how one sees the self, referred to as internal shame, and negative views about how one believes they exist in the thoughts and minds of others, referred to as external shame. Some studies investigating the impact of CFT on psychological functioning have measured external shame using the OAS (e.g., Bowyer et al., 2014; Gilbert & Procter, 2006; Judge et al., 2012; Laithwhaite et al., 2009; Lucre & Corten, 2013). Only one study to date (Judge et al., 2012) has investigated the impact of CFT on internal shame using the ISS. This study found significant reduction in both internal and external shame from pre-treatment to post-treatment. Future research could include a measure of internal shame as well as a measure of external shame, to investigate the impact CFT has on both components of shame.

Conclusions

The current research aimed to investigate the impact of CFT on nonverbal shame, trait shame, and psychological difficulties in shame-prone clinical participants. Additionally, the current research manipulated and examined differences in the internalisation process, where some participants internalised a single compassionate person or animal, while others internalised the group as a compassionate force. Participants in both conditions reported a significant reduction in trait shame and psychological difficulties with therapy. More specifically, on all subscales of the SCS the biggest therapeutic change was in the first part of therapy and these improvements were maintained at follow-up. This was also the case for the

shame-proneness subscale of the TOSCA-3. On all outcome measures, improvements made with therapy were found to stabilise after therapy had finished. Unexpectedly, there was no significant change in nonverbal shame with therapy. There was also no significant difference between the two conditions on any of the outcome measures, including nonverbal shame. The results of the current research suggest that CFT may reduce trait shame and intimacy fears, and increase relationship functioning and self-compassion in shame-prone individuals. The results also indicate that group-focused internalisation of compassion, or the type of imagery used during CFT, is not important per se as all participants reported improvements regardless of treatment condition. Several methodological limitations may hinder the generalisability of the significant findings in the current research, including the sample-size and lack of control group. Nonetheless, the current research adds to the evidence base supporting CFT as an intervention for individuals experiencing high levels of shame and self-criticism.

References

Alessandri, S. M., & Lewis, M. (1996). Differences in pride and shame in maltreated and nonmaltreated pre-schoolers. *Child Development, 67(4),* 1857–1869.

Andrews, B. (1995). Bodily shame as a mediator between abusive experiences and depression. *Journal of Abnormal Psychology, 104*(2), 277–285.

Andrews, B. (1998). Methodological and definitional issues in shame research. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 39–54). New York: Oxford.

Andrews, B., Qian. M., & Valentine, J. D. (2002). Predicting depressive symptoms with a new measure of shame: The experience of shame scale. *British Journal of Clinical Psychology, 41,* 29–42.

Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R.P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales (DASS) in clinical groups and a community sample. *Psychological Assessment, 10,* 176–181.

Ashworth, F., Gracey, F., & Gilbert, P. (2011). Compassion focused therapy after traumatic brain injury: Theoretical foundations and a case illustration. *Brain Impairment, 12,* 128–139.

Ausubel, R. H. (1995). Relationship between shame and guilt in the socializing process. *Psychological Review, 62,* 379–390.

Babcock, M. & Sabini, J. (1990). On differentiating embarrassment from shame. *European Journal of Social Psychology, 20,* 151–169.

Ballard, R. (1992). Short forms of the marlowe-crown social desirability scale. *Psychological Reports, 71,* 1155–1160.

Beaumont, E., & Galpin, A., & Jenkins, P. (2012). Being kinder to myself: A prospective comparative study, exploring post-trauma therapy outcomes measures, for two groups of clients, receiving either cognitive behaviour therapy or cognitive behaviour therapy and compassionate mind training. *Counselling Psychology Review, 27(1),* 31–43.

Beaumont, E., & Hollins Martin, C. J. (2015). A narrative review exploring the effectiveness of compassion focused therapy. *Journal of Counselling Psychology, 30,* 21–32.

Beck, A. T., & Steer, R. A. (1990). *Manual for the Beck Anxiety Inventory*. San Antonio, TX: Psychological Corporation.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory-II.* San Antonio, TX: Psychological Corporation.

Belsky, J., Domitrovich, C., & Crnic, K. (1997). Temperament and parenting antecedents of individual differences in three-year-old boys' pride and shame reactions. *Child Development, 68(3),* 456–466.

Benedict, R. (1946). *The chrysanthemum and the sword: Patterns of Japanese culture*. Rutland, VT: C.E. Tuttle.

Bennett, D. S., Sullivan, M. W., & Lewis, M. (2005). Young children's adjustment as a function of maltreatment, shame, and anger. *Child Maltreatment, 10*(4), 311–323.

Blatt, S. J., D'Afflitti, J., & Quinlan, D. (1976). Experiences of depression in young adults. *Journal of Abnormal Psychology, 65,* 383–389.

Boersma, K., Hakanson, A., Salomonsson, E., & Johansson, I. (2015). Compassion focused therapy to counteract shame, self-criticism and isolation. A replicated single case design for individuals with social anxiety. *Journal of Contemporary Psychotherapy, 45,* 89–98.

Bonanno, G. A., Keltner, D., Noll, J. G., Putnam, F. W., Trickett, P. K., LeJeune, J., & Anderson, C. (2002). When the face reveals what words do not: Facial expression of

emotion, smiling, and the willingness to disclose childhood sexual abuse. *Journal of Personality and Social Psychology, 83(1),* 94–110.

Borg, I., Staufenbiel, T., & Scherer, K. R. (1988). On the symbolic basis of shame. In K. R. Scherer (Ed.), *Facets of emotion: Recent research* (pp.79–98). Hillsdale, NJ: Erlbaum.

Bowling, A. (2005). Mode of questionnaire administration can have serious effects on data quality. *Journal of Public Health, 27,* 281–291.

Bowyer, L., Wallis, J., & Lee, D. (2014). Developing a compassionate mind to enhance trauma-focused CBT with an adolescent female: A case study. *Behavioural and Cognitive Psychotherapy, 42,* 248–254.

Braehler, C., Gumley, A., Harper, J., Wallace, S., Norrie, J., & Gilbert, P. (2013). Exploring change processes in compassion focused therapy in psychosis: Results of a feasibility randomized controlled trial. *British Journal of Clinical Psychology, 52(2),* 199–214.

Brewin, C. R. (2003). *Post-traumatic stress disorder: Malady or myth?* New Haven, CT: Yale University Press.

Brewin, C. R. (2006). Understanding cognitive behaviour therapy: A retrieval competition account. *Behaviour Research and Therapy, 44,* 765–784.

Brewin, C. R. (2007). Autobiographical memory for trauma: Update on four controversies. *Memory, 15,* 227–248.

