

**Changing the Meaning of Shameful Memories Through  
Compassionate Meditation**

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## Overview

This thesis investigated the relationships between shame, compassion and attachment styles. Part 1 is a systematic literature review. It summarises evidence on the link between attachment styles and shame. Because shame is conceptualised as a feeling of inferiority in relation to other people, it is conceptually associated with the *working models* of relationships described by attachment theory. The review evidenced a link between *fearful* or *preoccupied* attachment styles and shame. This finding is discussed in relation to the strengths and limitations of the studies, as well as current theories.

Part 2 describes an empirical study that investigated the effectiveness of a brief compassionate meditation for alleviating state shame. Fifty-seven students practiced drawing on their associations with compassion through mental imagery before recalling a shameful memory and considering it from a compassionate perspective. The study used mixed quantitative and qualitative methods. The results showed that quantitative measures of shame and self-blame reliably decreased following the meditation, and were accompanied by a shift from negative to positive affect. The ability to problem-solve about the event was enhanced by these changes. Participants' ease of cultivating compassion was studied in relation to their memories of their parents as children and any current signs of depression; only the negative impact of depression was supported. The qualitative analysis provided information on the qualities of helpful meditations. Recommendations are given for clinical practice and future research.

Part 3 is a critical appraisal that gives reflections on the literature review and empirical paper. It discusses issues in study design and measurement, as well as the use of imagery or meditation as a therapeutic intervention. It offers some guidance and recommendations to others considering similar projects.

## Contents

<b>Acknowledgements</b>	<b>7</b>
<b>PART 1. Literature Review</b>	<b>8</b>
<b>Abstract</b>	<b>9</b>
<b>Introduction</b>	<b>10</b>
Attachment	10
Shame	11
The development of attachment categorisations	12
Fearful and preoccupied attachments should relate to shame	15
<b>Method</b>	<b>16</b>
Inclusion and exclusion criteria	17
Assessing methodological quality	18
<b>Results</b>	<b>19</b>
Studies measuring three attachment categories	25
Studies measuring two attachment dimensions	29
Studies measuring four categories	40
<b>Discussion</b>	<b>48</b>
General limitations of the research reviewed	51
Conclusions and clinical implications	52
<b>References</b>	<b>53</b>
<b>PART 2. Empirical Paper</b>	<b>65</b>
<b>Abstract</b>	<b>66</b>
<b>Introduction</b>	<b>67</b>

The effect of shame and compassion on mental wellbeing	68
Using imagery exercises or meditation to cultivate compassion	69
Individual differences in the ability to cultivate compassion	70
Compassion and problem-solving	72
Research aims and hypotheses	73
<b>Method</b>	<b>74</b>
Power analysis	74
Sample	75
Ethical considerations	75
Researcher's background and perspectives	76
Quantitative measures	77
Procedure for data collection	81
Procedure for qualitative data analysis	85
<b>Results</b>	<b>87</b>
Quantitative analysis	87
Qualitative analysis	96
Combining the qualitative and quantitative results	114
<b>Discussion</b>	<b>114</b>
Limitations of the research	117
Clinical recommendations	119
<b>References</b>	<b>121</b>
<b>PART 3. Critical Appraisal</b>	<b>132</b>
<b>Introduction</b>	<b>133</b>
<b>The literature review: Measurement issues and self-report</b>	<b>133</b>



## List of Tables and Figures

### **PART 1. Literature Review**

Figure 1. Bartholomew and Horowitz's Four-Category Model of Attachment.	13
Table 1. Results of Electronic Searches for Articles Concerning Shame and Attachment.	19
Table 2. Summary of Study Characteristics and Findings by Attachment Measure.	21-24

### **PART 2. Empirical Paper**

Table 1. Descriptive Statistics for the Baseline Measures and their Subscales.	87
Table 2. Nonparametric Correlations Between Baseline Measures and the Compassionate Qualities of the First Meditation.	90
Table 3. Results of a Wilcoxon Matched-Pairs Test of Pre-to-Post Change in Attributions and Emotions Over the Course of the Second Meditation.	92
Table 4. Results of a Wilcoxon Matched-Pairs Test of Pre-to-Post Change in Attributions and Emotions Over the Course of the Second Meditation	93
Table 5. Nonparametric Correlations with Cognitive and Affective Change Resulting from the Second Meditation.	95
Table 6. Summary of Domains and Themes from the First Meditation.	98
Table 7. Summary of Domains and Themes from the Second Meditation.	107

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## **Part 1: Literature Review**

### **The relationship between attachment styles and shame**

## **Abstract**

**Aims:** Shame describes an experience of inferiority and anxiety in relation to other people. There is a theoretical association between shame and attachment styles, which are working models of intimate relationships. Problems in both areas have been linked to adverse childhood experiences and poorer mental health. This paper presents a systematic review of the relevant literature linking shame and attachment styles.

**Methods:** A search was conducted for articles using measures of attachment styles that also measured shame. The findings of fifteen articles were reviewed and their methodologies examined.

**Results:** In relation to two-factor models of attachment, shame was consistently associated with attachment-related anxiety (negative working models of the self) and, to a less pathogenic extent, to attachment-related avoidance (negative working models of others). In relation to four-factor models, shame related most clearly to a fearful attachment style and to a lesser extent to a preoccupied style. Dismissing styles were inconsistently related to shame.

**Conclusions:** The results are summarised in relation to research on the developmental trajectory of shame. Suggestions are made for future research and clinical practice.

## **Introduction**

The purpose of this review is to contribute to discussions about the link between attachment and shame. Specifically, this paper examines published studies that have included quantitative measures of attachment styles (such as *secure* or *fearful*) alongside measures of shame. Several different ways of measuring these concepts have been used by researchers and the links between them are explored. Theoretical work relating to theories of affect and evolutionary perspectives on human development is used to make sense of the findings. The paper begins with a review of our existing knowledge about attachment and shame and the main theoretical issues in this area of research.

### *Attachment*

Attachment research describes the profound influence that the relationship between a young child and their caregiver has on the child's understanding of other people and their ability to negotiate the social world. Insecure or rejecting attachment relationships early in life are predictive of a number of social and emotional problems, including depression and self-criticism (Besser & Priel, 2003; Thompson & Zuroff, 1999; Whiffen, Aubé, Thompson, & Campbell, 2000). By contrast, secure attachment is associated with being trusting, experiencing more frequent positive emotions, and showing more constructive interpersonal problem-solving (Lopez et al., 1997).

According to Bowlby (1988), attachment is so important because close relationships are a cornerstone of human social and emotional development. He argued that the tendency to form attachment bonds was selected for over our evolutionary history because they promoted security-seeking and cooperation between people in the presence a threat. Consequently, the success or failure of attachment bonds in

childhood determines the kind of interpersonal strategies that the child selects for managing intimacy and safeness with others. Mental representations or *working models* of the self and other people as either kind or cruel allow humans to carry these strategies across the lifespan. These give rise to *attachment styles*, or individual dispositions towards seeking or avoiding intimacy. Research has supported Bowlby, showing that attachment styles are moderately consistent over time, particularly if established through interview measures (Scharfe & Bartholomew, 1994).

### *Shame*

The concepts of shame and shame-proneness are also inexorably associated with interpersonal experiences (Gilbert, 2003; Lewis, 1971; Trumbull, 2003). To be in shame is to have an experience of the whole self as flawed, ugly, hateful, inferior or inadequate in the eyes of others (Gilbert, 1997). In shame, an anxiety about what others may think of us compels us to hide or disappear from a critical gaze, whether that gaze is from those around us, or from an internalised audience who could cruelly scrutinise our actions and silence us from the inside (Lewis, 1971; Talbot, Talbot, & Tu, 2004).

In shame, people signal appeasement by adopting a drooping posture with the head tilted down to avoid direct eye contact (Keltner & Buswell, 1996), a pattern of behaviour similar to those that other primates use to avoid attacks or signal defeat (Mignault & Chaudhuri, 2003), and associated with a rise in cortisol levels and a cascade of physiological stress responses (Lewis & Ramsay, 2002; Rohleder, Chen, Wolf, & Miller, 2008). In this way, shame appears to be a sociobiological response that inhibits expression and encourages escape to avoid harm, reorientating one's behaviour to the demands of others.

In sum, there are theoretical links to be made between shame and insecure attachment. For example, Kaufman (1996) thought that enduring shame would have its

roots in childhood experiences lacking in interpersonal trust or security, where the child felt cut off, or when their needs were belittled or ignored. Affect theorists like Kaufman have theorised that frequent shaming experiences lead to shame being more easily triggered, more intensely felt, and more difficult to resolve, as a link is built between the experience of one's needs and their habitual rejection (Jenkins, Oatley, & Stein, 1998; Malatesta & Wilson, 1988). The need to belong to a social group and to be valuable within it is a core human motivation (Baumeister & Leary, 1995), and excessive shame is a particular kind of problem with belonging.

#### *The development of attachment categorisations*

Attachment patterns have been categorised in different ways. The first popular models of attachment were based on observational studies of infants and proposed three categories: *secure*, *avoidant* and *anxious-resistant* (Ainsworth, Blehar, Waters, & Wall, 1978). Securely attached children were pleased to see their parents when they returned to the room and were readily comforted if distressed. Avoidant children appeared unemotional when separated from their parents and actively avoided contact with them on reunion. Anxious-resistant children showed ambivalent behaviour towards their parents, appearing upset but also difficult to comfort.

A second major methodology for studying attachment came out of work in social psychology and is wedded to the use of self-report measures rather than observation. Two influential approaches were outlined. Hazan and Shaver (1987) began by mapping Ainsworth et al.'s attachment styles onto adult romantic relationships, though they altered the conceptualisation of avoidant attachment styles. Avoidant adults were those who report distress and discomfort with getting close to others. In the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985; Main, 1995), a second conceptualisation that drew on Ainsworth et al.'s attachment categories, avoidant adults are those who

deny or minimise psychological distress and voice little concern about the importance of their relationships. Perhaps in relation to these differences, reviews failed to find close associations between the resulting categorisations (Crowell, Treboux, & Waters, 1999), leading to a suspicion that infant and adult avoidant attachments represented different expressive clusters.

Bartholomew (Bartholomew, 1990; Bartholomew & Horowitz, 1991) tried to resolve these difficulties by proposing a model of attachment with two continuums: one representing the lovability of the self, and the other the lovability of other people. When these two continuums (*attachment-related anxiety* and *attachment-related avoidance*) bisect each other they describe four spaces (see Figure 1).

		Model of self: attachment-related anxiety	
		Positive/High	Negative/Low
Model of other: attachment-related avoidance	Positive/High	<b>Secure</b> Comfortable with intimacy	<b>Preoccupied</b> Anxious about maintaining intimacy
	Negative/Low	<b>Dismissing</b> Dismissing of intimacy	<b>Fearful</b> Socially avoidant

Figure 1. Bartholomew and Horowitz's four-category model of attachment. Adapted from Bartholomew and Horowitz (1991).

A sense that other people are generally good, dependable or reliable combined with a sense that the self is good or lovable was felt to correspond to the existing descriptions of secure attachment (Ainsworth et al., 1978; Hazan & Shaver, 1987), and Bartholomew and Horowitz retained this label. All of the attachment measures encountered in the course of this review were relatively consistent in describing secure individuals as those

who were comfortable with expressing a range of emotions and addressing these in intimate relationships (Shaver & Mikulincer, 2002). However, the measures differ in the way they classify security. The AAI classifies individuals as secure if they can openly and honestly report the problems they have with relationships. By contrast, self-report measures describe security in terms of the absence of anxiety or dependence and classify problems with intimacy as resulting from a dismissing attachment style (Jacobvitz, Curran, & Moller, 2002).

It is possible to believe that others are lovable but to have a negative view of oneself. This attachment pattern might lead to a person striving to gain the acceptance of others, whilst feeling anxious and uncomfortable about themselves and their ability to self-soothe or provide comfort. Hazan and Shaver had called this group *anxious-ambivalent* (as did Ainsworth), whereas Main (1995) called this group *enmeshed* or *preoccupied*. Bartholomew and Horowitz kept the label *preoccupied* in their system of classification. They found that people in this group were emotionally expressive yet struggled to be noticed and felt rejectable. They often tried to meet their anxiety by dominating relationships, although some relationships of this sort were characterised by passivity and reassurance-seeking.

Ainsworth et al.'s final *avoidant* category has been the one most subject to change (Shaver & Mikulincer, 2002), not least because there can be different reasons for wanting to avoid people. The solution has been to split the category in two according to whether people believe themselves to be good or bad (Consedine & Magai, 2003). According to Bartholomew and Horowitz, if someone believes that they are good and valuable but does not trust others to see this or protect them when they are distressed, they could develop an attachment style motivated by maintaining a sense of invulnerability and independence. Bartholomew and Horowitz labelled this cluster

*dismissing* and found that these people reported a lack of warmth in their social interactions. The category maps on roughly to the *avoidant* style in three-category models. However, if one has a sense that both the self and other people are unworthy or threatening, then considerable effort might be spent struggling to stay away from people to avoid painful rejection or harm. Bartholomew and Horowitz called this a *fearful-avoidant* attachment style. They found that people in this quadrant could be passive and had a low opinion of themselves. It has been suggested that this category may tap into the same qualities of Ainsworth et al.'s *unresolved* type, but this has not been robustly supported (Jacobvitz et al., 2002).

Described here is the process by which Bartholomew and Horowitz's four-type classification system grew out of the original three-category and two-dimensional models. Notably, there has been little work done on relating Bartholomew and Horowitz's attachment categories back onto child attachments, which is a major omission.

*Fearful and preoccupied attachments should relate to shame*

Given that people high in attachment-related anxiety are hypothesised to have a negative view of themselves, we would expect shame to be higher for individuals with both fearful and preoccupied attachment styles, and not for dismissing and secure individuals who have a more positive view of themselves (Gross & Hansen, 2000; Wells & Hansen, 2003). Secure individuals are said to regulate their emotions openly and flexibly (Buchheim & Mergenthaler, 2000), meaning they are unlikely to be trapped in excessively shameful responding. Being more open and well-regulated is likely to put in place cycles of interpersonal contact in which shaming experiences are less likely to occur.

However, as above, evolutionary or functionalist accounts of shame suggest that the behaviours shame results in may have an adaptive purpose in signalling the withdrawal of a request for needs to be met and submissiveness to others' demands. The negative view of self and other that this description seems to entail is suggestive of fearful attachment styles (Ainsworth et al., 1978), and the observations of shameful behaviour (withdrawal, defeat, appeasement) are more suggestive of attachment-related avoidance rather than the "maximising" style of emotional regulation found in preoccupied attachments (Consedine & Magai, 2003). So we might expect fearful attachments to be the style most strongly associated with shame, but a preoccupied attachment style may be associated to a lesser extent.

Dismissing individuals are thought to minimise their feelings or to "route negative emotion from consciousness" (Consedine & Magai, 2003, p.167) and have been observed to deny anxiety while coming up with projective stories representing strong inner conflicts (Magai, Hunziker, Mesias, & Culver, 2000). It's not clear how this defensive interpersonal style relates to shame, but it seems unlikely that people with dismissing styles would choose to report shame on interview and self-report measures.

In summary, this literature review aimed to examine evidence relating shame to working models of attachment, by collecting and reviewing information on what kind of relationship behaviours and representations are found in individuals who commonly experience shame.

### **Method**

Initial electronic searches using *attachment* with terms relating to shame (*shame*, *shame-prone*, *shame-proneness* or *ashamed*) resulted in unmanageably large lists of articles of poor relevance, even when the search was limited to abstracts. Instead, a search was designed using the names of attachment measurements and attachment

styles combined with *shame*, where these terms appeared anywhere in the article. The list of attachment measures was compiled by reading reviews of attachment (Crowell & Treboux, 1995; Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010; Shaver & Mikulincer, 2002) and a full list of the measures included in the search, as well as the terms relating to attachment styles that were used, is given in Appendix A.

The following databases were included in the searches: Ovid Medline, PsychInfo, Embase, PubMed and Web of Science. No date limits were specified. The reference sections of included papers were consulted for further relevant articles. In addition, a hand search was conducted of the journal most frequently mentioned in successful search results (the Journal of Counseling Psychology). These additional searches found no further articles.

#### *Inclusion and exclusion criteria*

The review concerned only peer-reviewed journals. Only those studies that met the following criteria were included in the review:

1. the study reported empirical measurements or observations of more than one person, and
2. the measurements concerned both shame and attachment.

Criteria were developed in agreement with reviews of shame measures (Allan, Gilbert, & Goss, 1994; Goss, Gilbert, & Allan, 1994) and attachment measures (Crowell & Treboux, 1995; Ravitz et al., 2010). Attachment scales were defined as those examining the quality of close relationships, either in childhood or as an adult. In questionnaires, the quality of an attachment relationship is defined by the subjective experience of that relationship (e.g., the ease of intimacy, and the presence of trust)

and not only its objective features or the presence of particular parental rearing behaviours (e.g., being praised or blamed).

Questionnaires or interviews regarding shame ask about the respondent's agreement with thoughts and feelings that represent the presence of global negative self-evaluations (either by the self or by others). Examples of such items include "I feel intensely inadequate and full of self-doubt," from the Internalized Shame Scale (Cook, 1994), or "Other people see me as small and insignificant," from the Other As Shamer Scale (Goss et al., 1994). Some scales use scenarios to prompt these evaluations. For example, the Test of Self-Conscious Affect for Adolescents (Tangney, Wagner, Gavlas, & Gramzow, 1990) has 15 scenarios including "You trip in the cafeteria and spill your friend's drink," and asks about shame-related responses including "I would be thinking that everyone is watching me and laughing."

#### *Assessing methodological quality*

No formalised scales were used to assess the methodological quality of the studies. The weighting of summary scores necessitates making many assumptions that are not easily justified by the empirical evidence (Higgins & Green, 2011). Because the studies in this review employed cross-sectional repeated-measures designs, particular attention was paid to sampling, the reliability and validity of the measures used, and the defensibility of the statistical testing, in addition to other methodological concerns surrounding the study protocol and the interpretation of results.

## Results

The results of searching are summarised in Table 1.

Table 1

*Results of Electronic Searches for Articles Concerning Shame and Attachment.*

	Ovid	PubMed	WoS	TOTAL
Results returned	428	534	170	1132
Retrieved and scanned	33	24	12	69
Retained according to criteria	14	1	0	15

*Note.* Ovid searches employed three databases: Medline, Embase and PsychInfo. WoS = Web of Science.

It was possible to exclude many articles at the stage of scanning abstracts because they were either theoretical articles, or related to a different subject area. Many potentially relevant articles concerned only concrete parenting behaviours or the incidence of abuse, but without a link to attachment styles. Others did not measure shame directly, or did not compare shame and attachment measures in the study.

It should be noted that all of the research found was (a) based largely on self-report and (b) cross-sectional rather than longitudinal in nature. No studies were found using observational methods (as in Ainsworth et al.'s paradigm). The problems presented by these methods, common to so many psychological research projects, are addressed in the Discussion. It is also important to note that all but two of the studies employed attachment measures relating to current adult relationships and not childhood attachments. This limitation is also discussed at the end of the review.

The findings of the fifteen reviewed studies are summarised Table 2. The following three sections of the report examine the studies in relation to the method of attachment classification used: the earliest three-category distinction, the development of two-dimensional models, and finally the four-category models that are built on these two dimensions.

Table 2

*Summary of Study Characteristics and Findings by Attachment Measure.*

Authors	Type of sample	N	% female	Mean age	Attachment measure	Shame measure	Summary of findings
<b>Three-category attachment classifications</b>							
Blissett, Walsh, Harris, Jones, Leung and Meyer (2006)	Student	206	100	19.8	PAQ	YSQ	Shame not associated with any attachment styles.
Consedine and Magai (2003)	Older community sample	1118	50	74	Adapted RSQ	DES	Shame positively associated with fearful attachment style. Negative association with secure and dismissing styles.
<b>Two-dimensional attachment classifications</b>							
Gilbert, McEwan, Bellew, Mills and Gale (2009)	Depressed patients	62	58	44.32	ECRS	OAS	Shame positively associated with both anxious and avoidant attachment styles.
Brown and Treveethan (2010)	Community	166	0	46.7	RSQ	ISS	Shame positively associated with both anxious and avoidant attachment styles.
Lopez, Gover, Leskela, Sauer and Schirmer (1997)	Student	142	77.5	21.63	RSQ and AASI	TOSCA	Shame positively associated with anxious but not avoidant attachment style.

*Note.* AASI = Adult Attachment Style Inventory; DES = Differential Emotions Scale; ECRS = Experiences in Close Relationships Scale; ISS = Internalized Shame Scale; OAS = Other As Shamer Scale; PAQ = Parental Attachment Questionnaire; RSQ = Relationship Styles Questionnaire; TOSCA = Test of Self-Conscious Affect; YSQ = Young Schema Questionnaire.

