An Exploration of the Construct Validity of Self-Compassion

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Research Setting: University of Exeter

Target Journal: Behaviour Research and Therapy

Word Count: 7,999 for manuscript and 2,656 for appendices.

Submitted in partial fulfilment of the requirements for the Doctorate in Clinical and Community Psychology

University of Exeter University

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Abstract

Self-compassion is receiving increasing interest from psychologists and researchers due to its potential role in wellbeing and mental health however, self-compassion as a unique construct has not been validated. This research utilised pilot studies in order to develop an operational definition of self-compassion, separate from other similar constructs. A multi-trait multi-method approach to construct validation was utilised to assess self-compassion's discriminant and convergent validity in relation to the constructs of self-esteem and compassion for others in a community sample of 307. Self-compassion was then evaluated for its role in mental health and wellbeing when assessed against the two comparison constructs. Results demonstrated discriminant validity to both comparison constructs but convergent validity only in regards to self-esteem, providing partial support for the construct validity of self-compassion. As hypothesised support was found for self-compassion as a unique predictor in regards to wellbeing, but its role could not be determined for mental health. The results are discussed in terms self-compassion's functional relationships with comparison constructs and therapeutic utility. Recommendations for the direction of future research are discussed.

Keywords: Self-compassion, construct validity, compassion, self-esteem, wellbeing, mental health.

Highlights: >An operational definition of self-compassion was developed and explored>A MTMM approach found partial support for construct validation>Results indicated a distinction between self-compassion and compassion for others>Self-compassion was found to have a significant unique association with wellbeing.

An Exploration of the Construct Validity of Self-Compassion

The construct of self-compassion

The construct of self-compassion has received increasing attention from clinicians and researchers in recent years. Primarily two authors, Paul Gilbert and Kristin Neff are recognised for their ongoing involvement in researching self-compassion and its potential role in wellbeing and mental health. Although Neff and Gilbert acknowledge each other's work often and have common elements in their definition of self-compassion, their construct of self-compassion do differ.

Neff (2003a) developed her ideas from long standing Buddhist ideologies and states that self-compassion is a multi-dimensional construct comprising; treating oneself with kindness, recognising one's shared humanity and being mindful when considering negative aspects of oneself. By using this definition Neff describes self-compassion using a set of previously defined and validated constructs. In her definition, self-compassion is 'a kind, connected, and clear-sighted way of relating to ourselves even in instances of failure, perceived inadequacy, and imperfection' (Neff, 2011). Neff's view of self-compassion is thought of as an attitude that protects against the negative consequences of rumination, self-judgement and isolation (Neff, 2003a). Typically, in further research by others, Neff's definition and scale for self-compassion is used in community samples.

Gilbert's view of self-compassion developed from social mentalities theory. This draws on evolutionary theory, neurobiology and attachment and is informed by his work with clinical populations (Gilbert, 2009, pp. Xviii; Gilbert & Irons, 2005, pp.264). He predominantly discusses self-compassion as compassion that is simply focused on the self, as do many other authors in the field (see Feldman & Kuyken, in press; Goetz, Keltner &

Simon-Thomas, 2010). Gilbert highlights the active element of self-compassion as a trait that involves a process of self-soothing and self-reassurance as mediators to one's tendency to self-criticise, self-blame and feel shamed (Gilbert, Clarke, Hempel, Miles & Irons, 2004). He describes self-compassion as a process of self-to-self relating where one develops genuine concern for one's own wellbeing, sympathy and tolerance of one's own distress, empathy and non-judgemental attitudes, resulting in self-warmth or the action of self-reassurance (Gilbert and Proctor, 2006).

Clinical implications

There has been increasing interest and research into the role of self-compassion in mental health and wellbeing (Van Dam, Sheppard, Forsyth, & Earleywine, 2011; Harman & Lee, 2010; Leary, Tate, Adams, Batts Allen & Hancock, 2007). Neff (2003b) has developed the Self-Compassion Scale (SCS) and has found when focusing on the general population the SCS correlates concurrently with positive mental health, appears to act as a buffer against anxiety and is associated with increased psychological wellbeing (Birnie, Speca & Carlson, 2010; Neff, Kirkpatrick & Rude, 2007). Within clinical populations in prospective studies, self-compassion has been negatively associated with mental health difficulties such as depression (Gilbert & Procter, 2006) and with reduction in stress-induced immune responses (Pace et al., 2009). A link between self-compassion and reduced avoidance strategies has been established by Thomson and Waltz (2008) which they believe increases a natural exposure to emotional experiences and an associated reduction in post traumatic stress disorder (PTSD) symptoms. High self-criticism and shame, as the potential antitheses to self-compassion, have also been associated with increases in depressive symptoms and increases in malevolent voice hearing (Gilbert, Baldwin, Irons, Baccus & Clark, 2006; Mayhew & Gilbert, 2008).