Buss, A. H. (1980). *Self-consciousness and social anxiety*. San Francisco: W. H. Freeman.

Chung, J. M., & Robins, R. W. (2015). Exploring cultural differences in the recognition of the self-conscious emotions. *PLOS ONE, 10(8),* 1–27.

Cohen, T. R., Wolf, S. T., Panter, A. T., & Insko, C. A. (2011). Introducing the GASP scale: A new measure of guilt and shame proneness. *Journal of Personality and Social Psychology, 100(5),* 947–966.

Cook, D. R. (1996). Empirical studies of shame and guilt: The internalized shame scale. In D. L. Nathanson, (Ed.), *Knowing feeling: Affect, script, and psychotherapy* (pp. 132–165). New York: Norton.

Cox, B. J., Rector, N. A., Bagby, R. M., Swinson, R. P., Levitt, A. J., & Joffe, R. T. (2000). Is self-criticism unique for depression? A comparison with social phobia. *Journal of Affective Disorder, 57(1-3),* 223–228.

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*(4), 349–354.

Crozier, W. R. (2014). Differentiating shame from embarrassment. *Emotion Review, 6*(3), 269–276.

Dalai Lama (1995). *The power of compassion.* London: Harper Collins.

Darwin, C. (1872). *The expression of the emotions in man and animals* (3rd Ed.). New York: Oxford University Press.

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multi-dimensional approach. *Journal of Personality and Social Psychology, 44,* 113–126.

De Hooge, I. E., Zeelenberg, M., & Breugelmans, S. M. (2010). Restore and protect motivations following shame. *Cognition and Emotion, 24,* 111–127.

Depue, R. A., & Morrone-Strupinsky, J. V. (2005). A neurobehavioral model of affiliative bonding: Implications for conceptualizing a human trait of affiliation. *Journal of Behavioral and Brain Science, 28(3),* 313–395.

Dorahy, M. (2010). The impact of dissociation, shame and guilt on interpersonal relationships in chronically traumatized individuals: A pilot study. *Journal of Traumatic Stress, 23(5),* 653–656.

Driscoll, R. (1988). Self-condemnation: A conceptual framework for assessment and treatment. *Psychotherapy, 26,* 104–111.

Edelman, R. J. (1981). Embarrassment: The state of research. *Current Psychological Reviews, 1,* 125–138.

Ekman, P. (2003). *Emotions revealed.* New York: Times Books.

Ekman, P., & Friesen, W. V. (1978). *Facial action coding system: A technique for the measurement of facial movement*. Palo Alto, CA: Consulting Psychologists Press.

Ekman, P., & Rosenberg, E. L. (1997). *What the face reveals: Basic and applied studies of spontaneous expression using the facial action coding system (FACS).* New York: Oxford University Press.

Else-Quest, N. M., Higgins, A., Allison, C., & Morton, L. C. (2012). Gender differences in self-conscious emotional experience: A meta-analysis. *Psychological Bulletin, 138(5),* 947–981.

Fontaine, J. R., Luyten, P., De Boeck, P., & Corveleyn, J. (2001). The test of self-conscious affect: Internal structure, differential scales and relationships with long-term affects. *European Journal of Personality, 15,* 449–463.

Freud, S. (1896). *Further remarks on the neuro-psychoses of defence. SE, 3,* 157–185.

Gale, C., Gilbert, P., Read, N., & Goss, K. (2014). An evaluation of the impact of introducing compassion focused therapy to a standard treatment programme for people with eating disorders. *Clinical Psychology and Psychotherapy, 21(1),* 1–12.

Geppart, U. (1986). *A coding system for analyzing behavioral expression of self-evaluative emotions.* Munich: Max-Planck Institute for Psychological Research.

Gilbert, P. (1989). *Human Nature and Suffering*. Hove: Lawrence Erlbaum Associates Ltd.

Gilbert, P. (1997). The evolution of social attractiveness and its role in shame, humiliation, guilt, and therapy. *British Journal of Medical Psychology, 70,* 113–147.

Gilbert, P. (1998). What is shame? Some core issues and controversies. In P. Gilbert and B. Andrews (Eds.), *Shame: Interpersonal behaviour, psychopathology and culture,* (pp. 39–54). New York: Oxford University Press.

Gilbert, P. (2002). Body shame: A biopsychosocial conceptualisation and overview, with treatment implications. In P. Gilbert and J. Miles (Eds.), *Body Shame: Conceptualisation, Research and Treatment,* (pp. 3–54). London: Brunner-Routledge.

Gilbert, P. (2003). Evolution, social roles, and differences in shame and guilt. *Social Research*, *70*(4), 1205–1230.

Gilbert, P. (2005). *Compassion: Conceptualisations, research and use in psychotherapy.* New York: Routledge.

Gilbert, P. (2006). Old and new ideas on the evolution of mind and psychotherapy. *Clinical Neuropsychiatry, 3(2),* 139–153.

Gilbert, P. (2007). The evolution of shame as a marker for relationship security: A biopsychosocial approach. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 283–309). New York: Guilford Press.

Gilbert, P. (2009). Introducing compassion-focused therapy. *BJPsych Advances in Psychiatric Treatment, 15,* 199–208.

Gilbert, P. (2010a). Compassion focused therapy [Special issue]. *International Journal of Cognitive Psychotherapy, 3*, 95–201.

Gilbert, P. (2010b). An introduction to compassion focused therapy in cognitive behaviour therapy. *International Journal of Cognitive Therapy, 3(2),* 97–112.

Gilbert, P. (2011). Shame in psychotherapy and the role of compassion focused therapy. In R. L. Dearing & J. P. Tangney (Eds.), *Shame in the Therapy Hour,* (pp. 325–324). Washington, DC: American Psychological Association.

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology, 53,* 6–41.

Gilbert, P., Clarke, M., Hempel, S., Miles, J. N. V., & Irons, C. (2004). Criticizing and reassuring oneself: An exploration of forms style and reasons in female students. *British Journal of Clinical Psychology*, *43*, 31–50.

Gilbert. P., & Irons, C. (2004). A pilot exploration of the use of compassionate images in a group of self-critical people. *Memory, 12*, 507–516.

Gilbert. P., & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self-attacking. In P. Gilbert (Ed.), *Compassion: Conceptualisations, Research and Use in Psychotherapy,* (pp. 263–325). London: Routledge.

Gilbert, P., & Miles, J. N. V. (2000). Sensitivity to put-down: Its relationship to perceptions of shame, social anxiety, depression, anger and self-other blame. *Personality and Individual Differences, 29,* 757–774.

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Journal of Clinical Psychology and Psychotherapy, 13,* 353–379.