Authors	Type of sample	N	% female	Mean age	Attachment measure	Shame measure	Summary of findings
Feeney (2005)	Student	224	74.6	20.9	ECRS	Constructed	Shame positively associated with anxious but not avoidant attachment styles.
Wei, Shaffer, Young and Zakalik (2005)	Student	299	68	19.73	ECRS	PFQ2	Shame positively associated with both anxious and avoidant attachment styles, but more strongly with anxious.
Reinert (2005)	Catholic seminarians	75	0	22.1	RQ	ISS	Shame positively associated with both anxious and avoidant attachment styles, but more strongly with anxious.
<b>Four-category attachment classifications</b>							
Consedine and Fiori (2009)	Older community sample	616	50	59.14	RSQ	DES	Shame positively associated with fearful and preoccupied attachment styles, but more strongly with preoccupied. Weak negative association with dismissing style.

Note. DES = Differential Emotions Scale; ECRS = Experiences in Close Relationships Scale; ISS = Internalized Shame Scale; PFQ2 = Harder Personal Feelings Questionnaire; RQ = Relationship Questionnaire; RSQ = Relationship Styles Questionnaire.

Authors	Type of sample	N	% female	Mean age	Attachment measure	Shame measure	Summary of findings
Magai, Hunziker, Mesias and Culver (2000)	Community	63	56	63.4	AAI	Facial coding	Facial expressions of shame positively associated with fearful attachment style, while accuracy in recognising shame in others associated with attachment security.
Gross and Hansen (2000)	Student	204	62	22.9	RSQ	BSRS	Shame positively associated with fearful and preoccupied attachment styles, but not dismissing. Negative association with secure.
Wells (2003)	Gay psychotherapy clients	100	100	49.5	RSQ	ISS	Shame positively associated with fearful and preoccupied attachment styles, but more strongly with fearful. Negative association with secure and no relationship with dismissing.
Wells and Hansen (2003)	Gay community sample	317	100	39.9	RSQ	ISS	Shame positively associated with fearful and preoccupied attachment styles, but more strongly with fearful. Negative association with security.

Note. AAI = Adult Attachment Interview; BSRS = Brief Symptom Rating Scale; ISS = Internalized Shame Scale; RSQ = Relationship Styles Questionnaire.

Authors	Type of sample	N	% female	Mean age	Attachment measure	Shame measure	Summary of findings
Sherry (2007)	Gay online sample	286	57.8	31.5	RSQ	PFQ2	Shame positively associated with fearful and preoccupied attachment styles, but more strongly with fearful. Negative association with secure, and no relationship with dismissing.
Akbağ and İmamoğlu (2010)	Student	360	50.8	21.35	RQ	SGS	Shame positively associated with dismissing and secure attachments.

Note. PFQ2 = Harder Personal Feelings Questionnaire; RQ = Relationship Questionnaire; RSQ = Relationship Styles Questionnaire; SGS = Shame and Guilt Scale.

### *Studies measuring three attachment categories*

Two studies employed three-category attachment classifications. Only one was consistent with the original three attachment categories from Ainsworth et al.'s (1978) Strange Situation. It found no relationship between shame and attachment style. The authors, Blissett, Walsh, Harris, Jones, Leung and Meyer (2005), used the Parental Attachment Questionnaire (PAQ; Kenny, 1987), which measures the perceptions that older adolescents have of their parents' support. There are three subscales: Affective Quality of Attachment, Fostering of Autonomy and Emotional Support. The internal consistency of these scales is good, being reportedly between .84 and .96, while test-retest reliability over a two-week interval has also been as high as .92 (Kenny, 1987, 1990; Kenny & Donaldson, 1991; Reese, Kieffer, & Briggs, 2002). However, the scale is scarcely used in research and no studies could be found that cross-referenced the PAQ with other measures of attachment, so it lacks construct validity.

Shame was measured as a core belief using the short version of the Young Schema Questionnaire (YSQ-S; Young, 1998). Seventy-five items examine a range of maladaptive core beliefs clustered around 15 schemas. Positives of the scale include the fact that the underlying model outlined by Young (1994) is closely related to attachment theory, explaining how maladaptive schemas or negative core beliefs develop in childhood. Shame items have face validity, including "I'm unworthy of the love, attention, and respect of others," and "I am too unacceptable in very basic ways to reveal myself to other people." The short-form has also been validated against the long-form (Waller, Meyer, & Ohanian, 2001), and there is some moderate support for the clinical validity and internal reliability of the scale (Stopa, Thorne, Waters, & Preston, 2001). The main problem is that, with only four items, the "defectiveness/shame" cluster represents a narrow enquiry into shame. The use of these two brief measures meant

that bias was not rigorously controlled for in this study and theoretical concepts are thinly represented.

Participants were 206 female students with a mean age of 19.8 years ( $SD = 1.95$ ). The sample was predominantly white (93.7%) and single (95%). Student samples, though convenient, are thinly representative of general populations and limit the generalisations that can be made from a study. This limitation was common to several studies in this review.

A series of under-powered regression analyses with fifteen predictor variables each showed that nine of the 15 schemas – including defectiveness/shame – did *not* predict attachment functioning with either parent. Interestingly, four of the six beliefs that did predict poorer parental attachment are from the “Disconnection/Rejection” cluster to which defectiveness/shame also belongs. However, given the lower quality of the measures, the narrow range of possible scores for each schema on the YSQ (sampled as 1.5–3.4), and the overuse of regression with no clear hypotheses, the results are inconclusive.

Only one other study was found that employed a three-category classification system, though the categories were established pragmatically and not in accordance with Ainsworth et al. (1978). Consedine and Magai (2003) studied attachment and shame in relation to older adults and later-life issues. They based their study on Bartholomew’s four category model described in this paper’s Introduction.

The authors used the Relationship Styles Questionnaire (RSQ; Griffin & Bartholomew, 1994), which is a widely-used 30-item scale categorising four attachment patterns: secure (e.g., “I am comfortable depending on other people”), fearful (e.g., “I worry that I will be hurt if I allows myself to become too close to others”), preoccupied (e.g., “I want to be completely emotionally intimate with others”) and dismissing (e.g., “I

prefer not to depend on others"). The scale has good psychometric properties: a test-retest coefficient of .65 over a three-week period has been reported, and the RSQ's convergent validity has been demonstrated with interview methods (Griffin & Bartholomew, 1994). The factor analysis conducted by the original authors showed that the four attachment types mapped on to two underlying dimensions representing a model of the self and a model of others.

However, Consedine and Magai found the reliability of the four subscales to be unacceptably low in their sample. They conducted a factor analysis of the scores, which resulted in a three factor solution. The missing style was preoccupied, with the three factors being labelled secure, dismissing and fearful by the authors, though the construct validity of these categories was not confirmed by comparing items to the original scale.

The Differential Emotions Scale (DES; Izard, 1972) was used to measure shame and other emotional profiles. Consedine and Magai report that the internal consistency of all ten scales, each relating to a different emotion, is generally above .84 and the test-retest reliability for each emotion over a one-week interval is .77. The DES subscales of Interest, Joy, Surprise, Sadness, Fear, Shame/Shyness and Guilt have also been broadly supported as reliable in factor analyses (Boyle, 1984). Lastly, Boyle (1984) reported that shame and several other scales had internal reliabilities above .70. However, the scale has not been validated against other measures of shame, so there is limited data on the scale's construct validity. Like the YSQ, the small item pool for shame (represented by just three adjectives) is likely to have captured little information about the participants. Although the scale asks about the presence of all ten emotions in one's day-to-day experience, the type of contexts or life events that these emotional profiles relate to is also left unclear.

The sample was encouragingly large ( $N = 1118$ ) and recruited according to a stratified sampling plan. This meant it was representative of the distribution of ethnicity and income in the community and it is likely that demographic confounds were controlled for more thoroughly than in Blissett et al. (2005). The mean age was 74 ( $SD = 6.0$ ). However, the authors correlated the subscales of the DES with all of the other measures with no correction for multiple comparisons, which would have increased the chance of a false positive. Perhaps in relation to this, shame correlated significantly with all of the other emotions examined. In relation to attachment styles, shame was significantly positively correlated with a fearful/avoidant attachment style (.30), as predicted in this review, though it was also positively correlated with secure (.11) but not dismissing (-.05) styles.

Following these basic correlations, three separate regression analyses were carried out with one of the attachment styles as the outcome variable and all of the other variables as predictors (including the two attachment measures that weren't used as the outcome variable). As with Blissett et al., it would have been far better to test a more limited number of relationships against hypotheses. As it happens, all of the equations came out as significant, which could be related to the large sample size as much as the poor discriminant validity of the measures. Nonetheless, the coefficients for the significant independent predictors are low, suggesting that only a small amount of variance is being explained. The results confirmed the correlations and the theory stated in this paper's Introduction, showing that secure attachment was significantly predicted by low levels of shame ( $-.09, p < .01$ ), while fearful avoidance was predicted by more shame (.13,  $p < .01$ ). Dismissingness was predicted by less shame ( $-.11, p < .01$ ).

Broadly speaking, Consedine and Magai's findings are conceptually consistent with research and theory, in that shame was related to fearful avoidance. However, the poorer quality of the scales and the loose treatment of the data make this study less informative.

#### *Studies measuring two attachment dimensions*

Six studies were found that tested attachment in relation to Bartholomew and Horowitz's two dimensions of attachment-related avoidance (model of others) and attachment-related anxiety (model of self). Two found both attachment-related anxiety and attachment-related avoidance to be equally associated with shame (Brown & Trevelyan, 2010; Gilbert, McEwan, Bellew, Mills, & Gale, 2009). Such findings would suggest that having a negative view of oneself (as in preoccupied or fearful attachment styles) and having a negative view of others (as in fearful or dismissing styles) are equally important factors in shame. However, the other four studies found shame to hold variously stronger relationships with attachment-related anxiety than avoidance (Feeney, 2004; Lopez et al., 1997; Reinert, 2005; Wei, Shaffer, Young, & Zakalik, 2005). Such findings would suggest that shame is particularly related to a negative view of the self in relationships. The credibility of these findings is discussed in what follows.

#### *Studies finding attachment-related anxiety and avoidance to be equally related to shame*

One of two studies that found an equal importance for both anxiety and avoidance was by Gilbert, McEwan, Bellew, Mills and Gale (2009). They tested shame in the context of people's striving to avoid social inferiority. They also included measures of depression, anxiety, self-harm, submissive behaviour and social comparison.

The shame measure used in this study was the Other As Shamer Scale (OAS; Allan et al., 1994; Goss et al., 1994), which is a generally more extensive measure of shame than either the YSQ or the DES. The OAS is an 18-item questionnaire asking about how the individual thinks other people view them. It is related to the concept of “external shame,” rather than to the disgusted or critical feelings someone might have towards themselves (Gilbert, 1997). The items have good face validity. Examples include “I feel insecure about others opinions of me,” and “Other people see me as small and insignificant.” The Cronbach alpha in Gilbert, Cheung, Grandfield, Campey and Irons (2003) was high (0.93). There is no extensive validity or reliability data for this scale. However, Wyatt and Gilbert (1998) found that it correlated as expected with the General Health Questionnaire ( $r = .40$ ) and the CES-D ( $r = .54$ ). Goss, Gilbert and Allan (1994) found significant positive correlations with the Internalised Shame Scale (ISS; Cook, 1991) to the order of .81, which is promising, since the ISS is one of the best established self-report measures of shame.

The attachment measure was the Experiences in Close Relationships Scale (ECRS; Brennan, Clark, & Shaver, 1998). The scale provides a continuous measure of the individual’s experience of attachment anxiety and avoidance in their close relationships (see Figure 1). Items relating to avoidance include “I get uncomfortable when a romantic partner wants to be very close,” while items relating to anxiety include “I worry a fair amount about losing my partner.” The thirty-six items were developed by pooling all of the available attachment measures at the time and collecting data from over 1000 participants, which is a good grounding for measure design. Brennan et al. (1998) reported high internal reliabilities of .91 and .94 for the two scales. In short, the OAS and ECRS used by Gilbert et al. appear more reliable and valid than those in the three-category studies mentioned above.

The sampling also provided a reasonable control of bias. Gilbert et al. recruited sixty-two patients (both inpatient and outpatient) diagnosed with depression by their psychiatrist (mean age = 44.32,  $SD = 12.20$ ). In support of the diagnostic criteria, scores on the depression scale are considerably higher than those found in community samples (Henry & Crawford, 2005). Limitations include the fact that no detail is given about the recruitment process or the rate of attrition, so it is not possible to assess sampling biases that may have resulted from people choosing not to take part.

In terms of the statistics, the data screening process is reported, which increases confidence in the reliability of the results, though again no correction was made for the many comparisons tested. In the analysis, the OAS was significantly correlated with both the avoidant and anxious subscales of the ECRS to an identical extent ( $r = .68, p < .01$ ), though the intercorrelation between the ECRS scales is not reported, which is a barrier to interpreting the meaning of this finding. Other studies have reported low intercorrelations (Conradi, Gerlsma, van Duijn, & de Jonge, 2006; Lopez, Fons-Scheyd, Morúa, & Chaliman, 2006) and supported a two-factor model (Fairchild & Finney, 2006). If this is accurate and the subscales are independent, the result indicates that external shame was related equally to anxiety about one's own "badness," and to the emotional and behavioural avoidance associated with a negative view of others. Several regression analyses were carried out, which seem less judicious given the sample size. These showed that shame and attachment (alongside other measures of social behaviour) could be used to predict both social striving and depression. However, shame was the only significant independent contributor to predicting striving, while anxious attachment occupied the same role in predicting depression. Mediation analyses showed that shame and anxious attachment mediated a relationship between striving and depression.

In summary, the measures used in this study were good. The clinical sample was appreciably large and reliably established by psychiatric diagnosis (though there is a lack of information about the patients). The regression equations carried out on the sample were disproportionate to its size, but overall the sample control and measures used made this one of the better studies in this review. The results are consistent with the theory that external shame is the result of insecure attachments, but adds to our understanding by suggesting that anxious attachments (working models of the self) play a particular pathogenic role in relation to depression.

The other study that found an equal role for both attachment-related anxiety and avoidance was by Brown and Trevethan (2010), and benefitted from a similarly well-constructed methodology. Their aim was to study shame and attachment in relation to homosexual identity.

The measures used were good. The shame measure was the Internalised Shame Scale (ISS; Cook, 1988), a 30-item self-report questionnaire that was conceived to measure the presence of trait shame or a shame-based identity. The conceptualisation of shame used to construct the scale supposedly pays attention to its developmental origins, and is consistent with affect theory (Nathanson, 1992). It has become one of the most widely-used shame scales, improving its construct validity. Items include: "I see myself as being very small and insignificant," and "I feel intensely inadequate and full of self-doubt." The scale has high internal consistency (between .95 and .97) and good temporal stability ( $r = .81$  over a period of about 98 days). Cook (1994) found the scale was significantly negatively correlated to self-esteem and was unrelated to the Marlowe-Crowne Social Desirability Scale. The American norm reported by Cook (1994) was a mean of 30 ( $SD = 15$ ) and scores above 50 are taken to represent clinically significant shame. Robust associations between the measure and

depression have been found (Cook, 1988). The attachment measure was the RSQ, as used by Consedine and Magai (2003), which is also a reliable instrument.

The authors recruited 166 gay men through a variety of sources, so sampling bias was not controlled for and their sample may contain a stronger element of self-selection than a randomised sampling strategy would produce. Participants had an average age of 46.7 years ( $SD = 13.7$ ).

A factor analysis of the RSQ yielded a reliable two-factor structure identical to that found in previous research, and the internal reliability coefficients for these scales were high at .85. Scores were around the midpoint of the available range. Shame scores in the sample were, however, low: an average of 1.3 per item on the ISS, which Cook (1994) described as asymptomatic and means that the analyses may suffer from floor effects.

In an adequately-powered statistical analysis, shame was found to be correlated to a similar extent with both anxious ( $r = .51, p < .001$ ) and avoidant attachment styles ( $r = .50, p < .001$ ), a finding that corroborates Gilbert et al.'s results with their clinical sample. The good measures, reasonable sample size, and judicious application of statistics gave some confidence in the result, even if the convenience sampling, low levels of psychopathology, and lack of control for other variables may have reduced the reliability and validity of the finding.

#### *Studies finding a stronger role for attachment-related anxiety*

In some contrast to Brown and Trevethan (2010) and Gilbert et al. (2009), four studies found shame to be related more strongly to attachment-related anxiety (the working model of the self) than to avoidance. However, some of these studies suffered from more methodological shortcomings.

Lopez, Gover, Leskela, Sauer, Schrimmer and Wyssman (1997) studied shame in the context of collaborative problem solving, as measured by self-report questionnaires of relationship self-efficacy and styles of conflict resolution. The shame measure was good, namely the Test of Self-Conscious Affect (TOSCA; Tangney, Wagner, & Gramzow, 1989). The TOSCA contains fifteen brief scenarios. Participants indicate their likelihood of responding in various ways. The choices were designed to exemplify seven types of responses, including shame-proneness and guilt-proneness. Participants indicate the likelihood of each response occurring on a five-point scale. Like the ISS, the TOSCA has good psychometric properties. Tangney et al. (1992) reported convergent validity for the TOSCA with measures of shyness, self-derogation and depression and Cronbach alphas have been reported between .73 and .80 (Wells, Glickauf-Hughes, & Jones, 1999). Less helpfully, the shame and guilt subscales are shown to be significantly intercorrelated ( $r = .45$ ), but it is possible to partial out the shared variance to show two distinct factors (Tangney et al., 1992).

Two attachment measures were used: the Adult Attachment Style Inventory (AASI; Simpson, Rholes, & Nelligan, 1992) and the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991). The AASI, as less reliable measure, was used as a continuous variable, representing attachment in correlation analyses. It is a 13-item measure relating to Hazan and Shaver's (1987) three category model of attachment. It was created by decomposing the three paragraphs into individual sentences and asking participants to rate themselves on each one from *strongly agree* to *strongly disagree*. The resulting factor analysis resulted in two factors that promisingly seemed to tap into the two dimensions suggested by Bartholomew and Horowitz (1991). However, the AASI has scarcely been used in research studies. In the current study, security was conceived simply as low avoidance, rather than low anxiety and avoidance, which is an

additional weakness of the design. Simpson et al. (1992) found the avoidance subscale to be internally consistent (.81), the anxiety scale less so (.58–.61), though both were satisfactory in the present study (.83 and .70 respectively).

The RQ is a simpler version of the RSQ. It has four short paragraphs that describe the four prototypical attachment patterns, and respondents rate the degree to which each paragraph describes them on a seven-point scale. In this study, the RQ was used to make categorical statistical comparisons in relation to shame-proneness, using participants' highest rating to determine their attachment style.

The sample was composed of 142 students (77.5% women, 70% Caucasian). The mean age was 21.63 (*SD* not reported), meaning a similar limit in the applicability to the study by Blissett et al. In the statistical testing, attachment-related anxiety on the AASI was found to be significantly related to shame ( $r = .46, p < .01$ ), while avoidance was decisively not ( $r = .03$ ), but avoidance did show a relationship to guilt ( $r = .22, p < .01$ ) that anxiety did not ( $r = -.08$ ). A second analysis makes this result harder to interpret: an ANCOVA found that attachment styles were significantly related to shame scores, with students measured as being *either* preoccupied or fearful on the RQ showing higher shame than secure or dismissive students. If the AASI was reliable, we would expect preoccupied styles to have been more strongly related to shame, since these are explained in terms of attachment-related anxiety with a comparative lack of avoidance. One possible source of this inconsistency is that differences in the mean shame scores for all the attachment categorisations on the RQ were minimal (2.49–2.84). This does not appear to have been taken into account by Lopez et al. in making their conclusions and the picture that results is confusing.

A second study supporting the role of attachment-related anxiety in shame was by Feeney (2004), investigating how people's attachment histories related to their understanding of hurtful events in their relationships.

The large sample was composed of 224 students (74.6% female) with a mean age of 20.9 (*SD* not reported). Participants were asked to write an account of a hurtful event in an intimate relationship. The descriptions of hurtful events were coded by two raters into a priori categories of different emotions: Surprise, Anger, Sadness, Fear/Anxiety, Shame/Inadequacy, and Hurt/Injury. After initial coding, 80.10% of emotion terms had been placed into the same category by each coder, which is encouraging. The Shame/Inadequacy category also has some face validity, being made of terms like "embarrassed," "helpless" and "stupid." However, the terms "rejected" and "humiliated" were placed by both raters into the Injury category, whereas students in a second study categorised these terms under the Shame/Inadequacy category. In general, the coding and sorting exercise was over-simplified and could have benefitted from credibility checks to verify the structure of the a priori categories.

Attachment was more reliably measured by the ECRS, as used by Gilbert et al. Reliability coefficients for the ECRS subscales were high (.94 and .88). The statistical tests were reasonable, but poorly reported. When the emotion term categories were correlated with the ECRS subscales to see whether attachment styles were related to people's emotional reactions, shame was associated with attachment anxiety ( $r = .26$ ), though it is not mentioned whether this result was significant. The strength of the relationship between shame and avoidance is not reported, suggesting that it was weak or nonexistent. So, like the study by Gilbert et al. (2009), this study suggested that attachment-related anxiety is associated with increased shame. However, the measures and reporting in Feeney's study were less reliable and many sources of

variance that related to the events under study were insufficiently controlled for (e.g., mood and personal relationship history).

A third study that found attachment-related anxiety to be more strongly associated to shame was by Wei, Shaffer, Young and Zakalik (2005). The authors theorised that insecure attachments resulted in a failure to meet “basic psychological needs,” such as autonomy, competence and relatedness. Their sample of 299 students was 68% female, 81.3% Caucasian American, 49.5% single and had an average age of 19.73 years ( $SD = 2.92$ ). Again, the sampling of students causes the same problems, meaning the results are less applicable to clinical populations.

The ECRS was used as the attachment measure. The shame subscale of the Harder Personal Feelings Questionnaire (PFQ2; Harder & Zalma, 1990) was used to measure shame. The PFQ2 is similar to the DES in that it has a list of 22 feelings and respondents are asked to indicate how commonly they feel that way on a five-point scale, except that the PFQ2 asks only about guilt and shame. In the original validation study, Harder and Zalma (1990) obtained a good internal consistency coefficient of .78 for the shame scale and a test-retest reliability coefficient of .91 over a two-week interval. The factor analysis resulted in a two-factor solution, although some items thought to be part of the shame scale (e.g., “feeling humiliated”) loaded more strongly onto guilt and the shame scale explained only 11.4% of the variance (compared to 29.0% for guilt). Harder and Zalma (1990) found the shame scale related significantly to depression ( $r = .41, p < .001$ ), suggesting reasonable construct validity. In sum, the measures give some confidence in the results.

Wei and colleagues factor analysed the questionnaires and then intercorrelated the multiple factors extracted. Data screening is reported. However, no correction was made for multiple comparisons in a correlation matrix containing 153 separate tests, so

significance levels are likely to be overestimated. The correlations for the shame and anxious attachment measures ranged from .27 to .50 with an average of .36. The correlations for shame and avoidant attachment were marginally lower, ranging from .20 to .26 with an average of .23 representing medium effect sizes. The results imply a stronger relationship between anxiety and shame, but were not statistically tested.

A hypothetical model was tested that placed Basic Psychological Needs Satisfaction (BPNS) as a moderator of the relationship between attachment styles on the one hand and shame, depression and loneliness on the other. BPNS fully mediated the relationship between attachment-related avoidance and shame. BPNS was found to partially mediate the relationship between attachment anxiety and shame. Wei et al.'s findings imply that measures of shame are correlated with both anxious and avoidant attachment styles, but that there is a more direct link between attachment-related anxiety and shame. Avoidance also cultivates shame, but through a more indirect route, because it means that basic psychological needs for autonomy, competence and relatedness are not being met.

The final study retrieved that emphasised the role of attachment-related anxiety in the two factor model was by Reinert (2005) and was less rigorous than others. Reinert recruited 75 male Roman Catholic seminarians. The mean age was 22.1 ( $SD = 4.00$ ) and the sample was 79% Caucasian. The sample completed the ISS, but the attachment measure was constructed for the study with little empirical rigor by rewording the Attachment to God Scale (AGS; Rowatt & Kirkpatrick, 2002), replacing the word "God" with "my mother" and "my father" to create a scale for each parent. The original scale of a mere nine items had only two dimensions relating to avoidance and anxiety (the anxiety scale contained only three items). The original article reports that *both* of the dimensions of the AGS correlated with *both* of the anxious and avoidant

adult attachment styles identified by the Relationship Questionnaire, so has low convergent validity. Attachment classifications were created in the Reinert study by splitting the sample's scores along a median and defining anxious attachment as above the median on the anxiety subscale and below the median on the avoidance subscale, and vice versa for avoidance. In short, despite the fact that reliability coefficients for the attachment scale in Reinert's study are .87–.89, the measure suffers from a lack of validity.

The ISS was found to correlate significantly with anxious and avoidant attachments to participants' mothers at baseline ( $r = .42$  and  $.46$  respectively, both significant at  $p < .01$ ), and again eight months later ( $r = .60$  and  $.37$ ,  $p < .01$ ), so it appeared on balance that attachment-related anxiety held a closer relationship to shame. When the scale related to fathers, the ISS correlated only to anxious attachment at baseline ( $r = .27$ ,  $p < .05$ ) and eight months later ( $r = .28$ ,  $p < .05$ ) and not avoidant attachment ( $r = .13$  and  $.19$  respectively). Further analyses revealed that students classified as securely attached (presumably having below median scores on both anxiety and avoidance) experienced the lowest levels of internalized shame, while students classified as anxious *and* avoidant had the highest scores. In summary, the results are broadly in agreement with the role of attachment-related anxiety in shame, but must be interpreted with significant caution because of the study's methodological limitations.

#### *Studies measuring four categories*

The final type of article found measured shame in relation to four attachment categorisations: secure, preoccupied, dismissing and fearful-avoidant (Bartholomew & Horowitz, 1991). Of the seven papers using this paradigm, one of them found preoccupied attachment to hold a stronger relationship to shame than fearful styles, one

that they held an equal relationship, and three that fearful attachment held a stronger relationship than preoccupied. The remaining two studies did not accurately compare fearful and preoccupied styles.

The study finding preoccupied attachment to hold a stronger relationship to shame than fearful attachment (counter to the prediction of this review) was conducted by Consedine and Fiori (2009). They carried out a study of attachment in older adults similar to Consedine and Magai's (2003) reviewed earlier, and the study suffers from similar limitations. They used the same attachment and shame measures, but when they factor analysed the RSQ, the four expected attachment patterns emerged. The sample was large. Participants were 616 adults with an average age of 59.14 years (*SD* not reported). However, in the analysis, every measure was regressed onto each of the subscales of the DES and, like the other study, no correction was made for the large number of comparisons, so there is a similar risk of finding a false positive, compounding the issues caused by the use of the DES.

Shame was predicted by high levels of fearful attachment ( $\beta = .23, p < .01$ ) and more so by preoccupied attachment ( $\beta = .39, p < .001$ ), while increased levels of dismissing attachment were negatively associated with shame ( $\beta = -.14, p < .001$ ). On the basis of the regression coefficients, the association between shame and preoccupied attachment appears to be a stronger one than that with fearful attachment. However, the quality of the shame measurement and statistical analysis is low, overriding the benefits of a large, demographically representative sample and encouraging us to be cautious about the findings. The authors acknowledge that few possible confounding variables were measured and that it would have been more informative to know about the social networks of those involved, which would have increased the study's ecological validity.

One of the four-category studies found fearful attachments to be associated to shame, but did not test the association of preoccupied attachments. However, the association to fearful attachment was made on the basis of a more rigorous methodology and is thus more informative. Magai, Hunziker, Mesias and Culver (2000) based a study on the hypothesis that individuals would differ reliably in the way that they visibly expressed emotions depending on their attachment style. They sampled 160 people (56% women) with a mean age of 63.4 years ( $SD = 19.6$ ). The sample was predominantly Caucasian (97%).

All participants were given the Adult Attachment Interview (AAI; George et al., 1985; Main, 1995) by trained researchers. The AAI is semi-structured and takes 60–90 minutes to deliver. Participants are asked about their experiences with their parents in childhood. The way that these experiences are described is coded according to how the parents are characterised (e.g., loving, rejecting, or neglecting) and how they are remembered by the individual (e.g., idealised or remembered with anger), as well as the overall coherence of the narrative. The AAI is often regarded as the “gold standard” for attachment research, not least because it provides detailed information and provides a way of circumventing some of the response bias issues involved in social psychology measures. In the present study, interrater reliability for AAI classifications ranged from .71 to .86, and corroboration against the RSQ suggests improved construct validity.

The measures of shame were naturalistic. The participants were asked to judge the emotion expressed by eighty ambiguous faces by choosing from a list of ten words, including “shame/shyness.” In addition, participants were asked to describe four events in the past that had generated “strong feelings” and their facial expressions were coded for a range of emotions. The coding used an established system (Izard, 1979) and

interrater reliability coefficients were high (.78–.99), so the shame measures appear to be reasonable and to have good ecological validity.

The authors tested four hypothesis-driven models of the relationship between the four main attachment patterns on the AAI and styles of emotional expression. The models were based closely on previous empirical research and theory, although there was a pragmatic limitation on predictor variables because of the small sample size. In addition, each model was refined by examining bivariate correlations and run a second time with adaptations. In short, the study was well thought out and one of the better studies reviewed here. However, in relation to the depth of the analyses that were conducted on the data, this is still a small sample.

The authors assumed that secure attachment would be predicted by a facial decoding bias in favour of interest, but in fact this correlation was nonsignificant. It was replaced by a bias in favour of shame or shyness. This bias towards seeing shame/shyness became a significant predictor in a second model of secure attachments ( $r = .30, p < .01$ ). Thus, more interpretations of shame were surprisingly related to a more secure attachment style. The authors' explanation for this was that the recognition of shame is a part of healthy development and adapting to human emotions and "presupposes a positive relationship history as the social partner who experiences interpersonal shame is one who has an attachment he or she cares about" (p. 307).

The participants' own facial expressions of shame were (as predicted) significantly positively correlated with a fearful-avoidant attachment type ( $r = .22, p < .05$ ), although this did not represent a significant independent effect. The associations between shame and preoccupied or dismissing attachment styles are not reported, so it is difficult to draw comparisons with some of the other studies in this review. The association of shameful facial expressions to a fearful attachment style is consistent

with the theory outlined in the Introduction of this review, in that such people may be shy and lack social confidence because they expect others to be critical or attacking.

So far, we have seen one less rigorous study that found preoccupied attachment to hold the closest association with shame, and one better study in which fearful attachment was closely related but in which the association of preoccupied attachment was not tested. One study found both styles to be equally related to shame. Gross and Hansen (2000) explored the relationship between gender, attachment and shame. The attachment measure was the RSQ. Cronbach alphas for the RSQ are similar to those found in previous research and indicate adequate reliability (.49–.75). The shame measure was the Brief Shame Rating Scale (Hibbard, 1992, 1994), which is less reliable and has hardly been used in research. Ten adjectives relating to shame (e.g., “mortified,” “humiliated”) are rated on a five-point scale from *not much like me* to *very much like me*. Previous factor analyses suggested that the scale resolved into two factors, but these were found to correlate highly with each other (.83–.89). Gross and Hansen report an alpha coefficient of .83, which is good, and Hibbard (1994) reported some convergent validity with scales of narcissism, masochism and cyclothymia. However, the scale has not been compared to established measures of shame like the ISS, or to other psychopathological clusters such as depression or anxiety, so seems likely to result in a lower quality of measurement.

The participants were 204 students (62% female, 89% White), with a mean age of 22.9 ( $SD = 8.4$ ). The average shame score in the sample were low, being in the lowest 25% of possible scores. In the analysis, shame was equally related to fearful ( $r = .27, p < .001$ ) and preoccupied attachment styles ( $r = .26, p < .001$ ), and not to dismissing attachment styles ( $r = .07, p > .05$ ).

In contrast to these three studies, a further three studies found fearful attachment styles to be more closely related to shame than preoccupied styles. Wells (2003) explored shame in relation to lesbian identity integration, drawing on ideas from Kaufman (1996) and affect theory. The sample was made up of 100 self-identified lesbians who had been in individual psychotherapy for three to ten years. They were recruited through a number of psychotherapists. The mean age was 49.5 (*SD* not reported), and the sample was predominantly white (70%) and college-educated. In establishing exclusion criteria, she drew on a model of integration described by Cass (1984), which describes six stages from identity confusion through to synthesis. Wells' sample was limited to lesbians at the highest stage of Cass's scale ("synthesis") by excluding 22.9% of the sample who were scored as being at an earlier stage on the Self-Identity Questionnaire (Brady & Busse, 1994). In summary, the sample represents a small subset of individuals, even if the population of interest were all lesbian women, because they were of a high socioeconomic status and had experienced therapeutic interventions for their mental health.

The shame measure was the ISS. The attachment measure was the RSQ, so, despite the sampling limitations, both measures were of a good quality. In Wells' study, the Cronbach alphas were between .48 and .80, which is similar to previously reported coefficients and encourages a degree of confidence in the scale's psychometric properties. Shame scores were significantly lower than Cook's (1994) clinical samples, but approaching the cut-off for clinically significant shame ( $M = 45.9$ ,  $SD = 10.3$ ). In agreement with the prediction of this review, the intercorrelations between the ISS and the RSQ were strongest for fearful ( $r = .33$ ,  $p < .001$ ), less so for preoccupied ( $r = .22$ ,  $p < .001$ ), negative for secure ( $r = -.36$ ,  $p < .001$ ). The result was nonsignificant for dismissing ( $r = .04$ ).

Wells and Hansen (2003) used the same methodology as Wells (2003), with similar advantages conferred by the choice of measures and disadvantages to the sampling strategy. Their sample was larger, with 317 self-identified lesbians recruited via various social and professional contacts. The demographics of the sample were fairly similar. The average age was 39.9 ( $SD = 11.1$ ) and the sample was predominantly European-American and college-educated, with a majority of respondents (66%) reporting current relationships. The majority were classified as having reached stage six (synthesis) of identity integration.

The mean score on the ISS was close to the clinically significant cut-off and similar to Wells (2003) reported above ( $M = 48.9$ ,  $SD = 14.3$ ). Similarly to Wells (2003), the intercorrelations between the RSQ and the ISS were strongest for fearful ( $r = .57$ ,  $p < .001$ ), less so for preoccupied ( $r = .33$ ,  $p < .001$ ), negative for security ( $r = -.51$ ,  $p < .001$ ), and weakly positive for dismissing ( $r = .19$ ,  $p < .001$ ). It is interesting that dismissingness was associated with shame, unlike the previous study. The large quotient of people in the dismissing category (49%) may have added variance. Secure ( $\beta = -.24$ ,  $p < .001$ ), fearful ( $\beta = .39$ ,  $p < .001$ ) and preoccupied styles ( $\beta = .20$ ,  $p < .001$ ) were significant predictors of shame.

A third study that emphasised the role of fearful attachments in shame was by Sherry (2007), who also consulted a gay and lesbian sample. Her participants were 286 people who responded to online adverts for the study, so were self-selecting. The mean age was 31.5 ( $SD$  not reported) and the sample was 58.7% female and 83.7% European American. The sample was well-educated and 38.1% were single. The attachment measure was the RSQ. The shame measure was the PFQ2, as used by Wei et al. (2005), a moderately reliable measure. Sherry reported high internal

consistency coefficients of .85 for shame and .83 for guilt. Overall, the sample is large, if limited in its diversity, and the measures are good.

The data was analysed using canonical correlation analysis (CCA). CCA belongs to the same family of statistics as regression, but can be used when there is more than one dependent variable to avoid carrying out multiple regressions. In this study, all four attachment styles from the RSQ were regressed onto a composite of shame and guilt (from the PFQ2) and an internalised homophobia scale. The overall model explained 36.9% of the variance shared between all of the variables. The clearest predictors were secure ( $r_s^2 = 79.57\%$ ), fearful ( $r_s^2 = 60.84\%$ ) and preoccupied ( $r_s^2 = 26.52\%$ ) attachments, while dismissingness did not make a strong contribution ( $r_s^2 = 6.86\%$ ). The net result was that secure attachment showed a negative relationship to shame and guilt, while fearful and, to a slightly lesser extent, preoccupied attachments were related to increased shame (the correlation coefficients being .48 and .34 respectively), appearing to corroborate Wells (2003), Wells and Hansen (2003), and (to an extent) the findings of Magai et al. (2000).

A less reliable study was conducted by Akbağ and İmamoğlu (2010). They gave the RQ to 360 students (50.8% female) with a mean age of 21.35 ( $SD = 1.64$ ). The shame measure is reported as the 12 relevant items from the 24-item Shame and Guilt Scale and the reference is given as “Şahin and Şahin, 1992.” Akbağ and İmamoğlu report that this scale was developed in Turkey, but the reference given does not lead to an article mentioning this measure and no further evidence of it could be found through searching online, possibly because the original is in Turkish. Akbağ and İmamoğlu state that responses are given on a five-point scale, but no sample items are reported. They report that the internal consistency coefficient in their study for the shame subscale was .79.

In the results section, it is reported that all of the attachment styles on the RQ were correlated with shame, with the exception of preoccupied, but the correlation coefficients are not given. A regression analysis is reported as showing that shame was significantly predicted by secure attachment ( $t = 2.08, p < .05$ ) and dismissing attachment ( $t = 2.45, p < .05$ ), but it is not clear why these styles were selected over a fearful attachment style for inclusion, which makes their conclusions difficult to interpret.

### **Discussion**

In summary, the two studies that used a three-category attachment classification were among the least rigorous reviewed (Blissett et al., 2005; Consedine & Magai, 2003), and contributed little to the evidence base. One of them showed the expected association between shame and a fearful attachment style, while the other did not falsify this. The studies that used four-category classifications by and large corroborated the association, providing evidence that fearful attachment styles are reliably related to shame in research, often more so than preoccupied attachment styles (Magai et al., 2000; Sherry, 2007; Wells & Hansen, 2003; Wells, 2003), although one study by Gross and Hansen (2000) found preoccupied and fearful attachment styles to be equally related to shame. The finding by Consedine and Fiori (2009) that preoccupied attachment styles were more predictive of shame provided an exception, but it used a less rigorous methodology than the other studies. In short, the prediction of the review regarding fearful attachments seemed to be tentatively supported.

The six studies that used a two-dimensional approach to attachment classification suggested that attachment-related anxiety and avoidance were both related to shame, though their overall effect is to suggest that attachment-related anxiety has a particularly pathogenic effect (Brown & Trevethan, 2010; Feeney, 2004; Gilbert et al., 2009; Lopez et al., 1997; Reinert, 2005; Wei et al., 2005). As Wei et al.'s

study suggested, avoidance may result in shame by cultivating a negative perception of others, but attachment-related anxiety may play a more direct causative role in shame. Again, the conclusion has to be tentative pending further research.

It is not easy to combine these implications, but the suggestion seems to be that shame-proneness depends on interpersonal models of the self and others, but with a different role for each of these types of appraisal. Further research could contribute to this by investigating how shame differs between preoccupied and fearful individuals: What are its qualities and when does it occur? Considering the direction for such research, it is worth noting that preoccupied individuals have been noticed to have a “maximising” style of emotional regulation that may be cultivated with the specific aim of maintaining attention from others (Consedine & Magai, 2003). We might expect such individuals to express shame more readily. However, functionalist conceptualisations of emotion suggest that shame may have evolved as a down-regulation strategy intended to curtail the expression of emotional needs when they weren’t being met, or were likely to be met with scorn or rejection. Fearful attachment might represent a more prototypical social function of shame in this respect. Preoccupied individuals may well experience shame because of their negative view of themselves, but their experience may be accompanied by less submissive behaviour, avoidance and sadness than fearful individuals. Further research using the more reliable questionnaires alongside other measures with inclusive samples could help to clarify this issue.

Dismissing attachments (where the other is “bad” and the self “good”) were found to be positively associated (Akbağ & İmamoğlu, 2010; Wells & Hansen, 2003), negatively associated (Consedine & Fiori, 2009; Consedine & Magai, 2003), or to hold no relationship to shame (Blissett et al., 2005; Gross & Hansen, 2000; Sherry, 2007; Wells, 2003). This may be something to do with the category of dismissing attachment

itself, which is a more recent addition to attachment research: Magai, Hunziker, Mesias and Culver (2000) found that dismissing attachment style was harder to decode from facial expressions. However, it may be because painful affect is being dealt with in different ways by dismissing individuals. According to Lewis (1971), avoiding painful emotion is a key motivation in the shameful personality. Hunziker, Mesias and Culver found that dismissing individuals showed a mixed emotional profile in the stories they told (e.g., in denying anxiety), but then talking about themes of inner conflict. It may be that the strategies employed by dismissing individuals that are intended to deflect negativity from themselves onto others (e.g., thought suppression, rationalisation and social comparison), are fragile and can be easily overwhelmed, leading to shameful responses. Future research might explore such emotional regulation in the context of interpersonal relationships to help unravel these inconsistent findings. Qualitative studies of shame that included individuals with dismissing attachments might also begin to fill the conceptual gap regarding how this style is experienced.

The gender split in the total sample pool of this review was relatively equal (59.1% women). Women have been found to report more shame than men (Hoglund & Nicholas, 1995; Walter & Burnaford, 2006), so the ratio should give some confidence that these results can be generalised to both men and women. The ages of the samples are also varied. Only 5.7% of those sampled across these studies were from clinical settings or defined by clinical criteria (Gilbert, McEwan, et al., 2009; Hadley et al., 1993; Wells, 2003), so the relevance to pathological processes remains to be detailed. However, the finding that shame was associated with attachment-related anxiety or with fearful and preoccupied styles appears to hold consistently across studies independently of demographic variables or clinical status. The studies that disagreed

with this finding used measurement techniques that were less valid or reliable (Akbağ & İmamoğlu, 2010; Blissett et al., 2005).

#### *General limitations of the research reviewed*

Well-worn criticisms of psychological research include that the bulk of it is cross-sectional, uses nonrepresentative populations (including students), and is based on self-report. These criticisms are worth emphasising again. No longitudinal studies of shame were found in relation to the attachment paradigm, so it is not possible to draw conclusions about the causal relationship between attachment-related anxiety and shame, or to make sense of shame in relation to Bowlby, Kaufman and others' theories about early development. Although time-consuming, these kinds of study are absolutely vital to the kind of assertions that psychologists would like to be able to make about human development, and the kind of advice that they would like to give to parents and those in relationships.