Gramzow, R., & Tangney, J. P. (1992). Proneness to shame and the narcissistic personality. *Personality and Social Psychology Bulletin, 18,* 369–376.

Gratch, J. (2010). True emotion vs. social intentions in nonverbal communication: Towards a synthesis for embodied conversational agents. In I. Watchmuth, & G. Knoblich, (Eds.), *Modeling communication with robots and virtual humans,* (pp. 181–197). New York: Springer.

Greenberg, L. S. (2008). Shame in couple's therapy. In L. S. Greenberg, & R. N. Goldman, (Eds.), *Emotion-focused couples therapy*, (pp. 315–349). Washington, DC: American Psychological Association.

Haidt, J., & Keltner, D. (1999). Culture and facial expression: Open-ended methods find more expressions and a gradient of recognition. *Cognition and Emotion, 13(3),* 225–266.

Hashimoto, H., & Shiomi, K. (2002). The structure of empathy in Japanese adolescents: Construction and examination of an empathy scale. *Social Behavior and Personality, 30,* 593–602.

Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family, 50,* 93–98.

Hogan, R. (1969). Development of an empathy scale. *Journal of Consulting and Clinical Psychology, 33,* 307–316.

Izard, C. E. (1971). *The face of emotion.* New York: Appleton-Century-Crofts.

Izard, C. E. (1977). *Human emotions.* New York: Plenum Press.

Izard, C. E., Libero, D. Z., Putnam, P., & Haynes, O. M. (1993). Stability of emotion experiences and their relations to traits of personality. *Journal of Personality and Social Psychology, 64,* 847–860.

Judge, L., Cleghorn, A., McEwan, K., & Gilbert, P. (2012). An exploration of group-based compassion focused therapy for a heterogeneous range of clients presenting to a community mental health team. *International Journal of Cognitive Therapy, 5(4),* 420–429.

Karos, L. K. (2006). An attachment framework for the study of shame: Associations between parenting, temperament, and shame-proneness in early childhood. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 68 (2-B),* 1310.

Kaufman, G. (1989). *The psychology of shame*. New York: Springer.

Kelly, A. C., Zuroff, D. C., Foa, C. L., & Gilbert, P. (2010). Who benefits from training in self-compassion self-regulation? A study of smoking reduction. *Journal of Social and Clinical Psychology, 29(7),* 727–755.

Kelly, A. C., Zuroff, D. C., & Shapira, L. B. (2009). Soothing oneself and resisting self-attacks: The treatment of two intrapersonal deficits in depression vulnerability. *Cognitive Therapy and Research, 33,* 301–313.

Keltner, D. (1995). Signs of appeasement: Evidence for the distinct displays of embarrassment, amusement, and shame. *Journal of Personality and Social Psychology, 68*(3), 441–454.

Keltner, D., & Harker, L. A. (1998). The forms and functions of the non-verbal signal of shame. In P. Gilbert and B. Andrews (Eds.), *Shame: Interpersonal behaviour, psychopathology and culture,* (78–98). New York: Oxford University Press.

Kim, H. (2005). Current situation of self-reliance programmes and direction for the future. *Labour and Society, 95,* (www.klsi.org/magazine/magazine/htm?no=1284).

Klass, E. T (1990). Guilt, shame, and embarrassment: Cognitive-behavioural approaches. In H. Leitenberg (Ed.), *Handbook of social and evaluation anxiety* (pp. 385–414). New York: Plenum.

Klein, D. C. (1991). The humiliation dynamic: An overview. *Journal of Primary Prevention, 12,* 93–121.

Kugler, K., & Jones, W. H. (1992). On conceptualizing and assessing guilt. *Journal of Personality and Social psychology, 62,* 318–327.

Laithwaite, H., O'Hanlon, M., Collins, P., Doyle, P., Abraham, L., Porter, S., & Gumley, A. (2009). Recovery after psychosis (RAP): A compassionate programme for individuals residing in high security settings. *Behavioural and Cognitive Psychotherapy, 37(5),* 511–526.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33,* 159–174.

Lazarus, R. S. (1991). Emotion theory and psychotherapy. In J. D Safran & L. S. Greenberg (Eds.), *Emotion, psychotherapy, and change,* (pp. 290–338). New York: Guilford Press.

Leaviss, J., & Uttley, L. (2015). Psychotherapeutic benefits of compassion-focused therapy: an early systematic review. *Psychological Medicine, 45(5),* 927–945.

Lee, D.A. (2005). The perfect nurturer: A model to develop compassion within cognitive therapy. In P. Gilbert (Ed.). *Compassion and psychotherapy: Theory, research and practice,* (pp. 326–351). London: Routledge.

Leskala, J., Dieperink, M., & Thuras, P. (2002). Shame and posttraumatic stress disorder. *Journal of Traumatic Stress, 15,* 223–226.

Lewis, H. B. (1971). Shame and guilt in neurosis. *Psychoanalytic Review, 58(3),* 419–438.

Lewis, H. B. (1976). *Psychic War in Men and Women.* New York: New York University Press.

Lewis, H. B. (1987). *The role of shame in symptom formation*. Hillsdale, NJ, England: Lawrence Erlbaum Associates.

Lewis, M. (1990). The development of intentionality and the role of consciousness. *Psychological Inquiry, 1,* 231–248.

Lewis, M. (1992). *Shame: The exposed self.* New York: The Free Press.

Lewis, M. (2003). The development of self-consciousness. In J. Roessler & N. Eilan (Eds.). *Agency and self-awareness: Issues in philosophy and psychology,* (pp. 275–295). Oxford: Oxford University Press.

Lewis, M., Alessandri, S. M., & Sullivan, M. W. (1992). Differences in shame and pride as a function of children's gender and task difficulty. *Child Development, 63,* 630–638.

Lindsay-Hartz, J. (1984). Contrasting experiences of shame and guilt. *American Behavioral Scientist, 27(6),* 689–704.

Lindsay-Hartz, J., de Rivera, J., & Mascolo, M. F. (1995). Differentiating guilt and shame and their effects on motivations. In J. P. Tangney & K. W. Fischer (Eds.), *Self-Conscious Emotions: The Psychology of Shame, Guilt, Embarrassment and Pride,* (pp. 274–300). New York: Guilford Press.

Linehan, M. M. (1993). *Cognitive behavioral therapy of borderline personality disorder.* New York: Guilford Press.

Lombardi, R. (2007). Shame in relation to the body, sex, and death: A clinical exploration of the psychotic levels of shame. *Psychoanalytic Dialogues, 17,* 385–399.