Self-report has its limitations as a methodology, as explained above in relation to dismissingness, and in the Introduction in relation to the discrepancies between the AAI and questionnaire measures of attachment. The validity of self-report measurements is limited by the narrow range of their enquiry and the possibility of adapting responses to say what one thinks the researcher wants to hear. Future research would do well to carefully incorporate multidimensional measurements of attachment and shame, including observation of behaviour and more detailed measures of emotional responses, that would add depth to the concepts of fearful attachment styles and attachment-related anxiety.

### *Conclusions and clinical implications*

The research reviewed here suggests that understanding how shame-prone individuals interpret and remember their experiences in intimate relationships is important, as is the expectations that these working models create about future relationships. Such working models may be the crucibles in which a person's emotional temperament and the treatment they received as children came together to create an enduring sense of shame. Future research might explore excessive shame in relation to these developmental trajectories, particularly those that begin with neglecting or unreliable parenting.

It would be informative to investigate the processes, behaviours and experiences that link fearful or preoccupied attachments to shame in more detail. Many studies have been done with measures of specific parenting behaviours, such as control or expressions of warmth and praise. These studies have consistently shown shame to be related to recalled parenting that is low in warmth and high in control or overprotectiveness (Gerlsma, Das, & Emmelkamp, 1993; Gilbert & Gerlsma, 1999; Harris & Curtin, 2002; Lutwak & Ferrari, 1997; MacDermott, Gullone, Allen, King, & Tonge, 2010). Studies that have observed children and their parents on problem-solving tasks also find that children's behavioural expressions of shame are related to a type of authoritarian parenting that is low in warmth and high in control, involving direct negative feedback or criticism (Alessandri & Lewis, 1993, 1996; Mills, 2003). Shame may be cultivated by demanding and directive parents who insist on obedience from their children, show little warmth or care, and may themselves be ashamed (Mills, 2003). An understanding of the specific relationships and practices that lead to shame-proneness through attachment representations remains a relatively new area of research, but could inform our understanding of development and attachment. Future

studies might profitably draw on observational studies of parenting, or studies of recalled parenting practices, while also using attachment classifications to understand how these experiences of parenting are represented and understood by the individual.

However, being mistreated is not sufficient to create shame and research around the concept of “resilience” has demonstrated that some people go through traumatic early experiences only to bounce back while others struggle (Feinauer, Hilton, & Callahan, 2003). Many other variables such as child temperament, developmental progress or delay, living conditions and adverse experiences are likely to be important in modelling the trajectory towards shame-proneness. This review neglected research relating to self-criticism, perfectionism, or histories of child abuse, but these are consistently linked to shame and an important part of the developmental story.

The results suggest that professionals delivering talking therapies should continue to focus on social skills and models of relating to others as a way of tackling persistent shame and not just core beliefs about one’s worthlessness. The negative view of themselves that individuals with high shame hold may be specifically related to intimate relationships. Exploring the roots of their experience of shame in early relationships and current close bonds may be valuable to the process of formulating and understanding the triggers of persistent shame. The attachment categories themselves provide descriptions of relational styles that may helpfully inform therapeutic questions in talking therapies.

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## **Part 2: Empirical Paper**

### **Changing the meaning of shameful memories through compassionate meditation: A mixed methods study**

## Abstract

**Aims:** People who feel strongly ashamed about past events are at risk of poorer mental health. Research into imagery and meditation suggests that they may benefit from taking a more nurturing and comforting perspective on their memories. A mixed-methods study was designed to investigate the effectiveness and qualities of a brief compassionate meditation for reducing the shame and self-blame caused by a distressing memory.

**Method:** Fifty-seven students completed a one-off experimental session, filling out measures of depression, shame-proneness, trait self-compassion and their recollections of being parented. They were guided through a brief compassionate meditation exercise and used it to reconsider a personal memory that made them feel ashamed, before problem-solving about their distress at the time of the event. Cognitive and affective change was measured before and after the meditation, and participants' qualitative feedback was collected.

**Results:** The compassionate meditation reliably reduced shame, self-blame and negative affect, and promoted positive affect. The qualitative analysis suggested that the most effective meditations were characterised by mindful awareness of negative thoughts, comforting forgiveness and a sense that one did not have to suffer alone. Only depression was found to affect participants' ability to engage in the meditation, but did not preclude improvement. Participants with greater reductions in shame thought of more ways that their distress could have been reduced at the time.

**Conclusions:** The results point to the value of cultivating compassion through meditation to deal with shameful states, particularly when the meditations are characterised by mindful awareness, reappraisal of blame, and nurturing comfort. Suggestions for research and clinical practice are discussed.

## Introduction

The root of shame is an experience of ourselves as hateful in the eyes of others, a fear of being scorned and rejected for our faults. It is commonly accompanied by rumination about unattractiveness or stupidity, a vigilance for social putdowns and criticism, and a desire to submit, hide or escape (Andrews, 1998; Gilbert, 1998; Tangney et al., 1992). This state can follow the experience of being actively humiliated or victimised by other people, but it can also follow a failure to meet personal standards (Gilbert, 1998; McGregor & Elliot, 2005).

In stark contrast, compassion is an “open-hearted” feeling, arising when we witness another’s suffering (or our own) and are motivated to care for them or to alleviate their pain (Goetz, Keltner, & Simon-Thomas, 2010; Neff & Lamb, 2009). Unlike shame, compassion is associated with feeling tender, warm and nonjudgemental towards others and ourselves (Batson, Fultz, & Schoenrade, 1987). Being victimised or failing at a valued task can cause emotional shame and suffering. If shame is the expectation of rejection by others, then compassion is the experience of forgiveness and social integration.

The aim of this research study was to explore whether cultivating feelings of compassion towards oneself through meditation would reduce the thoughts and emotions that accompany state shame. The central contention was that, following an experience of humiliation or failure, compassion would encourage an open-hearted and soothing approach to emotional pain, rather than the anxious avoidance and angry self-attacks of shame.

It should be noted that, in this paper, shame and compassion are treated as distinct affective states with their own emotional and cognitive qualities. However, this is not beyond dispute. Reviews have competently addressed the controversies

surrounding the distinction of compassion from other emotions such as empathy, love or pity (Goetz et al., 2010), and the distinction of shame from guilt or other negative affects (Gilbert & Andrews, 1998; Tangney et al., 1996).

### *The effect of shame and compassion on mental wellbeing*

Developing interventions for shame is important because enduring shame has a well-documented relationship to poor mental health. Excessive shame is associated with depression and can be an indicator of its severity (Andrews, Qian, & Valentine, 2002; Gilbert, 2000; D. W. Harder, Cutler, & Rockart, 1992; Tangney et al., 1992). Shame is a maintaining factor in posttraumatic stress disorder (PTSD; Lee, Scragg, & Turner, 2001), being associated with a subset of clients who do not respond to the exposure therapies that can reduce flashbacks for many others (Grunnert, Smucker, Weis, & Rusch, 2003). Shame has also been linked to social anxiety (Gilbert, 2000), persistent drug and alcohol addictions (O'Connor, Berry, Inaba, Weiss, & Morrison, 1994; Potter-Efron, 2002) and eating disorders (Andrews, 1997; Burney & Irwin, 2000).

By contrast, increased self-compassion on self-report measures has been associated with reduced self-criticism and depression, and increased positive affect, curiosity, optimism, life satisfaction and agreeableness (Neff, 2003; Neff, Kirkpatrick, & Rude, 2007; Neff, Rude, & Kirkpatrick, 2007). In a factor analytic study of students' moods, Gilbert et al. (2008) found that a specific type of positive affect that feels safe and soothing (rather than activated or exciting) was closely associated with lower levels of depression, anxiety and self-criticism. Thus, compassion has been empirically linked to good mental health, while shame is psychologically toxic.

*Using imagery exercises or meditation to cultivate compassion*

We still need to understand how compassion might be cultivated. Research has consistently found that mental images evoke stronger and more powerful emotions than thinking in words alone (Holmes & Mathews, 2010). On the one hand, this property of mental imagery can result in unhelpful traps. Intrusive images of feared situations have been linked to the maintenance of a number of anxiety disorders, including PTSD, obsessive-compulsive disorder, and social phobia (Brewin & Holmes, 2003; de Silva, 1986; Hackmann, Clark, & McManus, 2000). On the other hand, imagery techniques can be powerful tools for cultivating positive emotions like compassion. It may be, for people suffering from a “heart-head lag” (i.e., knowing intellectually that their thinking is unhelpful, but nonetheless feeling it to be true; Lee, 2005), that mental imagery may shift the emphasis away from rational thinking that has become stuck, or used as a way of avoiding painful topics (Arntz & Weertman, 1999).

There is a long history in Buddhism (and other spiritual traditions) of cultivating compassion for suffering through meditations involving imagery or the contemplation of bodily sensations (Ringu Tulku & Mullen, 2005). Over the last two decades concepts and exercises that involve mindful meditations or the cultivation of self-compassion have been incorporated into Western models of clinical psychology (e.g., Neff & Lamb, 2009; Segal, Williams, & Teasdale, 2002). These meditation practices have found common ground with work on “imagery rescripting” that was developed in relation to trauma, childhood abuse and depression (e.g., Arntz & Weertman, 1999; Brewin et al., 2009). The common element in many of these approaches is that they encourage people to rest their attention completely on moment-to-moment emotional experiences with equanimity and then to use mental imagery to cultivate more nurturing emotions

(Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008).

To date there have been relatively few studies of such compassionate imagery interventions, or attempts to separate out the helpful qualities of them, including mindfulness (Gilbert & Irons, 2004). What research there is supports the idea that using imagery or meditation is therapeutic, particularly for people who tend to be ashamed or self-attacking, and for those who do not benefit from reasoned challenges to their self-criticism. For example, Gilbert and Procter (2006) ran a 12-week group intervention for day care attendees with long-term and complex difficulties. They found that the sessions, which included compassionate meditation exercises, reduced depression, anxiety, self-criticism, shame, inferiority and submissive behaviour. Fredrickson, Cohn, Coffey, Pek and Finkel (2008) ran a six-week group-based intervention based around meditations on the qualities of loving-kindness. In their sample of 139 working adults, practising this kind of meditation led to increased daily experience of a range of positive emotions, including joy, contentment, hope and gratitude, and less depression. Other studies have shown outcomes for the use of imagery or mindfulness that are consistent with these findings (Brewin et al., 2009; Gilbert & Irons, 2004; Kelly, Zuroff, Foa, & Gilbert, 2010; Laithwaite et al., 2009; Leary, 1983; Mayhew & Gilbert, 2008; Mongrain, Chin, & Shapira, 2010; Pace et al., 2009; Peters, Flink, Boersma, & Linton, 2010; Wheatley et al., 2007).

#### *Individual differences in the ability to cultivate compassion*

Although ashamed clients are the ones who most stand to benefit from cultivating compassion, shameful feelings make it especially hard for someone to feel soothed and calm. Gilbert and Procter (2006) found that individuals classified as self-critics found it easy to generate powerfully hostile self-critical images, but experienced difficulty in

generating warm or supportive images, and that this difficulty contributed to their depressive symptoms. Similarly, Rockliff, Gilbert, McEwan, Lightman and Glover (2008) found that individuals with greater self-criticism responded less to a compassionate imagery technique.

While exploring the overall utility of compassionate meditations, the current research sought to contribute to our understanding of the individual differences that might increase people's difficulty in generating compassionate states. In addition to an individual's overall shame-proneness and their general tendency towards self-compassion, two further variables were examined: authoritarian parenting in childhood and current depression.

#### *Experiences of authoritarian parenting*

Commonly, parenting is conceptualised in terms of two dimensions relating to parental warmth or responsiveness and parental control or demandingness (Maccoby & Martin, 1983). Warmth refers to the ability of the parents to build an affectionate relationship with their children and to provide reassurance during times of distress (Soenens et al., 2005). Control refers to setting boundaries on acceptable behaviour and teaching self-control.

Research evidences a link between enduring adult shame and childhood experiences of parents who lacked warmth and were shaming, controlling or critical (Gilbert & Gerlsma, 1999). However, discrepancies remain over whether a lack of warmth and excessive control are necessary or sufficient for trait shame. Shame may follow an experience of a cold and aloof parent, emotionally misattuned to their child's emotions and thus be caused by a lack of warmth (Lewis, 1971). Alternatively, shame may be a failure to develop independence and competence in the face of high parental expectations or direct disapproval and criticism, and thus be a problem of autonomy

(Epstein, 1980; Erikson, 1993; Goldberg, 1988). It may require both (Alessandri & Lewis, 1996). It remains to be seen whether there is a particular style of parenting that leads to shame-proneness that can be described in terms of these dimensions.

### *Depression*

Enduring depression or low mood commonly results in poorer concentration, blunted enjoyment or emotional numbness, and a tendency to recall memories in an overgeneral and negative way (Brewin, Reynolds, & Tata, 1999). Because concentration, experiencing positive affects, and drawing on positive associations are part of a helpful compassionate meditation, it was expected that depression would make undertaking compassionate meditations more difficult and less rewarding.

### *Compassion and problem-solving*

In addition to exploring individual differences that may influence the effectiveness of compassionate meditations, the current research sought to explore the effect of compassion on problem-solving. There are some questions over how compassion affects people's tendency to engage with their difficulties. Moderate self-criticism or *adaptive perfectionism* has its uses, in drawing our attention to our shortcomings, or in mobilising us to escape a social threat (Enns, Cox, & Clara, 2002; Van Vliet, 2008). Some people may fear that compassion is "letting oneself off the hook," and leads to complacency or overindulgence.

Considered in relation to shame, compassion seems unlikely to have this effect. State shame and self-criticism are paralysing. Shame makes people feel incapacitated and act in ways that are submissive, appeasing or avoidant (Gilbert, 2000; Wicker, Payne, & Morgan, 1983). Shame-prone individuals generate less effective solutions to common interpersonal problems and are less confident than guilt-prone individuals in

their ability to see them through (Covert, Tangney, Maddux, & Heleno, 2003). Therefore it seemed likely that encouraging people caught in shame to cultivate compassion would free them to think more flexibly and creatively about their problems.

### *Research aims and hypotheses*

In summary, this study explored three issues relating to compassionate meditations: their effectiveness in alleviating state shame, the individual differences that influence people's ability to engage with them, and their effect on problem-solving. A mixed methodology of quantitative and qualitative investigations was used.

The quantitative part of the study followed a repeated measures design and used correlation analyses. The hypotheses relating to quantitative data were as follows:

H1. The ability of individuals to generate images imbued with compassionate qualities will be positively associated with: (a) recalled parental styles characterised by less control and more care and (b) fewer depressive symptoms, as well as (c) greater trait self-compassion and (d) a reduced tendency towards feeling shame.

H2. A compassionate meditation will be effective in reducing cognitive appraisals of shame and self-blame, reducing negative affect, and increasing positive affect.

H3. The overall effectiveness of the compassionate meditation in reducing shame will be associated with the meditation having more compassionate qualities and with the baseline characteristics in the same way as specified in the first hypothesis.

H4. Greater reductions in shame and more compassionate images will be positively associated with more flexible problem-solving about shameful events.

The main research question for the qualitative analysis was: How do people experience compassionate meditations or imagery exercises? This broke down into three further questions, addressing different levels of abstraction: What feelings, thoughts or sensations characterised people's experiences (either helpful or unhelpful)? How do people reflect on and make sense of these experiences? What is their overall evaluation of compassionate meditation exercises?

## **Method**

### *Power analysis*

It was difficult to find a study that could provide an estimate of effect size. The few imagery studies in this area were principally studies of group therapy (Gilbert & Procter, 2006) or other long-term interventions (Brewin et al., 2009; Kelly, Zuroff, & Shapira, 2009), while others did not report the necessary statistics (Leary, Tate, Adams, Batts Allen, & Hancock, 2007).

Peters, Flink, Boersma and Linton (2010) asked students to write about either their best possible self or a normal day for 15 minutes and to imagine it for a further five. They measured mood using the Positive and Negative Affect Scale (Watson, Clark, & Tellegen, 1988), which is also used in this study. Students in the ideal-self condition reported significantly more positive affect following the session ( $\eta^2 = .21$ ). Using G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007), the required sample size was estimated at 100 for a multiple regression. The convention for regression is ten to twenty independent observations for each variable. The regression analysis that was

suggested by Hypothesis One used five variables, giving a sample size absolute minimum of 50.

### *Sample*

Participants were 57 students (41 female and 16 male) from the student population at University College London. They were aged between 18 and 47 ( $M = 26.18$  years,  $SD = 6.75$ ). Fluent English was required for participation, but there were no other exclusion criteria.

Of the participants, 42.2% identified themselves as White British, 35.6% as from another White background (predominantly European), 4.4% as Asian British, 11.1% as from another Asian background, and 6.7% as of mixed heritage. English was a first language for 57.8% of participants, representative of the large number of students who travel to study at University College London. The majority of participants (65.1%) identified themselves as having no religion, 20.9% as Christian, 7.0% as Buddhist, 4.7% as Hindu, and 2.3% as Jewish.

Participants were recruited via an email that was circulated to all students at University College London, or with leaflets left in the waiting area of the Student Psychology Service. The proportion recruited from each source was not recorded. Copies of the email and leaflet used are available in Appendix B. A prize draw for three electronic book vouchers was used as an incentive for participation in the study.

### *Ethical considerations*

Shame memories can be painful emotional experiences. To moderate the risk of causing undue distress, particular effort was made to emphasise confidentiality, the right to withdraw, and the possibility of feeling strong emotions at the beginning of the research session (a copy of the information and consent sheets are available in

Appendix C). Aside from the indication that the memory should relate to shame, no particular type of disclosure was requested from participants. It was also emphasised that, once consent had been given, withdrawing from the experiment would not preclude being entered into the prize draw.

Plans were made that, if any participant became considerably distressed during the course of the experiment, the researcher would be proactive in discontinuing the protocol and suggesting that the participant stay until they felt safe and ready to leave. A relaxation exercise was designed to assist in such an event. Information on sources of help or support was prepared.

Ethical approval for the study was granted by the committee at University College London. A copy of the approval is available in Appendix D.

#### *Researcher's background and perspectives*

The researcher who collected and analysed the data in this study was a 28-year-old White, male third-year clinical psychology trainee with no religious affiliation. At the time of conducting the analyses, he was familiar with literature on mindfulness, compassion and attachment, and he expected these processes to influence the way that people managed their shameful memories. He took an integrative approach to psychological therapy and had a bias towards seeing the research session as a one-off therapeutic appointment, with an implied relationship between “therapist” and “client.” He was trained by Dr Deborah Lee, a founding member of the Compassionate Mind Foundation, in delivering the compassionate script.

### *Quantitative measures*

*Center for Epidemiologic Studies Depression Scale* (CESD; Radloff, 1977). This is a 20-item depression scale designed specifically for nonpsychiatric populations, asking about feelings of sadness and happiness during the last week.

The scale has been used extensively in research. A number of studies are available that report on its criterion validity for distinguishing cases of depression (Beekman et al., 1997; Shinar et al., 1986) and convergent validity with other self-report measures of depression, anxiety and fatigue (Hann, Winter, & Jacobsen, 1999; Milete, Hudson, Baron, & Thombs, 2010). The scale has been validated in student populations (Radloff, 1991).

Radloff (1977) reported an internal consistency of .84. In the current study, the Cronbach's alpha was .89. According to the criteria of de Vaus (2002), two items had unacceptably low corrected item-total correlations (i.e., below .300). These were "My sleep was restless" (.143), and "I did not feel like eating; my appetite was poor" (.173). It may be that these items do not discriminate depression well in an industrious student population, so these were removed, leaving an 18-item scale with scores between 0 and 54. The Cronbach's alpha for this adapted CESD (CESD-A) was .90.

*Parental Bonding Inventory* (PBI; Parker, Tupling, & Brown, 1979). The PBI is a self-report questionnaire that asks about respondents' memories of their parents in their first sixteen years. Two subscales measure perceptions of control (e.g., "let me decide things for myself," "tried to make me feel dependent on him/her") and care (e.g., "was affectionate to me," "made me feel I wasn't wanted"). Two identical scales refer to mothers and fathers separately. Responses are given on a four-point scale from *strongly agree* to *strongly disagree*.

The satisfactory reliability and validity of the measure have been documented (Wilhelm, Niven, Parker, & Hadzi-Pavlovic, 2005), including test-retest reliability ( $r = .76$  for care and  $r = .63$  for overprotection), split-half reliability ( $r = .88$  and  $.74$ ) and interrater reliability ( $r = .85$  and  $.69$ ). Its measurements also seem to be fairly independent of mood (Gerlsma et al., 1993).

In the current study, high Cronbach alpha coefficients were found for Maternal Care (.93), Maternal Control (.88), Paternal Care (.93) and Paternal Control (.90).

*Experience of Shame Scale* (ESS; Andrews et al., 2002). This 25-item questionnaire assesses the frequency of shame experiences in the last year across three domains: characterological (e.g., "Have you felt ashamed of the sort of person you are?"), behavioural (e.g., "Have you tried to cover up or conceal things you felt ashamed of having done?"), and bodily (e.g., "Have you avoided looking at yourself in the mirror?"). Each item is rated on a four-point scale ranging from *not at all* to *very much*.

The scale was designed to be a prospective measure of the relationship of shame to psychopathology and was based on existing interview measures. Andrews, Qian and Valentine (2002) found the ESS to have an internal consistency coefficient of .92 and test-retest reliability over eleven weeks of .83. The scale made a unique contribution to predicting variance in depressive symptoms over that period. Andrews et al. reported convergent validity with the Test of Self-Conscious Affect (Tangney et al., 1989), another well-established shame measure. In the current study, the Cronbach alpha for the scale was high (.92).

*Self-compassion Scale* (SCS; Neff, 2003). This 26-item questionnaire was designed to test the concept of self-compassion as an enduring trait. Subscales concern self-

kindness (e.g., “When I’m going through a very hard time, I give myself the caring and tenderness I need”), common humanity (e.g., “When I’m down and out, I remind myself that there are lots of other people in the world feeling like I am”), mindfulness (e.g., “When something painful happens I try to take a balanced view of the situation”), self-judgement (e.g., “I’m intolerant and impatient towards those aspects of my personality I don’t like”), isolation (e.g., “When I’m feeling down I tend to feel like most other people are probably happier than I am”), and overidentification with feelings (e.g., “When something painful happens I tend to blow the incident out of proportion”). Responses are given on a five-point scale from *almost never* to *almost always*. Items relating to Self-Judgment, Isolation and Overidentification are reverse scored.

Neff (2003) reported an internal consistency of .92 and test-retest reliability of .93 over a three-week interval in sizeable student samples. A factor analysis showed that the six subscales were reliably distinguishable and could be explained by a single higher-order factor. The scale correlates positively with other measures of mental wellbeing and negatively with established measures of depression, anxiety and rumination (Neff, 2003; Neff, Kirkpatrick, et al., 2007; Neff, Rude, et al., 2007), suggesting good construct validity. The Cronbach alpha for the scale in the present study was .91.

*Positive and Negative Affect Scale* (PANAS; Watson et al., 1988). This scale lists twenty emotions: ten positive and ten negative. Positive affect (PA) is described by items like *alert*, *inspired*, *strong* and *proud*. Negative affect (NA) is described by items like *irritable*, *upset*, *ashamed* and *scared*. The scale measures the presence or absence of highly activated positive engagement and highly activated negative engagement, not happiness and sadness (Crawford & Henry, 2004).

Reported intercorrelations between PA and NA range from  $-.12$  (Watson et al., 1988) to  $-.30$  (Crawford & Henry, 2004). Although this indicates a degree of covariance, studies have confirmed the basic two-factor structure (Watson, Wiese, Vaidya, & Tellegen, 1999). The scale has been validated against measures of depression and, to a lesser extent, anxiety, while Cronbach alphas have been reported as  $.89$  (PA) and  $.85$  (NA), representing adequate internal reliability (Crawford & Henry, 2004).

In this study, participants were asked to indicate how they were feeling “right now, as you are thinking about the shameful memory” by rating each emotion on a five-point scale from *very slightly or not at all* to *extremely*. The Cronbach alphas for each scale were calculated for measures taken at two time points and ranged from  $.77$  to  $.94$ .

In addition to these standardised questionnaires, two further measures were constructed for the purposes of this study. Copies of both scales are presented in Appendix E.

*Compassionate qualities of the meditation.* A six-item scale was designed to ask about the qualities of compassion that characterised participants’ meditations. Three concepts from Neff’s Self-Compassion Scale were used (self-kindness vs. self-judgement, common humanity vs. isolation, and mindfulness vs. overidentification). In addition, P. Gilbert (personal communication, 25 August 2010) suggested including measures of power, warmth and vividness. The resulting six concepts appeared congruent with descriptions of compassion in research (e.g., Goetz et al., 2010; Neff & Lamb, 2009). They were presented in written format to participants with a single question relating to each, such as: “How kind and caring did the meditation make you feel towards yourself?” or “How much did the meditation allow you to take a balanced perspective on

your feelings?" Responses were given on a seven-point Likert scale from one (*not at all*) to seven (*very much so*). Scores ranged from six to 42, with higher scores indicating meditations with more compassionate qualities.

*Cognitive appraisals of the shameful memory.* A six-item scale was devised to people's thoughts about the shamefulness of their memory. Evaluations were given on a seven-point Likert scale identical to that used to enquire about the compassionate qualities of the image. Participants were asked for a global evaluation of shame ("How ashamed does the event make you feel about yourself?") and to what extent the event was caused by something they did, their character, other people and bad luck, as well as the extent to which the event was their fault. The format of these questions was derived from Leary et al. (2007) and was understood to be conceptually consistent with the cognitive model of shame explained by Tangney et al. (1992).

#### *Procedure for data collection*

At the beginning of the research session, participants were given a verbal explanation of the protocol and asked to read an information sheet before their consent was sought. As stated in the Ethical Considerations, consent was taken carefully, with the aim of setting up a relationship in which people felt comfortable to make disclosures.

Once consent was taken, participants completed the baseline questionnaires in a set order: CESD-A, PBI, ESS and SCS. Then the imagery meditation was outlined in brief. Four points were reinforced:

1. Participants could expect their mind to be very busy when they closed their eyes and it was likely to be hard to stay completely focussed.

2. The meditation aimed to cultivate a feeling state and was not a thinking exercise. Participants were encouraged to avoid an excessively focussed or selective attention and to allow thoughts to “come and go.”
3. They should expect any mental images to be relatively fleeing and indistinct.
4. They need not respond to the researcher during the meditation.

*First meditation: Generating associations with compassion*

Participants were asked what the word *compassion* meant to them. The researcher listened and added explanations to ensure that the following two conceptual points had been covered: (a) that compassion is commonly associated with feelings of warmth or kindness, safety, nonjudgement, openness and empathy towards suffering, and (b) that compassion might feel like being in the presence of someone caring, or caring about someone else.

The participant was then guided through an imagery-based meditation lasting approximately ten minutes that followed a standardised script. Several sources were edited together to create the script, including an exercise from Kelly, Zuroff, Foa and Gilbert (2010), a handout written by Gilbert (2007), and a research protocol from P. Gilbert (personal communication, 25 August 2010). The script was practised and adapted with the help of one of the researcher supervisors (DL).

The stages of the script were as follows:

1. Participants were guided to seat themselves comfortably and to close their eyes.
2. Their attention was directed in turn towards their bodily sensations, their current thoughts, and their breathing over the course of several minutes. It was emphasised that they should try neither to hold on to sensations and thoughts, nor to shut them out, but simply to observe what was happening and to “gently

bring themselves back to the moment” with their breathing if their mind wandered.

3. It was stated that “everyone has some qualities of compassion” and that this was a chance to explore them in oneself, without judging whether they were “good enough.”
4. For the remainder of the meditation, participants were encouraged to explore what came to mind in relation to four qualities of compassion: warmth/kindness, wisdom, strength and a desire to care for others who were suffering. Each quality was considered in turn and the participant was prompted to explore how they might appear or feel when they embodied the quality (including their tone of voice, speech content, posture, facial expression and physical sensations), as well as any images, places, colours or smells that came to mind and helped them to explore that quality.

#### *Collecting qualitative feedback*

As soon as the participants opened their eyes at the end of the meditation, they were asked “How did you find that?” and their responses were audio recorded. A standard prompt was used to ask people for elaboration or further information: “Did you notice any other images, sensations, feelings or thoughts while you were doing that?” No time limit was placed on people’s responses; the researcher ended the audio recording when no further information was offered. The participants were then given the measure of the compassionate qualities of the meditation.

#### *Recalling a shameful memory*

Participants were then asked about their understanding of shame. The researcher listened and added explanations to ensure that the following two conceptual points had

been covered: (a) shame involves a feeling that the whole self is defective or bad in some way, and (b) shame is often experienced in relation to interpersonal situations, accompanied by a worry about other people's negative appraisals of us. This explanation of shame was informed by several sources (del Rosario & White, 2006; Gilbert, 1998; Tangney et al., 1996). The participants were asked if the explanation of shame had brought to mind any specific experiences. The researcher used standard prompts to elicit details about the thoughts and feelings that had accompanied the experience, as well as concrete details about when it had happened, with whom and in what sequence of events. Following this discussion, participants completed two measures: the measure of their cognitive appraisals of the shameful memory and the PANAS.

*Second meditation: Bringing compassion to the shameful memory*

Participants were introduced to and then guided through a second meditation lasting approximately ten minutes. The meditation began by repeating the first in a condensed form. Participants were then prompted to bring to mind their shame-related memory, including who was there, what it looked or sounded like, and how it had made them feel or think. They were reminded to continue following their established breathing rhythm and asked to try to "look into the memory from the standpoint of your compassionate self." They were encouraged to wish themselves to be soothed or protected in that moment, accepting the feelings and thoughts that they had felt, and seeing their response in the context of their life as a whole.

As before, participants' responses to the meditation were audio recorded immediately upon finishing and the same standardised prompts for elaboration were used. Following verbal feedback, the participants were asked to fill in three measures: the PANAS, qualities of the image, and their cognitive appraisals of the memory.

### *Problem-solving*

Lastly, participants were introduced to a problem-solving exercise. They were told that they would be given two minutes to generate as many ideas as possible that might have made the situation less distressing or easier for them, including their actions, actions by others, or changes to the situation. A tally was taken for each successive solution suggested. Each utterance was recorded as one solution, unless the solution was a verbatim repeat of one already offered. The solutions were not judged for their breadth or likelihood of success. Participants were then debriefed from the experimental session.

### *Procedure for qualitative data analysis*

The structure of the qualitative analysis used the methods for a general thematic analysis outlined by Braun and Clarke (2006). These were suited to the data, which did not include enough detail from each participant for a narrative or discourse-based approach, but it still contained a variety of responses that it was important not to obscure by means of an a priori content analysis.

Feedback on the two meditations was analysed separately because they represented quite different tasks, one inviting the exploration of one's associations with compassion and the other requiring a more effortful contact with a distressing experience. Following verbatim transcription, the transcripts were read several times to encourage familiarity with the data. Then the smallest units of meaning relevant to the research questions were identified and coded. These semantic units were thought of as corresponding to the three main research questions for the qualitative analysis (outlined in the Introduction). They included: feelings, thoughts or sensations that occurred during the meditation, associations or memories, metacognitive reflections, and feedback on

the experience as a whole. Despite this coding strategy, no attempt was made at this stage to reduce the complexity of the data.

Once these codes were generated, they were clustered into potential themes. The criteria for establishing a theme was that the codes in it expressed a similar idea, and this idea related to one of the research questions about what the meditation had been like (Braun & Clarke, 2006). Consequently, there was an emphasis on finding ideas that had been elaborated in different ways by different people, and not simply on finding the most numerous responses.

Candidate themes were checked back against the codes and the original quotes to see whether the theme was both “internally homogenous” (i.e., cohering together meaningfully) and “externally heterogeneous” (i.e., clearly distinct from others), as outlined by Patton (2002). As part of this process, themes were collapsed into each other, while others were reorganised, until the thematic map provided a concise but inclusive description of the data. At the highest level of abstraction, domains were established that explained the content of themes in relation to the research questions. Thus, the *form* of the analysis was closely guided at all stages by the phrasing of the research questions, but a concerted effort was made to represent the *content* of personal meanings from the whole data set.

As a final step, the relationship of the themes to the original data was audited independently by one of the research supervisors (PS). On the basis of this auditing, themes relating to mixed experiences of compassion in the first meditation were adjusted to place more emphasis on anger or contempt that still conflicted with people’s experiences of compassion. No further changes were made.

## Results

### *Quantitative analysis*

Descriptive statistics for the baseline measures are shown in Table 1. The average score per item on the CESD-A of 0.83 in this study is closely comparable to other studies with student populations (e.g., Cheung, Gilbert, & Irons, 2004). Using thresholds proposed by Husani, Neff, Harrington, Hughes and Stone (1980) and Barnes and Prosen (1984), 21.1% of the current sample could be classified as having “probable depression,” 19.3% as “possible cases” and 59.6% as “asymptomatic.”

The mean of shame scores (ESS) is closely comparable to that found by Andrews, Qian and Valentine (2002) of 55.58 ( $SD = 13.95$ ) in a sample of 163 students. The self-compassion scores (SCS) were similar to those found by Leary et al. (2007) and Neff (2003) in large student samples. Using a different scoring system, they obtained means of 18.9 and 18.26 respectively, while the mean in this study was 18.26. Ratings of the PBI were also similar to those found in other community studies (Carter, Sbrocco, Lewis, & Friedman, 2001; Mackinnon, Henderson, Scott, & Duncan-Jones, 1989).

Table 1

*Descriptive Statistics for the Baseline Measures and their Subscales.*

	Possible range	Sampled range	Mean	SD
<b>CESD-A</b>	<b>0–54</b>	<b>0–42</b>	<b>13.47</b>	<b>9.43</b>
<b>PBI Care</b>	<b>0–72</b>	<b>15–72</b>	<b>48.55</b>	<b>14.77</b>
Maternal	0–36	2–36	26.92	8.40
Paternal	0–36	0–36	21.65	9.43
<b>PBI Control</b>	<b>0–78</b>	<b>0–63</b>	<b>21.32</b>	<b>14.33</b>
Maternal	0–39	0–33	11.32	8.23
Paternal	0–39	0–31	9.79	8.00
<b>ESS</b>	<b>25–100</b>	<b>28–94</b>	<b>59.07</b>	<b>14.57</b>
Habits	3–12	3–12	7.30	2.63
Manner	3–12	3–12	6.58	2.74
Character	3–12	3–12	6.24	2.42
Ability	3–12	3–12	6.33	2.56
Doing something wrong	3–12	4–12	8.58	2.21
Saying something stupid	3–12	3–12	7.54	2.16
Failure	3–12	3–12	7.65	2.78
Body	4–16	4–16	8.85	3.84
<b>SCS</b>	<b>25–130</b>	<b>50–116</b>	<b>78.49</b>	<b>17.98</b>
Shared humanity	4–20	5–20	12.86	3.701
Mindfulness	4–20	8–20	13.81	3.114
Self-kindness	5–25	6–25	14.19	4.502
Isolation	4–20	5–21	12.47	4.748
Overidentification	4–20	5–20	12.05	3.662
Self-judgement	5–25	5–23	13.11	4.39

*Note.* CESD-A = Center for Epidemiologic Studies Depression Scale (adapted 18-item version); PBI = Parental Bonding Inventory (Care and Control subscales); ESS = Experience of Shame Subscale; SCS = Self-compassion Scale.

### *Reliability of the scales measuring Compassionate Qualities*

The scale measuring the Compassionate Qualities of the first meditation had a reasonable Cronbach alpha (.592), but the corrected item-total correlation for the item asking about a sense of shared humanity was low (.203), falling below the .300 threshold suggested by de Vaus (2002). The qualitative analysis confirmed that shared humanity had not been an elaborated theme of people's experience of the first meditation, so the item was removed from the scale. The reliability of this new five-item Qualities scale relating to the first meditation was greatly improved (.828). Contrastingly, the scale measuring compassionate qualities in the *second* meditation had a coefficient of .895 and no item-total correlations were below .579, so this scale was left unchanged.

### *Testing Hypothesis One: The effect of baseline characteristics on the quality of the first meditation*

The first hypothesis predicted that participants' ability to engage in the first compassionate meditation would be influenced by their mood, recalled upbringing, shame-proneness and self-compassion. Kolmogorov-Smirnov tests revealed that many of the baseline and other variables were not normally distributed (CESD-A, PBI Care, SCS, the compassionate qualities of both meditations, PANAS positive subscale premeditation, PANAS negative subscale postmeditation and Problem-solving frequencies). Visual inspection confirmed that many of the variables were considerably skewed or multimodal, despite strong internal reliabilities. These problems were not sufficiently rectified by transformations, including square root and logarithmic functions.

This raised the question of whether to continue with a regression (as had been planned). One-tailed nonparametric correlations were calculated between all of the

variables. The alpha level was set at .0033 to adjust for multiple comparisons. The results are displayed in Table 2.

Table 2

*Nonparametric Correlations Between Baseline Measures and the Compassionate Qualities of the First Meditation.*

	PBI Care	PBI Control	ESS	SCS	Qualities of first meditation
CESD-A	-.163	.374*	.582*	-.544*	-.389*
PBI Care		-.257	-.036	.232	.172
PBI Control			.310	-.374*	-.035
ESS				-.580*	-.163
SCS					.240

*Note.* CESD-A = Center for Epidemiologic Studies Depression Scale (adapted 18-item version); PBI = Parental Bonding Inventory (Care and Control subscales); ESS = Experience of Shame Scale; SCS = Self-compassion Scale. \*  $p < 0.0033$ .

In support of Hypothesis One, depression was negatively associated with the Compassionate Qualities of the first meditation, meaning that participants with more signs of depression experienced less compassionate meditations. This was a medium to large effect size (i.e.,  $>.3$ ) according to the criteria of Murphy, Myors and Wolach (2009). In partial support of Hypothesis One, greater trait self-compassion was associated with more compassionate meditations, but this relationship was not significant. The relationships of the other variables to the meditation were weak, albeit in the expected directions. On the basis of these correlations, there was little justification for transforming the data and attempting to calculate a regression equation.

The correlations also suggest that recalling one's parents as being more controlling was significantly correlated with increased depression, while depression also had powerful relationships with increased shame in the last year and reduced trait self-compassion. Decreased self-compassion was associated with memories of one's parents as controlling and increased shame.

*Testing Hypothesis Two: Change in shame after the second meditation*

Tests were carried out to determine whether the second meditation was effective in remedying participants' reactions to their shameful memories.

Normality tests revealed that all of the shame-related appraisal variables both pre- and postmeditation were not normally distributed, being severely skewed or bimodal. Because only two of four PANAS subscales were also normally distributed, nonparametric one-tailed Wilcoxon matched-pairs tests were used (Table 3). This test was also used to detect any difference in the compassionate qualities of the two meditations (Table 4). For this family of tests, the alpha was corrected to .0033 to account for multiple comparisons.

Table 3

*Results of a Wilcoxon Matched-Pairs Test of Pre-to-Post Change in Attributions and Emotions Over the Course of the Second Meditation.*

	Mean pre (SD)	Mean post (SD)	Z	Effect size
Shamefulness of the memory	5.52 (1.44)	3.56 (1.44)	6.08*	.81
Attribution to others	3.91 (2.18)	3.16 (1.99)	3.43*	.45
Attribution to self	5.63 (1.77)	4.48 (1.74)	4.50*	.60
Attribution to luck	2.47 (1.97)	2.51 (1.95)	.18	
Attribution to own character	5.41 (1.49)	4.53 (1.70)	3.74*	.50
Attribution to own fault	5.26 (1.56)	3.88 (1.91)	5.16*	.68
Negative affect	24.22 (8.06)	15.36 (4.49)	6.32*	.84
Positive affect	21.65 (8.25)	26.90 (9.90)	4.61*	.61
Total affect	45.87 (11.63)	42.26 (10.59)	3.17*	.42

\*  $p < .0033$ .

Table 4

*Results of a Wilcoxon Matched-Pairs Test of Pre-to-Post Change in Attributions and Emotions Over the Course of the Second Meditation.*

	First meditation mean (SD)	Second meditation mean (SD)	Z	Sig.
Kindness	5.23 (1.27)	5.16 (1.39)	-.595	.55
Mindfulness	5.12 (1.12)	5.32 (1.37)	.838	.40
Powerfulness	5.45 (1.48)	5.39 (1.44)	-.211	.83
Warmth	5.44 (1.35)	5.25 (1.46)	-1.121	.26
Vividness	5.32 (1.53)	5.56 (1.34)	1.353	.18
Combined qualities	26.55 (5.22)	26.67 (5.92)	.630	.53

*Note.* Difference scores for the quality of shared humanity are not displayed, because it had been removed from the scores of the first meditation.

In relation to the second hypothesis, the meditation significantly reduced overall ratings of the shamefulness of the memory. The meditation also reduced the blame attributed to the self, one's own character, one's own fault, *and to others*. Attributions to luck did not change significantly. The same stringent alpha level of .0033 was used to determine significance. As can be seen from the final column of Table 3, the reductions in people's self-blame represented medium to large effect sizes. Reductions in shame were also reliable across the sample: 49 people reported lower shame scores following the meditation, five people did not change their scores, and three people reported an increase in shame scores of one point on the seven-point scale.

Following the testing of these cognitive changes, affective changes were tested. There was a significant reduction in negative affect after the meditation and a significant increase in positive affect, again with a medium to large effect size. The meditation was

more associated with reductions in negative affect than increases in positive. Interestingly, the overall level of affect reported was significantly lower following the second meditation. As with the change in self-blame, change in negative affect was reliable: 53 people reported less negative affect, one reported no change, and three people reported an increase in negative affect. Regarding positive affect, 40 people reported more positive affect, four reported no change, and 13 reported reductions.