Loo, R., & Thorpe, K. (2000). Confirmatory factor analyses of the full and short versions of the marlowe-crown social desirability scale. *Journal of Social Psychology, 140,* 628–635.

Lucre, K. M., & Corten, N. (2013). An exploration of group compassion-focused therapy for personality disorder. *Psychology and Psychotherapy: Theory, Research & Practice, 86(4),* 387–400.

Makogon, I. K., & Enikolopov, S. N. (2013). Problems with the assessment of shame and guilt. *Psychology in Russia: State of the Art, 6(4),* 168–175.

Marshall, M. B., Zuroff, D. C., McBride, C., & Bagby, R. M. (2008). Self-criticism predicts differential response to treatment for major depression. *Journal of Clinical Psychology, 64(3),* 231–244.

Martens, J. P., Tracy, J. L., & Shariff, A. F. (2012). Status signals: Adaptive of displaying and observing the nonverbal expressions of pride and shame. *Cognition and Emotion, 26(5),* 390–406.

Matos, M., & Pinto-Gouveia, J. (2010). Shame as a traumatic memory. *Clinical Psychology & Psychotherapy, 17*(4), 299–312.

Mayhew, S. L., & Gilbert, P. (2008). Compassionate mind training with people who hear malevolent voices: A case series report. *Clinical Psychology & Psychotherapy, 15(2),* 113–138.

Menke, R. (2011). *Examining nonverbal shame markers among post-pregnancy women with maltreatment histories* (Unpublished Master's Thesis). Wayne State University, Detroit, Michigan.

Miller, S. B. (1988). *Humiliation and shame: Comparing two affect states as indicators of narcissistic stress.* Bulletin of the Menninger Clinic.

Miller, S. B. (1996). *Shame in Context*. Hillsdale, NJ: Analytic Press.

Miller, R. S., & Tangney, J. P. (1994). Differentiating embarrassment and shame. *Journal of Social and Clinical Psychology IS,* 273–287.

Mosher, J. K., & Stiles, W. B. (2009). Clients' assimilation of experiences of their therapists. *Psychotherapy Theory Research & Practice, 46(4),* 432–447.

Nathanson, D. L. (1987). *The many faces of shame.* New York: Guilford Press.

Nathanson, D. L. (1992). *Shame and pride: Affect, sex, and the birth of the self*. New York: W. W. Norton.

Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity, 2,* 23–250.

Neff, K. D., & Beretvas, S. N. (2012). The role of self-compassion in romantic relationships. *Self and Identity,* DOI:10.1080/15298868.2011.639548

Neff, K. D., & Dahm, K. A. (2015). Self-compassion: What it is, what it does, and how it relates to mindfulness. In B. D. Ostafin, M. D. Robinson, & B. P. Meier (Eds.), *Handbook of Mindfulness and Self-Regulation,* (pp. 121–137). New York: Springer-Verlag.

Neff, K. D., Kirkpatrick, K., & Rude, S. S. (2007). Self-compassion and its link to adaptive psychological functioning. *Journal of Research in Personality, 41,* 139–154.

Neff, K. D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality, 77,* 23–50.

Nezlek, J. B., & Pilkington, C. J. (1994). Perceptions of risk in intimacy and social participation. *Personal Relationships, 1,* 45–62.

Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions.* New York: Oxford University Press.

Pilkington, C. J., & Richardson, D. R. (1988). Perceptions of risk in intimacy. *Journal of Social and Personal Relationships, 5,* 503–508.

Randles, D., & Tracy, J. L. (2013). Nonverbal display of shame predict relapse and declining health in alcoholics. *Clinical Psychological Science, 1(2),* 149–155.

Rector, N. A., Bagby, R. M., Segal, Z. V., Joffe, R. T., & Levitt, A. (2000). Self-criticism and dependency in depressed patients treated with cognitive therapy or pharmacotherapy. *Cognitive Therapy and Research, 24,* 571–584.

Reynolds, W. M. (1982). Development of reliable and valid short forms of the marlowe-crowne social desirability scale. *Journal of Clinical Psychology, 38(1),* 119–125.

Robins, R. W., & Tracy, J. L (2007). Assessing self-conscious emotions: A review of self-report and nonverbal measures. In J. L. Tracy, R. W. Robins, & J. M. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 443–467). New York: Guilford Press.

Robinette, R. L. (1991). The relationship between the marlowe-crowne form C and the validity scales of the MMPI, *Journal of Clinical Psychology, 47,* 396–399.

Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology, 67,* 206–221.

Salkovskis, P. M. (1996). Trends in cognitive and behavioural therapies. *Clinical Psychology & Psychotherapy, 4(1),* 1–73.

Schore, A. N. (1998b). Early shame experiences and infant brain development. In P. Gilbert & B. Andrews (Eds.), *Shame: interpersonal behavior, psychopathology, and culture.* New York: Oxford University Press.

Shapira, L. B., & Mongrain, M. (2010). The benefits of self-compassion and optimism exercises for individuals vulnerable to depression. *The Journal of Positive Psychology, 5(5),* 377–389.

Shaver, P. R., & Mikulincer, M. (2005). Attachment theory and research: Resurrection of the psychodynamic approach to personality. *Journal of Research in Personality, 39,* 22–45.

Shott, S. (1979). Emotion and social life: A symbolic interactionist analysis. *American Journal of Sociology, 84(6),* 1317–1334.

Snell, W. E., Jr., Schicke, M., & Arbeiter, T. (1996). The multidimensional relationship questionnaire: Psychological dispositions associated with intimate relations. Unpublished Manuscript.

Spreng, R. N., McKinnon, M. C., Mar, R. A., & Levine, B. (2009). The Toronto empathy questionnaire: Scale development and initial validation of a factor-analytic solution to multiple empathy measures. *Journal of Personality Assessment, 91*(1), 62–71.

Straham, R., & Gerbasi, K. C. (1972). Short, homogeneous versions of the marlowe-crowne social desirability scale. *Journal of Clinical Psychology, 28(2),* 191–193.

Stipek, D., Recchia, S., & McClintic, S. (1992). Self-evaluation in young children. *Monographs of the Society for Research in Child Development, 57(1),* 1–98.

Tangney, J. P. (1990). Assessing individual differences in proneness to shame and guilt: Development of the self-conscious affect and attribution inventory. *Journal of Personality and Social Psychology, 59,* 102–111.

Tangney, J. P. (1991). Moral affect: The good, the bad and the ugly. *Journal of Personality and Social Psychology, 61,* 598–607.