In some contrast to the qualitative feedback, quantitative ratings of the difference between the two meditations were small and nonsignificant (Table 4). The small changes in ratings indicated that the second meditation prompted people to feel a greater sense of shared humanity in their experiences, as well as increased mindfulness and vividness, but less kindness, power and warmth.

*Testing Hypothesis Three: Factors influencing the extent of change in the second meditation*

Tests were conducted to determine whether the changes in people's shame at their memories were related to the characteristics measured by the baseline questionnaires or the qualities of their meditations. In order to do this, a new variable was constructed. It was made from scores of the four appraisals relating to self-blame (total shame, own fault, blaming character, and blaming self) and scores for positive and negative affect. In this way, it provided a brief measure of cognitive and affective change, with the emphasis on reduced self-blame.

To construct the variable, pre-to-post difference scores for all of the above scales were calculated. These difference scores were then converted to z scores to standardise their measurements. All of the z scores except those relating to change in positive affect were reflected around zero before being added together. Thus, on this new variable, higher scores represented greater *reductions* in negative affect and

aspects of self-blame, as well as *increases* in positive affect. The relevance of these measurements was supported by themes of forgiveness and positive affect from the qualitative analysis. The resulting variable was normally distributed ( $M = -.0004$ ,  $SD = 3.47$ , range =  $-6.97$ – $6.43$ ).

Nonparametric correlations were calculated between the new change variable and the baseline measures. The results are displayed in Table 5.

Table 5

*Nonparametric Correlations with Cognitive and Affective Change Resulting from the Second Meditation.*

	Change	Sig
CESD-A	.224	.047
PBI Care	-.221	.050
PBI Control	.279	.019
ESS	.271	.021
SCS	-.177	.095
Qualities of second meditation	.278	.018

*Note.* CESD-A = Center for Epidemiologic Studies Depression Scale (adapted 18-item version); PBI = Parental Bonding Inventory (Care and Control subscales); ESS = Experience of Shame Scale; SCS = Self-compassion Scale.

Hypothesis Three was not supported: None of the correlations were significant when corrected for multiple comparisons ( $\alpha = .008$ ). Contrary to hypothesis three, there was a tendency for change to be greater for people who were *more* depressed, *more* ashamed, *less* compassionate, and who recalled *less* care and *more* parental control.

Greater reductions in shame were also nonsignificantly associated with more compassionate images.

*Testing Hypothesis Four: The effect on problem-solving*

A final set of tests was used to determine whether, in relation to the fourth hypothesis, problem-solving frequencies showed any relationships to the qualities of the compassionate meditation, or to changes in appraisals and emotions. Two minutes proved to be adequate for people to think through the things that they would have changed and the majority of participants had exhausted their ideas before this time elapsed.

The problem-solving variable as a whole was not normally distributed, but the median frequency of four and the mean (3.91,  $SD = .18$ ) were close together. Nonparametric correlations were used. Problem-solving frequencies were not related significantly to the compassionate qualities of the meditation ( $r = -.09$ ). However, there was a significant correlation between increased problem-solving and greater pre-to-post change ( $r = .282, p = .02$ ).

*Qualitative analysis*

One participant's feedback was lost in the recording process. Tables 6 and 7 show the themes that were interpreted from the first and second meditations respectively, arrived at after analysing the remaining 56 participants' feedback. An example of the early stages of coding is included as Appendix F.

*First meditation*

The analysis of feedback on the first meditation generated a number of themes that were grouped under four domains (Table 6).

The first domain pertained to thoughts and feelings that had occurred to participants about their relationships with other people. The variation in the emotional content of these associations was organised under four different themes of feeling comfortable, looking after people, sharing sadness and more negative or mixed emotions.

A second related domain described associations that had not been based on people's relationships, but on more general imagery of relaxation and empowerment. The third domain grouped together participants' reflections on these thoughts, images and feelings, and the way that they had experienced them. The last domain related to feedback on research session itself, which appeared to contextualise the overall experience of the meditation.

Table 6

*Summary of Domains and Themes from the First Meditation.*

1. Connection and separation in relationships
  - 1.1 Feeling comfortable with people
  - 1.2 Looking after people
  - 1.3 Sharing sadness
  - 1.4 Powerlessness, guilt and anger
2. Emotion without imagery of relationships
  - 2.1 Relaxed and peaceful
  - 2.2 Confident and inspiring
3. Metacognitive reflections
  - 3.1 Thinking effortfully
  - 3.2 Wandering thoughts
  - 3.3 Should I be more compassionate?
4. Feedback on the meditation as a whole
  - 4.1 Novelty of the experience
  - 4.2 Relating to the script and the researcher
  - 4.3 Breathing

*1. Connection and separation in relationships*

Participants said that they had used the meditation to think about their relationships with other people, or that such associations had occurred to them. It is worth recalling that the script for the meditation contained many prompts on this subject. This domain represented a richly-elaborated feature of the sample's feedback, including pleasant associations of being with friends and family, or experiences of helping other people

who were upset, as well as recollections of sadness, powerlessness or anger in the presence of others.

*1.1 Feeling comfortable with people.* Participants drew on recollections of being with their family, friends and close acquaintances, when they had felt safe and accepted, or comforted and soothed by the presence others. The relationships were characterised by an enjoyable sense of “just being” without engaging in any directed activity. The relationships came to mind as thoughts and images, but also as an emotional warmth that dwelling on those memories had cultivated, or a physical sense of being in the company of a caring other.

I should explain why I got a bit emotional because I thought about my mother. She is a very compassionate person and I felt like I was hearing her voice and feeling her presence, so it felt good. [P6]

I saw a lot of places that I've been to with my friends, my family. I felt happy and warm and I felt good in general. I also felt a bit kind of moved at some moments and touched and I just... Sometimes I wanted to smile. It was all something really gentle and relaxing. [P45]

*1.2 Looking after people.* Participants recalled caring relationships in which they had confidently taken care of other people. These included times when someone they knew had been upset, but they hadn't felt overwhelmed or incapable of comforting them. Often the experience had led them to feeling closer to the other person. These comments had an empathic tone, indicating an awareness of the other person's mental state and why they might have become upset. Being able to take care of people or to

“cheer them up” made participants feel confident and capable and, again, provoked similar emotions or physical sensations during the meditation itself.

He was so upset. He was devastated and for him it was a huge thing because he had never been told off and he felt like he didn't have anyone around. And he didn't because he was very shy. So I spent the whole two days with him. He was very upset. So I sat in my room with him and I made him feel better and we were best friends after that. [P8]

Two weeks ago I gave my brother some advice [about a family matter]. I was trying to make him understand what it's like at those times, and I was trying to make him aware of that. And I thought I was going to be tough but I wasn't. I was very kind. And he cried because he didn't know that. He wasn't aware of that and he realised that it was going to be tough. I think I just knew I had to talk to him and say those things even though he's older, and I think I did the right thing. [P13]

*1.3 Sharing sadness.* Participants also described feelings of sadness in relation to being with other people, either because they had thoughts about being alone and cut off from others, or because they were empathising with another person's sadness, and this felt different to happiness or contentment. Some reflected on the absence of family and friends that they had separated from in order to come to university.

It was a mixed experience in that it was mainly warm and nice, but there was a little... I was conscious of a little glimmer of sadness. I don't know whether it's partly there's something quite nostalgic maybe, but also that I guess it's maybe to do with the sense of... suffering is sad, and maybe the kind of warm sadness. But I was very conscious that I wasn't feeling happy. It was very different to feeling happy. [P28]

When you were talking about people close to you and getting their compassion, a person who kept on coming to mind was my girlfriend who is at a different university and she's having a bit of a hard time making friends there. And so, whenever you mentioned seeing other people suffering and wanting to help them, that was the image that kept on coming back, that she's really quite sad because she doesn't have any friends. It was kind of saddening to remember. [P48]

*1.4 Powerlessness, guilt and anger.* Participants also talked about times they hadn't been able to take care of someone, leading to more negative feelings. Occasionally this related to a decision they had made to follow their own interests, leaving someone behind who they regretted not being able to support. Some recollected feeling overwhelmed, not confident in their ability to take care of someone else, or feeling angry with others.

There was this guy in the street, he was just lying there and people were sort of stepping over him. And I just went over and I said: "Are you alright, mate?" And he said: "I've come here to die." So I just sat with him for... I can't remember how long, and said: "I'm sorry to hear that and why do you want to die?" He said that he hadn't spoken to anyone for a year and that was really sad. And so eventually he let me call him an ambulance. I didn't know what to do. I can still see it. There were people still stepping over him. I got really angry while I was on the phone with the whole world. [P19]

## *2. Emotion without imagery of relationships*

Some of the imagery and feeling states that participants described were not associated with their relationships to other people. Separating these into a different domain was a pragmatic choice, since feeling of relaxation and confidence featured in people's

thoughts about their relationships. However, participants commonly experienced the meditation as generally “relaxing” or had cultivated feelings of personal empowerment.

*2.1 Relaxed and peaceful.* For students on a busy schedule, the research session presented an opportunity to relax. Perhaps as a consequence of this, many fed back that they felt “nice” or “peaceful” after the meditation. The images that accompanied this feeling were predominantly of natural places.

Waves. The sound of the ocean generally. Sea gulls. That sort of very lazy Sunday afternoon. Sunny summer kind of day. That’s what kept coming back for me. I’d say it was just being at ease, being free, awake, being able to take out the noise, the excess.  
[P34]

*2.2 Confident and inspiring.* Other participants reported on feelings of confidence or strength that had been accompanied by recollections of periods in their life where they had felt independent and capable of leading others, or by images of themselves standing in confident poses or wearing adventurous clothes.

Sometimes I have these images of when I looked in the mirror when I was younger and I remember looking in the mirror and feeling good about what I saw. I think these images come when I’m feeling really good. I always think about that image of me looking at myself in the mirror and feeling, yes, that everything was going to be alright. Physically looking nice and feeling good. [P10]

### *3. Metacognitive reflections*

Some feedback addressed participants’ observations of their own thought processes, or concerned their thoughts about compassion as a personality trait. This feedback

appeared to relate to the second research question of how people made sense of their experiences. It was clustered as a separate domain because it provided a commentary on the thoughts and emotions that were reported in the first two domains.

*3.1 Thinking effortfully.* Some participants noticed an analytical or logical train of thinking that was less emotional and more disruptive than their emotional experiences of compassion. This occasionally self-critical train of thought was experienced as distracting, because it was involved in trying to structure their experience of the meditation or correcting their associations with compassion, rather than permissively allowing feelings and thoughts to come and go.

There was a point when you were saying how the idea of having strength and courage and how you might look from the other perspective and my brain went: "Hang on. What is my posture like?" And then I was stuck thinking consciously about how to correct my posture, but thinking that I was meant to be in the moment, so I got slightly agitated. [P9]

*3.2 Wandering thoughts.* In complement to their experience of a more effortful thinking style, people reported being struck by the volume of mental activity that awaited them on closing their eyes. The characteristic of this mental activity was that it had not seemed effortful or directly willed. Consequently, this wandering mental activity could be distracting and unfocussed, but it also allowed previously forgotten memories and associations to come to mind.

I thought it was quite nice that I was getting lots of different associations and I think I was managing to not think that that was wrong, that I should have been having just one picture that was built up. [P28]

My mind did wander and when you were saying: “Remember your breathing.” I thought: “Oh yeah. Actually I’ve been thinking about making sausages for dinner.” [P51]

Some this mental activity was experienced from a detached perspective. This perspective enabled participants to be aware of the mental activity without feeling emotional reactions as strongly as they would expect. Consequently, this “mindful” state seemed to be creating space for a less judgemental response.

So I just noticed different feelings in my body when I switched from one state to the other and I began to notice more the grounding feeling of the sense of acceptance.  
[P29]

*3.3 Should I be more compassionate?* The meditation prompted some people to wonder if they were capable of cultivating compassion, and whether it would be useful for them to do so. Like observations of their mental activity, this feedback related to the second research question: How did people make sense of their experiences? No one in the sample reported a definite “no,” while some people came back with a fairly definite “yes.” However, participants elaborated more fully on being unresolved. They limited their knowledge to certain types of compassion, or compared their kindness to others with their more critical or guarded attitude towards themselves. Some had reservations about whether being compassionate would be helpful, reflecting on their needs for privacy, self-criticism and active coping.

I found myself, something in me resistant to the idea of being compassionate towards myself somehow, almost like a... Almost like it wouldn’t allow for feelings of frustration or anger. [P23]

It made me think about how I'm actually a very compassionate person to others, but not myself. I will always give and I don't expect to get back. So, when I do get something back, I'm always very surprised. And when I'm feeling down, I'm suffering, I don't tend to be compassionate towards myself. I tend to let myself suffer, feel like I deserve to suffer.  
[P41]

#### *4. Feedback on the meditation as a whole*

A final domain of feedback was interpreted in relation to the third research question: What was participants' overall evaluation of the meditation? This kind of feedback contextualised the feedback of the other three domains by situating it in the participants' experience of the researcher and the protocol.

*4.1 Novelty of the experience.* For a good proportion of the sample the research session was the first time that they had undertaken a meditation exercise. Some people mentioned this in their feedback, which resulted in a less elaborated theme relating to the novelty of the exercise or it being "interesting" or "weird."

I've never done anything like this. I've never seen a therapist or anyone. So obviously at first it was kind of weird for me to close my eyes because I've never done it. [P5]

*4.2 Relating to the script and the researcher.* For the most part, participants seemed to experience their thoughts and emotions as being invited by the script, or as occurring alongside it, indicated by constructions such as "while you were talking, I was..." A smaller proportion of people experienced the script as more demanding and as asking for something that they couldn't feel or understand.

It kind of gave me a focus, specifically when you were talking about compassion. It kept coming back to me, these various things, almost like every time you said the word it kind of came up, and I don't know. It made me feel a bit more relaxed and it also gave me space to put that in. [P26]

*4.3 Breathing.* Some people found that the instruction to focus on their breathing helped them to find the metaperspective described in the third domain (metacognitive reflections) and to cope with wandering thoughts. However, there were exceptions and some people found that the internal focus prompted anxiety.

To actually concentrate on your breathing, you just don't have time to think about that kind of thing. It's just something that happens. You don't really think about it. And it does slow everything down by thinking about it. It makes you more aware of yourself. [P56]

### *Second meditation*

The feedback from the second meditation was mapped out differently to feedback on the first. This was largely based on its content: The feedback related more closely to the second half of the meditation in which participants had been directed to think about their shameful memory.

The final structure grouped themes against three domains concerning feedback from people who already felt little or no shame about their memory, and the elements of difficult and helpful meditations respectively (Table 7). Where there were parallels to the feedback given on the first meditation, these are discussed in the text that follows.

Table 7

*Summary of Domains and Themes from the Second Meditation.*

1. Not bothered anymore
2. Difficulties with meditations
  - 2.1 Avoiding the memory
  - 2.2 Feeling threatened by negative thoughts
  - 2.3 Blocking compassion
3. Helpful processes
  - 3.1 Being mindfully aware of one's thoughts,
  - 3.2 Reappraising causes
  - 3.3 Compassion for shared suffering
  - 3.4 Imagery of comforting interactions

*1. Not bothered anymore*

For some participants, the meditation didn't "work" because they didn't feel ashamed about the memory anymore, or had difficulty remembering it. These participants reported finding the research session less engaging. Some noticed that they had allowed their thoughts to wander in the absence of any strong emotion to provide a focus.

It's not even real right now. It doesn't feel like it happened. [P49]

*2. Difficulties with meditations*

Other participants reported that the second meditation had been globally harder or characterised by more agitation and anxiety than the first.

That was a lot more difficult this time. That was really tough. [P1]

The different strands of tougher meditations were interpreted as different themes relating to internal avoidance of the memory, feeling overwhelmed or threatened by negative thoughts, and blocking compassion.

*2.1 Avoiding the memory.* Some people simply didn't want to remember the shameful memory. They engaged in active thought suppression or felt something had "blocked" the memory on their behalf, in order to protect them from the shameful feelings.

As soon as you started mentioning those bad thoughts, that's when my mind starting going blank as if it was like going: "Yeah, ok, we're not thinking any more about that." Just what you were saying and the rain. [P38]

*2.2 Feeling threatened by negative thoughts.* As suggested by some of the feedback on internal avoidance, a motivation for avoiding the memory was that thinking about it caused negative thoughts or emotions to resurface. This made the participant feel uncomfortable in the research session and provoked worries that they would be overwhelmed by shame.

I found it much harder to bring the compassionate images to mind. I was really conscious of the memory being... feeling very threatening, almost like I had to keep it in my sights. [P28]

*2.3 Blocking compassion.* Participants had sometimes actively decided not to feel compassion or to forgive themselves. There were a number of reasons for this.

Some people didn't feel that forgiveness was the right way to deal with being ashamed, because it conflicted too strongly with their desire to "get over it" and feel capable, or to continue scrutinising their faults. Feeling compassion made them feel "vulnerable," which was unpleasant. In this sense, there were some parallels to the metacognitive reflections on whether to be compassionate that were interpreted from the first meditation, but the quality of this feedback after the second meditation was more self-critical or angry in its tone.

I guess a more natural way would be to put the feelings I have to the side and just to be a bit more sensible about how I'm feeling. To be a bit more like: "You're being a baby and taking this a bit too far and getting a bit too upset about this." [P1]

I felt this kind of very sarcastic compassion towards myself like: "It's really sad that you're shit, but you are still shit aren't you? And I don't blame you for it, but that's the situation and there's nothing we can do about it, and that's ok, you know." [P4]

In relation to feeling unworthy of compassion, some people reported feeling guilty or sad because they didn't deserve forgiveness, or should have been punished for their actions. All of these comments appeared to concern problems with the idea of compassion, rather than feeling threatened by shame.

I found myself thinking: "Who are you to be being kind to yourself when you've done this? You don't deserve it." It felt almost grandiose to be thinking of myself in that way. And there was some sort of knee-jerk reaction to be thinking of myself like that, to be thinking of myself as a kind and wise person. [P23]

### 3. *Helpful processes*

There were a number of themes to more helpful meditations, where participants reported on changes in their attitude to their shameful memory or more positive emotional outcomes. The helpful processes were interpreted in relation to four themes: being mindfully aware of one's thoughts, reevaluating the reasons for what happened, cultivating compassion for shared suffering, and using imagery of comforting interactions to support these processes.

*3.1 Being mindfully aware of one's thoughts.* It was helpful for participants to observe the memory and the thoughts it provoked without feeling strong emotions. This meant experiencing their mental imagery from an "objective," or third-person perspective, or creating images that allowed them to visualise self-critical thoughts as a character. Sometimes they were surprised that their reaction to the memory had not been as negative as they had expected. There were parallels in the way this state was described to the metacognitive processing that enabled people to feel detached from feelings in the first meditation.

Because of the way that I tend to approach problems, there's this guy in the corner who is pounding the table saying: "Something must be done." And part of me thinks I need a better chairperson. And the mindfulness felt like having a better chair who says: "Duly noted. Anyone else?" [P19]

When I described it to you at first I was reliving the thing, like I was in the first point of view. So yeah, it was more... It was funny because it moved and I felt like I was watching myself from a completely different angle from the one I actually experienced it. [P42]

A further parallel to metacognitive reflections in the first meditation was that this detached awareness was associated with the cultivation of acceptance. Reexperiencing the memory appeared to allow participants to admit to themselves what had happened, as well as their own part in it, while resisting catastrophic interpretations.

Well, it happened, and I can't really change what happened right now. So it's just one of the awkward stories I will have and I will be able to tell later on in my life. It seemed like not such a big thing that it happened. [P31]

*3.2 Reevaluating the reasons for what happened.* In taking this mindful perspective, some people were reflecting on the reasons for the shameful event. Whereas shame typically involves blaming oneself, this perspective-taking involved considering the role of other people and the situation as a whole. Similar to people's comments in the first set of feedback about looking after others, reevaluating the event often involved mentalising about people's needs and motivations at the time.

I found myself looking at myself from outside, when I could see this wonderful dream was all falling to bits. And, instead of remembering the shameful aspects, the things that were coming to mind were how lonely I was and the reasons why I was looking for that, why I wanted it so badly, and feeling compassionate for myself for feeling being lonely. [P12]

In some cases, this broad reappraisal led vividly to forgiveness.

Seeing it now, I can see no reason to feel ashamed. I think I sort of felt a bit better knowing that I really have no reason to be ashamed. I kind of felt a bit better about that. Just that I looked at it from afar. You know, it wasn't my fault. [P30]

*3.3 Compassion for shared suffering.* In relation to these reappraisals and broader perspectives, some people reflected on how their suffering wasn't unique. In doing so, they appeared to be addressing lingering feelings of rejection or loneliness that had characterised their experience of shame.

It's nice to think that you're just a nice person all of the time, that you can do everything to help everyone, or be kind, but I don't think anyone actually is. Everyone has things that they're ashamed of. Everyone makes mistakes, does things wrong. Everyone has their bad moments. [P14]

*3.4 Using images of comforting interactions.* To support these processes of reappraisal and acceptance, participants used images of comforting relationships to help them reach a compassionate feeling state. Again, there were parallels to the imagery of being with other people and looking after them from the first meditation, but with a greater emphasis on the provision of nonjudgemental acceptance and comfort at the time of the shame itself.

Some of these images were of people who knew them. The participants thought about how they might have reacted and shown forgiveness.

I started thinking of friends being compassionate towards me, giving me the kindness that I would have needed at that moment to make me feel better. I just had a picture of

my best friend being who she is. She knows how I think and she knows what to offer, what I would need to make me feel better. [P41]

However, in other images, participants imagined their younger self, and reached out to or comforted them. These images seemed to successfully combine or result from many of the above elements: a mindful awareness of the situation, a reappraisal of blame, and a desire to reconnect or comfort.

I was a bit unable to picture myself as a child at that age, especially my face. The only one that came was I guess the face I must have had when I was really, really little and I've seen it sometimes in pictures. Then I tried to mould it somehow, to make it recognisable to myself. And, towards the end, the moment was frozen, like I pushed on pause, and I imagined myself intervening and interacting with the me that was there as a child. There was no real talking, but more sort of a sympathy that was reaching out to him but more through my eyes. And at that moment I even pictured ourselves laughing together. Well, him more giggling I guess. [P42]

I had this vision of putting my arm around my younger self. Because I was obviously shorter then, it was this version of myself a few inches shorter and a few inches wider. And I just put my arm round his shoulders. It was... I felt empathy for him or me. I sort of felt like saying: "Don't worry. Things will get better. I know because you'll be me in the future and I'm better off than you are." [P48]

### *Combining the qualitative and quantitative results*

Percentiles were calculated for the quantitative change variable. The qualitative feedback of cases in the most and least improved 10% of scores was examined to see what themes characterised these meditations.

Six participants had change scores in the lowest ten per cent, indicating the least change pre- to postmeditation. Their feedback was predominantly characterised by themes of not feeling ashamed about the memory anymore. Interestingly, quantitative global shame ratings for the memories they brought before the meditation were varied ( $M = 4.83$ ,  $SD = 2.40$ ), which contradicts the participants' reported equanimity about the event. One of these participants spoke about their difficulty with accepting compassion and wanting to be independent.

Five participants had change scores in the highest ten per cent. These transcripts were characterised uniformly by mindful awareness, a sense of comforting oneself or being comforted by another, reevaluating the event or forgiving oneself, and a sense that other people suffered too. Notably, they were characterised to a lesser extent by themes relating to feeling threatened by the memory and feeling uncomfortable with compassion. Global shame ratings for these participants were uniformly higher at the outset of the meditation than the participants who showed less change ( $M = 6.40$ ,  $SD = 1.34$ ). Depression scores in this group were also higher ( $M = 19.4$ ,  $SD = 10.45$ ) than in those who experienced less successful meditations ( $M = 10.17$ ,  $SD = 7.08$ ).

### **Discussion**

As hypothesised, the compassionate meditation encouraged people to reevaluate their shame at past events (Hypothesis 2.). The resulting quantitative reductions in self-

blame, which were both powerful and reliable, were underwritten by qualitative themes of perspective-taking, acceptance and forgiveness in people's meditations. Shame has been characterised by cognitive theorists as the attribution of a negative event to global, personal and stable causes (Gilbert, 1998). These quantitative and qualitative findings are consistent with that account. They point to the importance of questioning people's appraisals about their memories in providing therapeutic interventions for shame.

The decreases in self-blame that people reported were accompanied by quantifiable shifts from negative to positive emotion. Previous research has shown that clients high in shame or self-criticism make slow progress in talking therapy (Grunnert, Weis, Smucker, & Christianson, 2007; Grunnert et al., 2003), perhaps because they feel worthless and expect to fail (Rector, Bagby, Segal, Joffe, & Levitt, 2000). Pure cognitive or exposure-based therapies have struggled with the resulting "heart-head-lag," where thinking differently has not led to a meaningful emotional shift (Lee, 2005). By contrast, cognitive and emotional changes to state shame in this study were observed concurrently. The qualitative analysis showed that the most successful meditations were those not simply prompting reappraisal, but also being accompanied by feelings of comforting forgiveness, self-soothing and a sense that one did not have to suffer alone. Such themes of soothing relatedness and looking after people were key themes in the first meditation, and are consistent with the way that compassion has been characterised by contemporary authors as an affective state (Gilbert, 2005; Goetz et al., 2010; Neff & Lamb, 2009). It was unfortunate that the quantitative measure of compassionate qualities did not contribute to understanding these outcomes. However, the implication appears to be that emotions are an additional key element of therapeutic changes to shame, alongside reappraisal.

A further implication of the qualitative analysis was that mindfulness was an ingredient in both meditations, as metacognitive awareness in the first and mindful awareness of negative thoughts in the second. As mentioned in the Introduction, previous research on compassion has employed exercises with a mindfulness component in addition to compassionate imagery. In this study, participants who were worried about being overwhelmed by negativity or avoided thinking about the memory struggled to engage with the processes of reappraisal and comforting described in the preceding paragraphs. Mindfulness has been described as a “non-elaborative, non-judgmental, present-centered awareness in which thoughts, feelings, and sensations are accepted as they are” (Aldao, Nolen-Hoeksema, & Schweizer, 2010). The results of this study support the idea that such awareness may be important for down-regulating negative affect and leaving space for warmer feelings to develop. In light of the potential importance of mindfulness as a corollary of compassion, future research could incorporate qualitative study of the relationship between mindfulness and compassion within this emotion regulation framework, and avoid conflating mindful awareness with compassionate feeling states.

In support of Hypothesis 4, there was some evidence to suggest that reducing shame resulted in more flexible problem-solving. This finding is consistent with research showing shame to be a paralyzing affect, and that reducing shame may liberate people’s thinking (Covert et al., 2003; Gilbert, 2000; Wicker et al., 1983). Together, these results corroborate the positive findings of other studies of compassion-based interventions, but they may be taken to lend particular emphasis to the processes of mindful awareness, reappraisal and the cultivation of a relaxed positive affect as therapeutic strategies for shame.

The results concerning the personal characteristics that might affect the ease of generating compassionate images were less informative (Hypotheses 1 and 3). It was interesting to find that participants who reconsidered their shame most successfully tended to be those who were *most* depressed, despite the fact that they found it harder in the first meditation to locate compassionate feelings. On the one hand, this corroborates the finding of previous studies that those who are more self-critical are both less likely to feel compassionate towards themselves and most likely to benefit from doing so (Gilbert & Procter, 2006; Kelly et al., 2010; Rockliff et al., 2008). However, the finding could also be a measurement and sampling issue: The people who showed less improvement were often not ashamed by their memories to begin with. Research with clinically depressed people tends to show the opposite trend, because of the difficulty that depressed people have in cultivating positive feelings (Gilbert & Irons, 2004; Gilbert & Procter, 2006). In nonclinical populations, such as the one in this study, there may be a less reliable relationship between compassion and depression or harsh parenting, because of the resiliencies people have developed and the opportunities they have been afforded.

#### *Limitations of the research*

The sample was made up of students and the memories they recalled varied widely in their subject. The design did not control for the extent to which shame was the result being victimised or one's own actions, nor the memory's intrusiveness and its centrality to the person's sense of identity. These limitations should be taken into account in making generalisations to populations with poorer mental health. Although the results may generalise to people suffering from moderate depression, they may not translate so well to people suffering from traumatic shameful memories (in either PTSD or

depression), since these can be quite different in their character (Brewin, Dalgleish, & Joseph, 1996).

In the research session, participants were faced with a trainee psychologist emotionally invested in their improvement. The feedback from the meditations would have been influenced by the script for the meditation itself, which suggested some of the qualities that were later interpreted from people's meditations. These "demand characteristics" may have been an essential factor in the change observed, just as they are in other psychological therapies (Weinberger, 1995). Either way, the results are best understood in the context of this research study, and not as if the meditation were a stand-alone protocol. The quality of the therapeutic relationship is likely to be important in these kinds of meditations, but has not yet been investigated, or controlled for here.

A related point is the extent to which participants concealed their distress on quantitative measures and exercised editorial control over their feedback. It would have been informative for feedback to have been collected by an independent researcher, or to have included an independent follow up condition to see whether changes noted were lasting or valued.

Two measurement issues are worth mentioning. One of the problems with the PANAS is that its list of positive emotions is representative of an "activated" positive emotional tone, comparable to a sense of energetic, focussed and pleasurable engagement. This is conceptually and empirically distinct from a deactivated or relaxed positive emotional tone (Gilbert, 2010). Future studies could improve on the current design by using measures that captured these more relaxed and soothed emotions.

Secondly, the problem-solving measure in this study is narrow. The types of solutions that people generated were not controlled for, particularly for whether they

represented self-blaming solutions (e.g., “I should have tried harder”). Nor was it clear whether the verbal behaviour of generating solutions would have any relationship to improved self-soothing. Future research could examine problem-solving as both consequence and cause of decreased shame, since a recent review has shown problem-solving to be one of the most effective emotional regulation strategies (Aldao, Nolen-Hoeksema, & Schweizer, 2010).

### *Clinical recommendations*

The central implication of the results is as follows: People suffering from excessive feelings of shame can benefit from cultivating compassionate affective states. The most healing exercises in the current study shared several key characteristics: mindful awareness of negative thoughts, perspective-taking or reappraisal, and a sense of warmth, belonging or shared humanity. It is important to note that compassion was not simply an interpersonal variant of happiness. Compassion brings people into contact with emotional suffering and the participants’ qualitative feedback reflected their efforts to work with anxious, sad or agitated states of mind.

The images that people used to cultivate these compassionate feelings were of people who the participant remembered as being helpful, nonjudgemental or kind, natural places, compassionate colours of their choosing, and images of comforting one’s younger self. Though these may inform the scripts of people guiding meditations, it is important to bear in mind that deprived populations may have far fewer memories of supportive relationships to draw on. Previous research into compassionate interventions with severely depressed people has indicated that those who are most vulnerable distressed need a great deal more practice to be able to engage in these techniques and to elaborate on compassionate feeling states (e.g., Gilbert & Procter, 2006). In relation to this, the qualitative feedback emphasised the potential importance

of people's discomfort with compassion, feeling that they don't deserve it or finding it strange and threatening. It will be important for clinicians to consider the fear of kindness that shame so vividly engenders before people can be motivated to explore a gentler and more caring perspective.

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## **Part 3: Critical Appraisal**

## Introduction

This section of the thesis contains more general reflections on the literature review and empirical project. More specifically, this section gives some guidance on research into compassion, attachment and shame, as well as ideas for future research. It discusses the limitations of self-report questionnaires and the benefits of mixed methods. It also gives some reflections on the conduct of therapeutic meditations.

### **The literature review: Measurement issues and self-report**

Firstly, an epistemological observation: Researchers of human behaviour use concepts (like *shame* or *attachment style*) that are far removed from the events they actually observe (tears, words, or embraces). There is no psychological equivalent of a thermometer to measure a preoccupied attachment style.

This issue, primarily one of measurement, impacted on the literature review. Shame and attachment theories describe broad classes of phenomena: emotional, behavioural, cognitive and physiological. However, almost all of the studies reviewed investigated them through a single self-report questionnaire. The way people complete questionnaires is mediated by cultural expectancies and language to a much greater extent than using a thermometer, yet the results of studies were often discussed in a positivist tradition, as if the researcher was confronting the “real” phenomena of shame and attachment independent of the measurements taken. Many of the questionnaire measures that were reviewed lacked extensive construct validity, which further impacted on the meaningfulness of the data collected.

For these reasons, the literature review was the most challenging aspect of the thesis. I struggled to understand what the data meant: What *is* a fearful attachment

style when measured by the Relationship Style Questionnaire (Griffin & Bartholomew, 1994)?

I had come to attachment research after reading about the effect of abusive parenting on shame. It took me a long time to fully grasp how little emphasis self-report questionnaires place on the actual behaviours that happen in people's close relationships (e.g., whether their parents had been fair and responsive, or critical and abusive). Attachment styles and shame as measured by questionnaires have much more to do with the stories people tell about such relationships than observational methods, resulting in a study of meaning rather than behaviour. I felt that the conclusions of the literature review were strongly tempered by these issues. It was possible to understand how attachment and shame might be related as cognitive representations of an interpersonal world, but difficult to go any further.

I would be pleased to see future researchers using a greater diversity of methods to investigate attachment and shame. Both are empirically productive concepts and worth studying. As classifications, shame-proneness and attachment styles are moderately stable over time (Feiring & Taska, 2005; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000) and hold predictive relationships with psychological distress or wellbeing (Roberts, Gotlib, & Kassel, 1996; Tangney et al., 1992). Their conceptualisation can lead to directly falsifiable hypotheses about how people will tend to interpret, feel and behave in social situations. I would encourage the use of observational methods and longitudinal designs, which can overcome some of the issues with self-report. Such studies remain scarce because they are time-consuming. However, the small number of studies that have investigated real-time interactions between young children and their parents are informative regarding the

development of shame (e.g., Alessandri & Lewis, 1993, 1996; Belsky, Domitrovich, & Crnic, 1997; Mills, 2003; Mills et al., 2007; Mills, Arbeau, Lall, & De Jaeger, 2010).

On a related but more practical note, searching for “shame” and “attachment” in electronic databases produced thousands of articles. This included many that used the terms in unhelpfully loose ways or took no reliable empirical measurements (e.g., single case studies in psychoanalytic journals). I decided to address this by restricting the search to papers using common self-report measures of attachment. This criterion seemed to increase the likelihood of what was actually being measured in the study relating to the concepts of shame and attachment. It also gave me some confidence that connection between fearful or preoccupied attachment styles and shame was reliable enough to inform future research. However, restricting the criteria in this way meant excluding areas that, though conceptually relevant, could not be easily compared, because they used different questioning styles or concepts. This included research that linked shame to child abuse, and studies of concrete parenting or relationship behaviours that weren’t classifiable under an attachment style. It also led to the exclusion of qualitative studies, or those with the emphasis on how shame is cultivated in larger social groups. Again, it would be interesting to know how the association between fearful and preoccupied styles and shame maps on to findings in these areas.

## **The empirical study**

### *Designing a mental imagery study*

The design for the empirical study was not born fully-formed. The framework was inherited from a previous trainee, who had gone on to do another project. Their design compared two imagery interventions for shame, one focussing on cultivating

compassion and the other a sense of “mastery.” Mastery imagery is employed by people seeking a sense of control or competence following an experience of helplessness (of which shame is an example). Commonly the person is encouraged to visualise themselves intervening in their memory to enact a rescue and confront the others involved (Wheatley et al., 2007), and not necessarily to offer comfort or forgiveness.

The overall emphasis of such a project was appealing. At the time, I was interested in the finding that imagery was associated with stronger feelings than thinking in words alone (Holmes & Mathews, 2010). It seemed relevant to working with emotion in talking therapy. I had also been interested in the relationships found between types of intrusive imagery and various diagnostic categories, including obsessive-compulsive disorder, social phobia and depression (Hirsch, Meynen, & Clark, 2004; Speckens, Hackmann, Ehlers, & Cuthbert, 2007; Wheatley et al., 2007).

However, the specific idea of comparing mastery to compassionate imagery was abandoned. It was too challenging to find a way of controlling for the variance between them when the object of study was a mental image. Both mastery and compassion might be needed to tackle the paralysed submission and self-hating blame of shame, but reliable and valid quantitative measurements of the difference between the two in subjective experience seemed unlikely. Because of this, I decided to use a repeated measures design with only compassionate imagery. Further qualitative investigation of the difference between compassion and mastery might provide a more useful starting point for future research rather than quantitative methods. It is notable that the qualitative analysis in this thesis captured some feelings of confidence and empowerment that emerged from “compassionate” meditations.

Another important choice was to include two meditations in the session, not one. It was felt that, without practising the meditation, people would struggle to cultivate the right feeling state when they were faced with their shameful memory. The first meditation provided the opportunity for a “dry run” and gave people some associations to take into the second.

### *Choosing measures*

As discussed in relation to the literature review, choosing measurements for psychology involves a trade-off between recording usable information and discovering something new. It is my intention to draw attention to some of the bargains with variance that I made in the empirical study.

The baseline questionnaires did not capture much of what had influenced people’s ease of engaging with the meditation. The measure that did (the Center for Epidemiologic Studies Depression Scale; Radloff, 1977) was specifically designed for nonclinical populations. I suspect that the general pattern of weak results is accurate in this student population, but wouldn’t generalise to clinical samples. Parenting, shame and depression are important for people’s engagement with therapy. In this sample, experiences of control and coldness from parents may have been less extreme than is required to kick start a developmental trajectory towards excessive shame. In the same way that a muscle weakness can be compensated for by an otherwise healthy body, coping strategies and social opportunities may buffer people against difficult upbringings, leaving them able to cultivate warm feelings. Choosing measurements based on clinical studies for nonclinical populations involves a trade-off between capturing the characteristics of the sample, and being able to make clinical generalisations. In this respect, measures of attachment style and personality could

have been more informative, because they might have related more closely to the interpersonal processes that shaped the session.

Perfectionism was not measured. It would have been useful to know about, since research shows it to be an important factor in psychological disorders, and to hold a relationship to shame and self-criticism (Hewitt & Flett, 1991; Stoeber, Harris, & Moon, 2007). Holding high standards for oneself may influence someone's capacity to forgive a failure. I certainly had the impression that some participants approached the meditation with high standards for the clarity and focus they hoped to achieve. This may have related to some of the qualitative material on effortful or self-critical thinking. Perfectionism may also have explained some variance in responses to the problem-solving exercise.

A great deal else that was peculiar to each person and their experience of the session was not measured. The biggest obstacle to interpreting the results was that people's memories were confidential, so the extent of guilt, shame, or other self-conscious emotions in their memory was not controlled for. There is an important difference between a memory relating to something that you have *done* (because it has hurt or undermined someone else), and a memory where you have been made to feel ashamed *by someone else* (because of being victimised or humiliated). The former involves a more external focus and suggests reparative actions, while the shamed response involves an internal focus and more emphasis on the reevaluation of personal worthlessness (Gilbert, 2009). Future research could better control for these differences.

The problem-solving task was narrow. With hindsight, it would have been more informative to audio record people's responses and have found a way of coding them. This might have controlled for the difference between problem-solving and rumination.

Nonetheless, I think the task succeeded in showing that people who reduce their self-blame for events will be more willing to engage in generating possible solutions. This would be an interesting avenue for research to continue in, particularly if naturalistic measures of interpersonal problem-solving are used following a compassionate intervention. It would also be interesting to plot the potentially U-shaped relationship between shame and compassion. It remains possible that too much self-compassion and too little shame might make people less motivated to engage in problem-solving.

### *Recruitment*

For those thinking of conducting research with samples at UCL, I simply wish to report that recruitment for the project was easy. It is hard to say how much this was to do with the session being brief, one-off and focussed on an emotionally-engaging topic. Nonetheless, two group emails to the entire student population at UCL produced a large number of responses. *Doodle.com*, a free online scheduling service, made booking people in straightforward.

### *Reflections on guiding therapeutic meditations*

My main worry going into the research session was asking people to disclose a shameful memory. Reimbursement for the study was minimal and the promised benefits seemed speculative when considered against my own inexperience.

Perhaps to compensate for this, I was initially *overly* enthusiastic in encouraging people to make contact with their shameful feelings. At the time, I believed that one had to reconnect with and engage with a negative emotion itself in order to effect therapeutic changes. I no longer believe this. Making contact with shameful emotions simply made people feel ashamed. Moreover, people who continue to experience shame do so precisely because, when they are in that state, they are unsure of how to

move on. Asking someone to concentrate excessively on reexperiencing the shameful feelings themselves inhibited their ability to feel compassion and their willingness to explore meanings. In essence, there was little to be learned from feeling ashamed except how to feel ashamed.

Related to this, a small number of participants said that they had experiences of being both compassionate and highly critical of themselves. Trying to somehow bring these sides together by experiencing them alongside each other seemed impossible. A Danish saying advises: “You cannot blow and keep flour in your mouth at the same time.” I felt the session had been more helpful when we had understood compassion and shame as mutually exclusive emotions and aimed to cultivate one while keeping the other at bay.

In relation to this change in my perspective, two conceptual tools helped me to see the session differently. The first was exposure therapy. If participants were primarily anxious about remembering, I think they were better off when their imagery focussed on the shameful situation as a trigger – whether that was the group of people who had humiliated them, the action of their own that they despised, or the uncomfortable image of themselves in distress – and on habituating to that. The process of approaching the memory shared something with therapy for a phobia, with the memory taking the role of an internal tarantula. The same theory applies to imaginal exposure for Posttraumatic Stress Disorder. When the anxiety provoked by the memory triggers avoidance (and thus inhibits emotional resolution), the anxiety can be successfully addressed by exposure.

The second conceptual tool was more generally to think in terms of “emotion regulation” (Gross, 1998). Considering different meanings, being mindfully aware of thoughts and dwelling on positive associations might be considered “emotion regulation

strategies" (Aldao et al., 2010). The key point with the compassionate meditation became to employ the strategy of mindfully attending to breathing or dwelling on associations with compassion, and let the emotion follow, rather than to worry (as above) about feeling a particular emotion.