Tangney, J. P. (1995). Shame and guilt in interpersonal relationships. In J. P Tangney & K. W. Fischer (Eds.), *Self-conscious emotions. The psychology of shame, guilt, embarrassment, and pride,* (pp. 343–367). New York: Guilford,

Tangney, J. P. (1999). The self-conscious emotions: Shame, guilt, embarrassment, and pride. In T. Dalgleish & M. Power (Eds.), *Handbook of cognition and emotion,* (pp. 541–568). Chichester, UK: Wiley.

Tangney, J. P., & Dearing, R. (2002). *Shame and guilt in interpersonal relationships.* New York: Guilford Press**.**

Tangney, J.P., Dearing, R., Wagner, P.E., & Gramzow, R. (2000). *The Test of Self-Conscious Affect – 3 (TOSCA-3).* Fairfax, VA: George Mason University.

Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt and embarrassment distinct emotions? *Journal of Personality and Social Psychology, 70,* 1256–1269.

Tangney, J.P., Stuewig, J. & Mashek, D.J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, *58,* 345–372.

Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology, 62(4),* 669.

Thwaites, R., & Freeston, M. H. (2005). Safety-seeking behaviours: Fact or fiction: How can we clinically differentiate between safety behaviours and additive coping strategies across anxiety disorders? *Behavioural and Cognitive Psychotherapy, 33,* 177–188.

Tomkins. S. S. (1963). The right and the left: A basic dimension of ideology and personality. In R. W. White (Ed.), *The study of lives,* (pp. 388–411). New York: Atherton.

Tracy, J. L., & Matsumoto, D. (2008). The spontaneous expression of pride and shame: Evidence for biologically innate nonverbal displays. *PNAS, 105(33),* 11655–11660.

Tracy, J. L., & Robins, R. W. (2004). Show your pride: Evidence for a discrete emotion expression. *Psychological Science, 15,* 194–197.

Tracy, J. L., & Robins, R. W. (2007). The prototypical pride expression: Development of a non-verbal behavioural coding system. *Emotion, 7,* 789–801.

Tracy, J. L., & Robins, R. W. (2008). The non-verbal expression of pride: evidence for crosscultural recognition. *Journal of Personality and Social Psychology, 94(3),* 516.

Tracy, J. L., Robins, R. W., & Schriber, R. A. (2009). Development of a FACS-verified set of basic and self-conscious emotion expressions. *Emotion, 9(4),* 554–559.

Wang, Y., Davidson, M., Yakushko, O. F., Savoy, H. B., Tan, J. A., & Bleier, J. K. (2003). The scale of ethnocultural empathy: Development, validation, and reliability. *Journal of Counselling Psychology, 50,* 221–234.

Webb, M., Heisler, D., Call, S., Chickering, S. A., & Colburn, T. A. (2007). Shame, guilt, symptoms of depression, and reported history of psychological maltreatment. *Clinical Abuse & Neglect, 31(11-12),* 1143–1153.

Weiner, B. (1985). "Spontaneous" casual thinking. *Psychological Bulletin, 97(1),* 74–84.

Wells, G. B., & Hansen, N. D. (2003). Lesbian shame: Its relationship to identify integration and attachment. *Journal of Homosexuality, 45(1),* 93–110.

Whelton, W. J., & Greenberg, L. S. (2005). Emotion in self-criticism. *Personality and Individual Differences, 59,* 339–345.

Wicker, F. W., Payne, G. C., & Morgan, R. D. (1983). Participant descriptions of guilt and shame. *Motivation and Emotion, 7,* 25–39.

Woods, H., & Proeve, M. (2014). Relationships of mindfulness, self-compassion, and meditation experience with shame-proneness. *Journal of Cognitive Psychotherapy: An International Quarterly, 28(1),* 20–33.

Zigmond, A. S., & Snaith, R. P. The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica, 67(6),* 361–370.

Zook, A., & Stipps, G. J. (1985). Cross-validation of the marlowe-crowne social desirability scale, *Journal of Clinical Psychology, 41,* 236–238.

Zuroff, D. C., Santor, D. A., & Mongrain, M. (2005). Dependency, self-criticism, and maladjustment. In J. S. Auerbach, K. J. Levy, & C. E. Schaffer (Eds.), *Relatedness, self-definition and mental representation: Essays in honour of Sidney J. Blatt,* (pp. 75–90). London: Brunner-Routledge.

Appendix A

Differential Emotions Scale (SG & HI-DEQ)

Please read each question below and respond with the answer that fits best for you.
In your daily life, how often do you:

1. Feel regret, sorry about something you did
Rarely or never = 1 Hardly ever = 2 Sometimes = 3 Often = 4 Very Often = 5

2. Feel embarrassed when anybody sees you make a mistake
Rarely or never = 1 Hardly ever = 2 Sometimes = 3 Often = 4 Very Often = 5

3. Feel you can't stand yourself
Rarely or never = 1 Hardly ever = 2 Sometimes = 3 Often = 4 Very Often = 5

4. Feel like you did something wrong
Rarely or never = 1 Hardly ever = 2 Sometimes = 3 Often = 4 Very Often = 5

5. Feel like people laugh at you
Rarely or never = 1 Hardly ever = 2 Sometimes = 3 Often = 4 Very Often = 5

6. Feel mad at yourself
Rarely or never = 1 Hardly ever = 2 Sometimes = 3 Often = 4 Very Often = 5

7. Feel like people always look at you when anything goes wrong
Rarely or never = 1 Hardly ever = 2 Sometimes = 3 Often = 4 Very Often = 5

8. Feel like you ought to be blamed for something
Rarely or never = 1 Hardly ever = 2 Sometimes = 3 Often = 4 Very Often = 5

9. Feel sick about yourself
Rarely or never = 1 Hardly ever = 2 Sometimes = 3 Often = 4 Very Often = 5

Appendix B

Multidimensional Relationship Questionnaire

SURVEY INSTRUCTIONS: Listed below are several statements that concern the topic of intimate relationships. For the purpose of this questionnaire, an intimate relationship should be thought of as a close relationship with a single partner in which there is some sexual attraction. Please read each of the following statements carefully and decide to what extent it is characteristic of you. For each statement fill in the response on the answer sheet that indicates how much it applies to you by using the following scale:

A = Not at all characteristic of me.
B = Slightly characteristic of me.
C = Somewhat characteristic of me.
D = Moderately characteristic of me.
E = Very characteristic of me.

NOTE:
Remember to respond to all items, even if you are not completely sure.
Your answers will be kept in the strictest confidence.
Also, please be honest in responding to these statements.