A separate lesson I learned was to be confident in my presentation of the exercises and to offer fewer adaptations, or automatic reassurances. Being too accommodating and careful placed a burden on the participant to adapt to my own anxiety and to take some of the responsibility for the smooth running of the session (at least, this was my observation). In a longer term therapy where a therapeutic relationship is more established, it may be more acceptable to take a slower, more person-centred pace. However, in brief expositions of meditation techniques, it seemed preferable to take as much responsibility for the structure of the session as possible, and not for the participant's responses.

#### *Suggestions for future research*

Reflecting on these and other aspects of the sessions, and thinking about directions for future research, it is my suspicion that compassionate imagery interventions will produce the greatest changes when the following conditions are met:

1. The person has done little thinking about the shameful memory so far, finding it too anxiety-provoking to think about and instead choosing to avoid it. This has left it untouched in its original form, in a way similar to that described of traumatic memories (Brewin, Dalgleish, & Joseph, 1996).
2. In relation to the first point, the person has not told anyone else about the memory. The process of disclosure is in itself a behavioural experiment of whether they are as horrible as they feared.

3. The situation that triggered the shame can be remembered clearly, so that the person has something they can habituate to in the process of the meditation, rather than an overgeneral shameful feeling (e.g., “I am generally incompetent in social situations”). This will result in lowered anxiety.
4. The meditation contains those qualities identified in the qualitative analysis as being helpful, namely mindful awareness of mental activity, reappraisal and associations with soothing comfort.
5. The researcher has confidence in the technique itself and is perceived as modelling compassionate responding to participants.

Carrying out these research sessions was tiring. I would not recommend to trainees or researchers scoring high on measures of trait anxiety to give themselves the task of meeting, welcoming and comforting five new people on each research day. Three proved to be a more manageable number.

#### *The qualitative analysis*

Making decisions about the statistical analyses felt relatively straightforward, as was interpreting the findings. The qualitative element of the study was more challenging.

Part of the difficulty I experienced was in relation to my role. One's own assumptions are important in qualitative analysis, as both a creative asset and a threat to credibility (Patton, 1999). On the one hand, I chose the role of “therapist” in the research session. The way I tried to do this was related to Carl Rogers' writing on empathy and unconditional positive regard (Rogers, 1995). I was fairly invested in finding a positive result and I am sure some of this expectation (and my belief in the possible positive benefits of the meditation) was communicated to participants. Later, when reading feedback, this therapist stance persisted in trying to empathise with

people's perspectives on experiencing their own warmth or kindness. Having conducted the interviews myself, I could remember the emotional nuances that accompanied people's feedback, and I think elements of this more inductive stance were helpful to the analysis.

On the other hand, I recognised a need to play the role of "observer" and to code the data with detachment in order to find out what was "really" there. I maintained this by reading feedback in relation to its face value or semantic content where possible, and not what seemed to be implied, or what my attempts at empathy suggested to me (Braun & Clarke, 2006). Feedback was read as describing their meditations (i.e., as a genuine phenomenological account) more than it was as a social discourse on compassion. In this role, I was maintaining a more consistent awareness of my biases, so as not to distort people's communications by misinterpreting them.

In general, the brief feedback that people gave did not afford them much time to develop their ideas or give a consistent narrative. The study made an atypical use of thematic analysis in this sense, as the technique is usually applied to small samples and longer interviews. Consequently, many nuances were simmered out, including interesting dreams, unexpected asides and unresolved conflicts. My role in the research sessions acted as a potential confound: I hadn't told people what to say, but I had certainly suggested what they should think. It was necessary to walk a line between capturing individual people's experiences and not ending up with an incomprehensibly long list of themes.

The result was that the research questions were applied strongly in determining the structure of the analysis (though not its content), and the feedback from the sample was considered as a whole for each meditation, rather than privileging individual narratives and viewpoints. It is hard to know whether the roles of therapist and scientist

were balanced sufficiently. Beyond extended interview time and a more developed protocol, additional credibility checks would probably have been one of the most powerful improvements. I would like to take the awareness of my personal biases with me into future qualitative research.

Some methodological choices helped with these challenges. In the research session, it was useful to have a rigid set of questions and prompts. Asking a standardised neutral question (“How was that?”) and then listening to the response without intervening encouraged me to limit the variation in my interpersonal style between each person. In coding the data, I found it helpful to be (a) curious each time I sat down to read the transcripts and (b) to have plenty of time, so as not to feel less rushed or frustrated when things didn’t make immediate sense. In interpreting themes and domains, I found it helpful to maintain a close eye on the codes and original quotes, so that I could adjust boundaries and rename themes in an ongoing way to improve consistency.

### **Summary and recommendations**

I gravitated towards a project on compassion before I knew what compassion was. By the end of the first year, there had been many opportunities to sit across from someone over a formulation diagram or a thought record and to feel my heart sink in the silence, as they sighed and leaned back further into the chair. I understand these moments might be an experience of the “heart-head lag” (Lee, 2005): the client grasps what “should” be done, but doesn’t feel it.

I am still not sure what compassion “is” or how best to explain it. However, I do feel that, buried in the research on attachment and shame, and lurking in the results from the empirical paper are psychological processes common to many people, emotional and interpersonal experiences that are based on our shared biological and

cultural heritage and representing key elements of human social behaviour: fearing, hating, soothing, forgiving. Understanding these processes may contribute to our ability to work with the heart-head lag.

Although my views on meditation, therapy and research were challenged and cultivated by what I encountered, one thread seems to have remained since the outset of the research, and that is an interest with explaining as genuinely as possible what is going on when people comfort each other. To me, this means finding the clearest and most congruent explanation of warmth in interpersonal relationships. It should also mean avoiding excessively reductionistic, jargon-laden or biased discourses, as well as narrow and uninformative measures. Despite the limitations of the quantitative and qualitative methods that I used, I think that a mixed methods approach could be applied to this end in understanding “compassion,” because it balances the demands of generalisability with openness to new ideas.

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## Appendices

**Appendix A: Measures and terms included in literature review  
searches**

### Attachment measures included in the search

Adolescent Attachment Interview	Inventory of Parent and Peer Attachment
Adult Attachment Interview	Marital Q-Sort
Adult Attachment Projective	Maternal Separation Anxiety Scale
Adult Attachment Q-Sort	Measure of Attachment Qualities
Adult Attachment Scale	Mother Father Peer Scale
Adult Attachment Styles	Parental Attachment Questionnaire
Adult Attachment Questionnaire	Parents of Adolescents Separation Anxiety Scale
Attachment History Questionnaire	Reciprocal Attachment Questionnaire
Attachment Interviews	Reciprocal Attachment Questionnaire for Adults
Attachment and Object Relations Inventory	Reciprocal Questionnaire
Attachment Scale	Relationship Questionnaire
Attachment Style Interview	Relationship Scales Questionnaire
Attachment Style Questionnaire	Revised Inventory of Parental Attachment
Avoidant Attachment Questionnaire for Adults	SASB Intrex Questionnaires
Client Attachment to Therapist Scale	Secure Base Scoring System
Couple Attachment Interview	Separation Anxiety Test
Continued Attachment Scale	State Adult Attachment Measure
Current Relationship Interview	Strange Situation
Experiences in Close Relationships	Vulnerable Attachment Style Questionnaire
Marital Attachment Interview	

In addition, two generic measure terms were included in the search: *attachment questionnaire* and *interview* (the latter coupled with the word *attachment* appearing anywhere in the article). Lastly, labels associated with attachment styles were also included (*secure, preoccupied, fearful, fearful-avoidant, anxious-ambivalent, anxious-*

*resistant, attachment-related anxiety, attachment-related avoidance and dismissing*). All of these terms were searched for anywhere in articles that also contained the word *shame*.

## **Appendix B: Recruitment email and leaflet**

## Email

RE: Compassionate imagery research with voucher prize draw

Dear Student,

I am running a research project into Compassionate Imagery. Everyone who takes part is entered into a prize draw for Amazon.co.uk vouchers. There are three vouchers worth £50, £25 and £10. The research session takes about one hour to complete and is located on UCL campus.

The research session involves trying out an imagery exercise that helps people to feel more compassionate towards themselves. As part of the session, you will be helped to think of something that made you feel uncomfortable or bad about yourself and to think compassionately about it.

- I am a Trainee Clinical Psychologist studying at UCL, with an interest in the use of compassion in psychology
- All the information that you give as part of the research will be kept confidential and anonymous
- You will have the right to withdraw from the session at any time should you choose to

Interested? Please get in touch: [ucjtlbd@live.ucl.ac.uk](mailto:ucjtlbd@live.ucl.ac.uk) or [louisdennington@hotmail.com](mailto:louisdennington@hotmail.com)

## **Leaflet**

### Compassionate Imagery

- You will have the opportunity to try out guided compassionate imagery. This kind of imagery is aimed at helping you to feel more compassionate towards yourself when you feel self-critical or upset
- All participants will be entered into a prize draw for Amazon.co.uk vouchers worth £50, £25 and £10
- The research session takes one hour and is located on UCL campus

I am a Trainee Clinical Psychologist in my second year of study at UCL. The research is part of my thesis on the use of compassion in psychology. If you are interested in the study and would like to know more, please take down my email and get in touch with your questions.

ucjtlbd@live.ucl.ac.uk or louisdennington@hotmail.com

Data Protection disclaimer: All your information will be kept confidential and anonymous

## **Appendix C: Information and consent sheets**

## Information Sheet for Participation in Research Project

<b>Title of Project:</b>	How does shame influence the usefulness and quality of compassionate imagery techniques?		
<b>Principal Experimenter:</b>	Dr Peter Scragg, UCL Department of Clinical Educational and Research Psychology		
<b>Ethics:</b>	This study has been approved by the UCL Research Ethics Committee. Its project ID number is: <b>2896/001</b>		
<b>Name of researcher:</b>	Louis Dennington		
<b>Address:</b>	Room 433, 1-19 Torrington Place, London WC1E 7HB		
<b>Telephone:</b>	020 7679 1897	<b>Email:</b>	ucjtibd@live.ucl.ac.uk

**You will be given a copy of this information sheet.**

**What is this research about?** This research is about *compassionate imagery techniques*. Compassion is a feeling of warmth and kindness towards yourself or other people. Clinical psychologists are interested in finding ways of helping people to cultivate feelings of compassion. This is because doing so might be useful to people who are feeling low, or critical of themselves. One way of cultivating these feelings is through “guided imagery” (i.e., being helped to generate images that make you feel more kind and compassionate towards yourself).

**What are the aims and possible benefits of this research?** The study aims to find out what sort of feelings people generate when they do a compassionate imagery exercise, what it is like on a subjective level to experience those feelings, and how they affect someone's mood and the way that they think. The results of the study may benefit the clients of clinical psychologists by helping us understand who these kinds of imagery exercises might be useful for, and what sort of benefits clients can expect from undertaking an imagery exercise.

**What will happen if I agree to take part?** You will be asked to fill out some questionnaires that ask about your mood over the last week, your memory of your parent(s) as a child, your tendency to feel ashamed of yourself, and your tendency to be kind towards yourself. The researcher will then take you through an exercise that involves imagining yourself as being a very compassionate person.

They will then ask you to remember a time that led to you feeling ashamed of yourself, and prompt you to give some details. Finally, they will help you to use the compassionate feelings you found in the first exercise to feel better about your unpleasant memory. As you go through the imagery exercises, they will be asking you to fill in questionnaires that measure how you are feeling and what you are thinking. They will also audio record the conversations you have about what the imagery exercise felt like. All the information that is collected from you in the course of this study (including audio recordings) is kept strictly confidential and will be stored anonymously in accordance with the Data Protection Act. None of your information will be passed on in a personally identifiable format to any other people.

**Who is being recruited for this study?** Students from UCL.

**Are there any risks to taking part?** Thinking about shameful experiences can bring up uncomfortable or even distressing feelings for some people. It is expected that, if you think about something that made you feel ashamed, you will feel a degree of temporary distress. From the perspective of the researchers, this is regarded as a natural part of using compassion to feel better about unpleasant experiences, but it could be a difficult experience. You will not be required to remember or experience anything that you decide not to and you will be helped to manage any distress you might feel in the course of talking about your experiences. The experimenter is a trainee clinical psychologist and has some experience in helping people to deal with difficult feelings. You should let them know if you are finding any part of the research unduly distressing.

**Are there any benefits to taking part?** Some people find compassionate imagery techniques useful and the experimental session offers an opportunity to find out about and experience this part of clinical psychology practice. Participants will also be offered a copy of the final report (due for completion by September 2012). Participants will be entered into a prize draw for three gift vouchers that can be used on [www.amazon.co.uk](http://www.amazon.co.uk), an online shop for books, music and films. The vouchers are worth £50, £25 and £10.

**What are the arrangements for ensuring anonymity and confidentiality?**  
The Data Protection Act requires researchers to let you know what information will be held about you and who will have access to it. The following information will be collected from you:

- Your age and gender

- Questionnaires on aspects of your mood, character traits and your memories of your parents
- Measures of your mood and experience of the research session
- Audio recordings of your feedback about the compassionate imagery techniques

This information will be stored anonymously. It will be stored against a participant number and not against your personal details. The information will also be stored confidentially. It will not be passed on to anyone else in any format that could identify you.

**Please discuss the information above with others if you wish or ask us if there is anything that is not clear or if you would like more information.**

**It is up to you to decide whether to take part or not; choosing not to take part will not disadvantage you in any way. If you do decide to take part you are still free to withdraw at any time and without giving a reason. Your rights are explained in full on the following consent form.**

**All data will be collected and stored in accordance with the Data Protection Act 1998.**

## Informed Consent Form

Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you.

<b>Title of Project:</b>	How does shame influence the usefulness and quality of compassionate imagery techniques?	
<b>Principal Experimenter:</b>	Dr Peter Scragg, UCL Department of Clinical Educational and Research Psychology	
<b>Ethics:</b>	This study has been approved by the UCL Research Ethics Committee. Its project ID number is: <b>2896/001</b>	
<b>Name of researcher:</b>	Louis Dennington	
<b>Address:</b>	Room 433, 1-19 Torrington Place, London WC1E 7HB	
<b>Telephone:</b>	020 7679 1897	<b>Email:</b> ucjtlbd@live.ucl.ac.uk

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you to decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

If you sign this form statement, you are indicating that you understand the nature of the research study, and that you agree to participate.

### Participant's statement

	No	Yes
I have read the Information Sheet and the notes written above.		
I have had the chance to ask any questions that I wanted to, and I understand that I can ask further questions at any time.		
I understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researchers involved and withdraw immediately. I understand that there will be no negative consequences if I do so. I understand that I will not be withdrawn from the prize draw for the vouchers unless I also request this.		
I consent to the processing of my personal information for the purposes of this research study. I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.		
I understand that my identity will <b>not</b> be linked with my data and that all information I provide will remain confidential.		
I understand that my feedback on the imagery exercises will be audio recorded and I consent to the use of this material as part of the project.		

I understand that I can withdraw my data from the study at any time up to the time that it is transcribed for use in the final report (October 2012).		
I understand that the information I have submitted will be published as a report and I will be sent a copy.		
I agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.		.

**Signature**

**Date**

**Print**

**Signature of researcher**

**Date**

**Print**

## **Appendix D: Ethical approval**



Dr Peter Scragg  
Department of Clinical, Educational and Health Psychology  
Room 436, 1-19 Torrington Place  
UCL

5 April 2011

Dear Dr Scragg

**Notification of Ethical Approval**  
**Ethics Application: 2896/001: How does trait shame influence the usefulness and quality of compassionate imagery techniques?**

I am pleased to confirm that your study has been approved by the UCL Research Ethics Committee for the duration of the project (i.e. until October 2012).

Approval is subject to the following conditions:

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form'.

The form identified above can be accessed by logging on to the ethics website homepage: <http://www.grad.ucl.ac.uk/ethics/> and clicking on the button marked 'Key Responsibilities of the Researcher Following Approval'.

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. Both non-serious and serious adverse events must be reported.

**Reporting Non-Serious Adverse Events**

For non-serious adverse events you will need to inform Helen Dougal, Ethics Committee Administrator ([ethics@ucl.ac.uk](mailto:ethics@ucl.ac.uk)), within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

**Reporting Serious Adverse Events**

The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

Best wishes for the research.

Yours sincerely



**Sir John Birch**  
**Chair of the UCL Research Ethics Committee**

Cc: Louis Dennington, Department of Clinical, Educational and Health Psychology, UCL

UCL Research Ethics Committee, c/o The Graduate School, North Cloisters, Wilkins Building  
University College London Gower Street London WC1E 6BT  
Tel: +44 (0)20 7679 7844 Fax: +44 (0)20 7679 7043  
ethics@ucl.ac.uk  
www.ucl.ac.uk/gradschool

**Appendix E: Qualities of the compassionate meditation and shame-related appraisals scales**

**Qualities of the meditation you just did...**

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How kind and caring did the meditation make you feel towards yourself?

1	2	3	4	5	6	7
Not at all						Very much so

How much did the meditation make you feel that your feelings were a part of life that everyone goes through?

1	2	3	4	5	6	7
Not at all						Very much so

How much did the meditation allow you to take a balanced perspective on your feelings?

1	2	3	4	5	6	7
Not at all						Very much so

How powerful was your compassionate meditation?

1	2	3	4	5	6	7
Not at all						Very much so

How warm and understanding did the meditation make you feel towards yourself?

1	2	3	4	5	6	7
Not at all						Very much so

How vivid was your meditation?

1	2	3	4	5	6	7
Not at all						Very much so

**The memory you described...**

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How ashamed did the event make you feel about yourself?

1	2	3	4	5	6	7
Not at all						Very much so

How much do you feel that the shame-related event you described was caused by...

... other people?

1	2	3	4	5	6	7
Not at all						Very much so

... something you did?

1	2	3	4	5	6	7
Not at all						Very much so

... bad luck?

1	2	3	4	5	6	7
Not at all						Very much so

... the kind of person you are (your personality, abilities, attitudes, character, and so on)?

1 Not at all	2	3	4	5	6	7 Very much so
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How much do you feel the event was your fault?

1 Not at all	2	3	4	5	6	7 Very much so
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## **Appendix F: Example coding for qualitative analysis**

**Key**

[text] part of the transcript has been deleted to preserve confidentiality.

... a pause in the participant’s feedback.

(laughs) laughter

*italics* questions asked by the researcher.

Nº	Transcript from first meditation	Initial coding	Thematic grouping
26	<p><i>How did you find that?</i> Yeah, I found it tricky to get my mind to relax and stop, you know, thinking about what you were saying and I kept sort of... A couple of times I found my mind just wandering off and that was quite nice. I had a couple of images when you were talking about facial expressions and things like that. I could picture that quite clearly, I could see it, or faces of people that I know and kind of things like that, because you don’t usually see yourself. So that was quite a nice feeling. I felt more relaxed and my mind kind of quietened down a bit. They were friends and family, the people. I don’t know. I saw a lot of open spaces and things and realised that I always associate general happiness and good feeling and all of sorts of feelings with places like that. But then... I don’t know... Thinking about people and other places that aren’t necessarily outside. [Laughs] They were a mixture of imagined places, mostly places I’ve been, but other places... They were more to do with pictures that I’ve seen that have evoked a certain kind of sense of “ah,” like travel pictures and holiday brochures and things like that. They’re the kind of you know these flower filled meadows, that kind of thing. And, um, strangely a car park in a wood at home. Not really sure why that... [Laughs] Possibly because I was</p>	<p>Tricky to relax mind</p> <p>Mind wandering off Pleasant</p> <p>“When you were talking...”</p> <p>Faces of people known</p> <p>Nice feeling Relaxed</p> <p>Friends and family Open spaces</p> <p>Mixture of imagined and real places</p> <p>Holidays</p> <p>Natural places</p> <p>Home</p>	<p>3.2 Wandering thoughts</p> <p>4.2 Relating to the script and the researcher</p> <p>1.1 Feeling comfortable with people</p> <p>2.1 Relaxed and peaceful</p> <p>2.1 Relaxed and peaceful</p>

<p>there yesterday. It just seemed to bring back that as well. <i>Did you notice any other thoughts, sensations in your body, feelings...?</i> It was interesting. It made me think I suppose more about... I don't know, it kind of gave me a focus I suppose specifically when you were talking about compassion it kept coming back to me, these various things, almost like every time you said the word it kind of came up, and I don't know it kind of made me sort of feel a bit more relaxed and it also gave me space to put that in. It was almost like my mind was kind of travelling and picturing all of the things that you were saying. Having said that I was thinking to myself sometimes: "Stop pigeonholing things," because I do that sometimes for the most part. Like trying to make things fit and they don't. I tend to then go round in loops. But no, it helped to kind of give a focus for what you were saying. So it was interesting.</p>	<p>Passive voice used to describe thoughts Interesting</p> <p>Comments on researcher's voice prompting associations</p> <p>Travelling mind</p> <p>Pigeonholing things</p> <p>Trying</p> <p>Going round in loops</p> <p>Interesting</p>	<p>3.2 Wandering thoughts</p> <p>4.2 Relating to the script and the researcher</p> <p>3.2 Wandering thoughts</p> <p>3.1 Thinking effortfully</p> <p>4.1 Novelty of the experience</p>
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