Questions	Response
1. I am confident about myself as an intimate partner.	
2. I'm very motivated to be involved in an intimate relationship.	
3. Intimate relationships make me feel nervous and anxious.	
4. I am somewhat afraid of becoming intimately involved with a partner.	
5. I think of myself as a pretty good intimate partner.	
6. I'm strongly motivated to devote time and effort to an intimate relationship.	
7. I am somewhat awkward and tense in intimate relationships.	
8. I sometimes have a fear of intimate relationships.	
9. I am better at intimate relationships than most other people.	
10. I have a strong desire to be involved in an intimate relationship.	
11. I feel nervous when I interact with a partner in an intimate relationship.	
12. On occasion, I am fearful of intimate involvement with a partner.	
13. I would rate myself pretty favorable as an intimate partner.	
14. It's really important to me that I involve myself in an intimate relationship.	
15. I am more anxious about intimate relationships than most people are.	
16. I don't have very much fear about being involved in an intimate relationship.	
17. I would be very confident in an intimate relationship.	
18. I strive to keep myself involved in an intimate relationship.	
19. I feel inhibited and shy in an intimate relationship.	
20. I'm not very afraid of becoming involved in an intimate relationship.	

Appendix C

Self-Compassion Scale

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

Almost never				Almost always
1	2	3	4	5

_____ 1. I'm disapproving and judgmental about my own flaws and inadequacies.

_____ 2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.

_____ 3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.

_____ 4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.

_____ 5. I try to be loving towards myself when I'm feeling emotional pain.

_____ 6. When I fail at something important to me I become consumed by feelings of inadequacy.

_____ 7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.

_____ 8. When times are really difficult, I tend to be tough on myself.

_____ 9. When something upsets me I try to keep my emotions in balance.

_____ 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.

_____ 11. I'm intolerant and impatient towards those aspects of my personality I don't like.

_____ 12. When I'm going through a very hard time, I give myself the caring and tenderness I need.

_____ 13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.

_____ 14. When something painful happens I try to take a balanced view of the situation.

_____ 15. I try to see my failings as part of the human condition.

_____ 16. When I see aspects of myself that I don't like, I get down on myself.

_____ 17. When I fail at something important to me I try to keep things in perspective.

_____ 18. When I’m really struggling, I tend to feel like other people must be having an easier time of it.

_____ 19. I’m kind to myself when I’m experiencing suffering.

_____ 20. When something upsets me I get carried away with my feelings.

_____ 21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.

_____ 22. When I'm feeling down I try to approach my feelings with curiosity and openness.

_____ 23. I’m tolerant of my own flaws and inadequacies.

_____ 24. When something painful happens I tend to blow the incident out of proportion.

_____ 25. When I fail at something that's important to me, I tend to feel alone in my failure.

_____ 26. I try to be understanding and patient towards those aspects of my personality I don't like.

Appendix D

The Risk in Intimacy Inventory

Listed below are several statements that reflect different attitudes about relationships. Some of the items refer to general attitudes or beliefs about relationships. Other items refer to more specific kinds of interactions, such as those with acquaintances (e.g., someone you've met only once, someone you know only from class), with casual friends, or with people you are very close to.

Using the scale below, indicate the extent to which you agree with each statement by writing the appropriate number in the blank beside each item.

1 = very strong disagreement	4 = slight agreement
2 = moderate disagreement	5 = moderate agreement
3 = slight disagreement	6 = very strong agreement

There are no right or wrong answers. This is simply a measure of how you feel. Please try to give an honest appraisal of yourself.

_____ 1. It is dangerous to get really close to people.

_____ 2. I prefer that people keep their distance from me.

_____ 3. I'm afraid to get really close to someone because I might get hurt.

_____ 4. At best, I can handle only one or two close friendships at a time.

_____ 5. I find it difficult to trust other people.

_____ 6. I avoid intimacy.

_____ 7. Being close to other people makes me feel afraid.

_____ 8. I'm hesitant to share personal information about myself.

_____ 9. Being close to people is a risky business.

_____ 10. The most important thing to consider in a relationship is whether I might get hurt.

Appendix E

Test of Self-Conscious Affect, Version 3

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:

A. 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

In the above example, I've rated ALL of the answers by circling a number. I circled a "1" for answer (a) because I wouldn't want to wake up a friend very early on a Saturday morning – so it's not at all likely that I would do that. I circled a "5" for answer (b) because I almost always read the paper if I have time in the morning (very likely). I circled a "3" for answer (c) because for me it's about half and half. Sometimes I would be disappointed about the rain and sometimes I wouldn't -- it would depend on what I had planned. And I circled a "4" for answer (d) because I would probably wonder why I had awakened so early.

Please do not skip any items -- rate all responses.

1. <u>You make plans to meet a friend for lunch. At five o'clock, you realize you have stood your friend up.</u>

	not likely very likely
a) You would think: "I'm inconsiderate."	**1---2---3---4---5**
b) You would think: "Well, they'll understand."	**1---2---3---4---5**
c) You would think you should make it up to your friend as soon as possible.	**1---2---3---4---5**
d) You would think: "My boss distracted me just before lunch."	**1---2---3---4---5**

2. <u>You break something at work and then hide it.</u>

	not likely very likely
a) You would think: "This is making me anxious. I need to either fix it or get someone else to."	**1---2---3---4---5**
b) You would think about quitting.	**1---2---3---4---5**
c) You would think: "A lot of things aren't made very well these days."	**1---2---3---4---5**
d) You would think: "It was only an accident."	**1---2---3---4---5**

3. <u>You are out with your friends one evening, and you're feeling especially witty and attractive. Your best friend's spouse seems to particularly enjoy your company.</u>

	not likely very likely
a) You would think: "I should have been aware of what my best friend is feeling.	**1---2---3---4---5**
b) You would feel happy with your appearance and personality.	**1---2---3---4---5**
c) You would feel pleased to have made such a good impression.	**1---2---3---4---5**
d) You would think your best friend should pay attention to his/her spouse.	**1---2---3---4---5**
e) You would probably avoid eye-contact for a long time.	**1---2---3---4---5**

4. <u>At work, you wait until the last minute to plan a project, and it turns out badly.</u>

	not likely very likely
a) You would feel incompetent.	**1---2---3---4---5**
b) You would think: "There are never enough hours in the day."	**1---2---3---4---5**
c) You would feel: "I deserve to be reprimanded for mismanaging the project."	**1---2---3---4---5**
d) You would think: "What's done is done."	**1---2---3---4---5**

5. <u>You make a mistake at work and find out a co-worker is blamed for the error.</u>

	not likely very likely
a) You would think the company did not like the co-worker.	**1---2---3---4---5**
b) You would think: "Life is not fair."	**1---2---3---4---5**
c) You would keep quiet and avoid the co-worker.	**1---2---3---4---5**
c) You would feel unhappy and eager to correct the situation.	**1---2---3---4---5**

6. <u>For several days you put off making a difficult phone call. At the last minute you make the call and are able to manipulate the conversation so that all goes well.</u>

	not likely very likely
a) You would think "I guess I'm more persuasive than I thought.	**1---2---3---4---5**
b) You would regret that you put it off.	**1---2---3---4---5**
c) You would feel like a coward.	**1---2---3---4---5**
d) You would think: "I did a good job."	**1---2---3---4---5**
e) You would think you shouldn't have to make calls you feel pressured into.	**1---2---3---4---5**

7. <u>While playing around, you throw a ball, and it hits your friend in the face.</u>

	not likely very likely
a) You would feel inadequate that you can't even throw a ball.	**1---2---3---4---5**
b) You would think maybe your friend needs more practice at catching.	**1---2---3---4---5**
c) You would think: "It was just an accident."	**1---2---3---4---5**
d) You would apologize and make sure your friend feels better.	**1---2---3---4---5**

8. <u>You have recently moved away from your family, and everyone has been very helpful. A few times you have needed to borrow money, but you paid it back as soon as you could.</u>

	not likely very likely
a) You would feel immature.	**1---2---3---4---5**
b) You would think: "I sure ran into some bad luck."	**1---2---3---4---5**
c) You would return the favour as quickly as you could.	**1---2---3---4---5**
d) You would think: "I am a trustworthy person."	**1---2---3---4---5**
e) You would be proud that you repaid your debts.	**1---2---3---4---5**

9. <u>You are driving down the road, and you hit a small animal.</u>

	not likely very likely
a) You would think the animal shouldn't have been on the road.	**1---2---3---4---5**
b) You would think: "I'm terrible."	**1---2---3---4---5**
c) You would feel: "Well, it was an accident."	**1---2---3---4---5**
d) You'd feel bad you hadn't been more alert driving down the road.	**1---2---3---4---5**

10. <u>You walk out of an exam thinking you did extremely well, then you find out you did poorly.</u>

	not likely very likely
a) You would think: "Well, it's just a test."	**1---2---3---4---5**
b) You would think: "The instructor doesn't like me."	**1---2---3---4---5**
c) You would think: "I should have studied harder."	**1---2---3---4---5**
d) You would feel stupid.	**1---2---3---4---5**

11. <u>You and a group of co-workers worked very hard on a project. Your boss singles you out for a bonus because the project was such a success.</u>

	not likely very likely
a) You would feel the boss is rather short-sighted.	**1---2---3---4---5**
b) You would feel alone and apart from your colleagues.	**1---2---3---4---5**
c) You would feel your hard work had paid off.	**1---2---3---4---5**
d) You would feel competent and proud of yourself.	**1---2---3---4---5**
e) You would feel you should not accept it.	**1---2---3---4---5**

12. <u>While out with a group of friends, you make fun of a friend who's not there.</u>

	not likely very likely
a) You would think: "It was all in fun; it's harmless."	**1---2---3---4---5**
b) You would feel small...like a rat.	**1---2---3---4---5**
c) You would think that perhaps that friend should have been there to defend himself/herself.	**1---2---3---4---5**
d) You would apologize and talk about that person's good points.	**1---2---3---4---5**

13. <u>You make a big mistake on an important project at work. People were depending on you, and your boss criticizes you.</u>

	not likely very likely
a) You would think your boss should have been more clear about what was expected of you.	**1---2---3---4---5**
b) You would feel as if you wanted to hide.	**1---2---3---4---5**
c) You would think: "I should have recognized the problem and done a better job."	**1---2---3---4---5**
d) You would think: "Well, nobody's perfect."	**1---2---3---4---5**

14. <u>You volunteer to help with the local Special Olympics for handicapped children. It turn out to be frustrating and time-consuming work. You think seriously about quitting, but then you see how happy the kids are.</u>

	not likely very likely
a) You would feel selfish and you'd think you are basically lazy.	**1---2---3---4---5**
b) You would feel you were forced into doing something you did not want to do.	**1---2---3---4---5**
c) You would think: "I should be more concerned about people who are less fortunate."	**1---2---3---4---5**
d) You would feel great that you had helped others.	**1---2---3---4---5**
e) You would feel very satisfied with yourself.	**1---2---3---4---5**

15. <u>You are taking care of your friend's dog while they are on vacation, and the dog runs away.</u>

	not likely very likely
a) You would think, "I am irresponsible and incompetent.	**1---2---3---4---5**
b) You would think your friend must not take very good care of her dog or it wouldn't have run away.	**1---2---3---4---5**
c) You would vow to be more careful next time.	**1---2---3---4---5**
d) You would think your friend could just get a new dog.	**1---2---3---4---5**

16. <u>You attend your co-worker's housewarming party, and you spill red wine on a new cream colored carpet, but you think no one notices.</u>

	not likely very likely
a) You would think your co-worker should have expected some accidents at such a big party.	**1---2---3---4---5**
a) You would stay late to help clean up the stain after the party.	**1---2---3---4---5**
b) You would wish you were anywhere but at the party.	**1---2---3---4---5**
c) You would wonder why your co-worker chose to serve red wine with the new light carpet.	**1---2---3---4---5**

Appendix F

The Marlowe-Crowne Social Desirability Scale (Short Form C)

Please read each statement carefully and answer as honestly as possible for what is most accurate for you:

1. **It is sometimes hard for me to go on with my work if I am not encouraged.**
   True False

2. **I sometimes feel resentful when I don't get my way.**
   True False

3. **On a few occasions, I have given up doing something because I thought too little of my ability.**
   True False

4. **There have been times when I felt like rebelling against people in authority even though I knew they were right.**
   True False

5. **No matter who I'm talking to, I'm always a good listener.**
   True False

6. **There have been occasions when I took advantage of someone.**
   True False

7. **I'm always willing to admit it when I make a mistake.**
   True False

8. **I sometimes try to get even rather than forgive and forget.**
   True False

9. **I am always courteous, even to people who are disagreeable.**
   True False

10. **I have never been irked when people expressed ideas very different from my own.**
    True False

11. **There have been times when I was quite jealous of the good fortune of others.**
    True False

12. **I am sometimes irritated by people who ask favours of me.**
    True False

13. **I have never deliberately said something that hurt someone's feelings**
    True False

Appendix G

Toronto Empathy Questionnaire

Below is a list of statements. Please read each statement *carefully* and rate how frequently you feel or act in the manner described. Circle your answer on the response scale. There are no right or wrong answers or trick questions. Please answer each question as honestly as you can.

1. When someone else is feeling excited, I tend to get excited too

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

2. Other people's misfortunes do not disturb me a great deal

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

3. It upsets me to see someone being treated disrespectfully

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

4. I remain unaffected when someone close to me is happy

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

5. I enjoy making other people feel better

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

6. I have tender, concerned feelings for people less fortunate than me

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

7. When a friend starts to talk about his/her problems, I try to steer the conversation towards something else

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

8. I can tell when others are sad even when they do not say anything

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

9. I find that I am "in tune" with other people's moods

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

10. I do not feel sympathy for people who cause their own serious illnesses

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

11. I become irritated when someone cries

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

12. I am not really interested in how other people feel

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

13. I get a strong urge to help when I see someone who is upset

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

14. When I see someone being treated unfairly, I do not feel very much pity for them

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

15. I find it silly for people to cry out of happiness

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

16. When I see someone being taken advantage of, I feel kind of protective towards him/her

Never = 0 Rarely = 1 Sometimes = 2 Often = 3 Always = 4

Appendix H

Pride Coding System

Instructions for Coders

For each of the following codes, please rate the intensity of the particular behavior or movement using the scale below. If the behavior or movement is not present, score it as 0.

0----------1----------2----------3----------4----------5

Not at all present	Visible, but very mild intensity	Moderate intensity	Extreme intensity

Head Codes

1. Head tilted back/up ___

2. Head tilted forward/down ___

3. Moving hands to cover face or part of face ___

4. Hiding face by moving face or head (in hands, onto ground, into upper arm, turning away, etc.) ___

5. Eye gaze directed straight ahead ___

Body Codes

1. Chest expanded ___

2. Torso pushed out/leaning back ___

3. Chest narrowed inward ___

4. Shoulders slumped forward ___

Arm Codes

1. One or both arms out from body ___

2. One or both arms raised ___

3. One or both hands in fists ___

4. Hands on hips ___

5. Arms crossed on chest ___

6. One or both arms limp at sides ___

Coding Scheme

Pride components = Head 1, Head 3, Arms 1, Arms 2, Arms 3, Arms 4, Arms 5, Body 1, and Body 2. Not all components must be present to code pride. Necessary components for greater than chance recognition are as follows: Head 3 + [(Head 1 + Head 6) or (Arms 1 + Arms 2 + Arms 3) or (Arms 4) or (Arms 5)] or Head 3 + Arms 6 + Head 1 + (Body 1 or Body 2).

Shame components = Head 2, Head 4, Head 5, Arms 6, Body 3, and Body 4. Not all components must be present to code shame. Greater than chance recognition as been found from Head 2 + (Head 4 or Head 5).

Appendix I

Reliability analyses for the self-report measures used in the current study

Table A1

Reliability analysis for MRQ at pre-treatment, post-treatment and follow-up

	Pre-treatment N = 16			Post-treatment N = 15			Follow-up N = 12		
MRQ Subscale	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha
Relationship Esteem	5.63	4.03	0.73	7.80	4.44	0.82	7.50	4.83	0.94
Relationship Motivation	11.69	4.41	0.68	11.60	5.19	0.87	11.67	5.21	0.92
Relationship Anxiety	11.69	5.56	0.89	9.13	6.02	0.92	9.17	5.18	0.85
Fear of Relationships	11.31	5.19	0.70	10.33	4.92	0.83	9.92	4.23	0.74

Table A2

Reliability analysis for SCS at pre-treatment, mid-treatment, post-treatment and follow-up

	Pre-treatment N = 16			Mid-treatment N = 16			Post-treatment N = 15			Follow-up N = 12		
SCS Subscale	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha
Self-Kindness	8.31	2.68	0.45	12.69	3.18	0.59	14.87	4.58	0.88	15.17	3.43	0.89
Self-Judgement	21.31	2.21	0.75	18.81	4.10	0.91	17.00	4.60	0.88	15.83	4.13	0.93
Common Humanity	7.63	2.45	0.64	10.63	3.07	0.80	13.07	2.60	0.61	12.25	3.62	0.94
Isolation	16.56	2.22	0.38	14.75	3.00	0.70	12.80	3.40	0.80	12.25	3.62	0.94
Mindfulness	9.13	2.00	0.05	11.88	2.73	0.76	13.67	2.13	0.41	13.25	2.63	0.83
Over-Identification	17.31	1.85	0.57	14.38	2.28	0.60	12.80	3.67	0.90	13.00	2.30	0.62

Note: One participants pre-treatment Mindfulness score was unable to be calculated due to missing data.

Table A3

Reliability analysis for TOSCA-3 at pre-treatment, mid-treatment, post-treatment and follow-up

	Pre-treatment N = 16			Mid-treatment N = 16			Post-treatment N = 15			Follow-up N = 12		
TOSCA-3 Subscale	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha
Shame-proneness	52.50	8.32	0.68	48.38	11.36	0.87	44.87	11.01	0.87	44.50	9.79	0.85
Guilt-proneness	63.93	8.61	0.75	61.81	7.95	0.79	63.40	7.04	0.78	62.17	8.38	0.86
Externalisation	36.38	7.45	0.57	35.44	8.60	0.77	35.13	8.28	0.77	34.42	8.39	0.83
Detachment	26.94	6.02	0.62	28.31	6.78	0.75	31.13	5.91	0.72	31.92	4.54	0.55
Alpha pride	16.63	5.20	0.80	17.69	3.54	0.76	18.00	3.36	0.62	18.50	3.34	0.80
Beta pride	16.63	4.03	0.67	17.63	3.54	0.71	18.27	3.27	0.63	18.25	2.60	0.37

Note: One participants pre-treatment Guilt-proneness score was unable to be calculated due to missing data.

Table A4

Reliability analysis for RII at pre-treatment, post-treatment and follow-up

	Pre-treatment N = 16			Post-treatment N = 15			Follow-up N = 12		
	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha
RII Score	40.00	12.83	0.93	33.60	11.76	0.91	35.67	8.13	0.84

Table A5

Reliability analysis for M-C SDS at mid-treatment, post-treatment and follow-up

	Mid-treatment N = 16			Post-treatment N = 15			Follow-up N = 12		
	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha
M-C SDS Score	7.56	1.50	-0.31	7.21	1.76	0.06	7.92	1.93	0.31

Table A6

Reliability analysis for TEQ at mid-treatment, post-treatment and follow-up

	Mid-treatment N = 16			Post-treatment N = 16			Follow-up N = 12		
	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha	M	SD	Cronbach's Alpha
TEQ Score	43.88	8.32	0.88	45.80	6.82	0.85	44.58	6.95	0.88