Self-compassion based approaches are currently being developed and validated to help people with mental health difficulties manage their own self-criticism and shame. Compassionate Mind Training (CMT) developed by Gilbert and Irons (2005) for people with high shame and self-criticism refers to a therapeutic approach based on cognitive behavioural therapy (CBT) and social mentalities theory. CMT involves the use of imagery to help people move away from self-criticism and shame to experience compassion for oneself and others (Gilbert et al., 2004). CMT has been associated with a reduction in depression and anxiety in people experiencing complex mental health difficulties (Gilbert and Proctor, 2006). Compassion Focused Therapy (CFT; Gilbert, 2010) is not actually a therapy in itself but a focus for many types of psychotherapy to incorporate self-compassion. CFT draws upon elements of evolutionary, neuroscience, social, developmental psychology and Buddhist philosophies to develop inner warmth and self-soothing through compassion for one's self and others (Gilbert, 2010). It has close links with mindfulness, mentalizing and attachment based therapy (Compassionate Mind Foundation, 2007). Mindfulness Based Stress Reduction programmes have also been associated with increases in self-compassion (Fredrickson, Cohn, Coffey, Pek & Finkel, 2008). Neff is currently developing a self-compassion based programme called Mindful Self-Compassion and suggests the use of self-compassion training in schools, to help young people develop positive mental wellbeing in communities early on (MSC; Neff, 2011). Cumulatively, current research appears to support the notion that self-compassion has a role in improving psychological health in both community and clinical samples.

Where is self-compassion literature limited?

As interest in the idea of self-compassion increases and curiosity of its potential self-protecting role develops, the validity of the core construct has become an important issue. Research often focuses on the separate definitions and measures of self-compassion

developed by either Neff or Gilbert (SCS, Neff, 2003b; Forms of self-criticizing/attacking and self-reassuring scale (FSCRS) and Functions of self-criticizing/attacking scale (FSCS) in Gilbert, et al., 2004). Due to the number of descriptive words used by Gilbert and Neff to explain self-compassion the differences between the two definitions might vary between readers. However, it appears that Gilbert's focus is on self-criticism and blame, as the antithesis of self-compassion although this relationship has not been clearly explored, which can be tempered by self-compassionate process of self-reassurance and self-soothing. Neff also discusses of positive and negative elements of self-compassion (although she tends to focus on the positive) as represented by her six elements of self-compassion, all of which she believes are required for self-compassion to occur. The amount of overlap or discrepancies between Neff and Gilbert's definitions has not been openly explored. Neff and Gilbert might well be talking about the same thing when referring to self-compassion but they specify it and measure it differently, making it impossible to conclude that they are measuring and therefore providing evidence for the same individual construct. In addition to this, as Neff's definition and scale is used in research on community samples and Gilbert's with clinical samples, although rarely acknowledged, the construct supporting research developed is exclusive to either Neff or Gilbert's definition and not for self-compassion as a single construct.

Both Neff and Gilbert discuss self-compassion using broad definitions and focus some of their compassion research on the absence of self-compassion. In this way the core element of self-compassion is unclear, leading the field to question for example, what is self-compassion without self-criticism, or self-esteem and is it separate to other similar constructs? Some of the unique qualities of self-compassion are however starting to emerge. Neff (2011) reports that the main difference between her definition of self-compassion and self-esteem is that self-compassion does not include a social judgemental element which she believes can lead to narcissism in some people with high self-esteem.

The construct validity of self-compassion has been explored as a multi-faceted construct comprising self-kindness, mindfulness and acceptance using the SCS through therapist judgements of participants' self-compassion levels (Neff, Kirkpatrick and Rude, 2007). This provided support for the validity of the SCS, but the actual construct of self-compassion itself, remains non-validated. This is problematic as a multifaceted construct can be impossible to assess in many research modalities such as physiological research. The construct definition difficulty is also evident in other current research such as for CMT. CMT involves accessing emotional memories of other people by showing oneself soothing and reassurance (Gilbert & Iron, 2005, pp.282). This is slightly different from showing oneself soothing and reassurance as it involves imaging compassion coming from another person, but is classed as support for the benefits of self-compassion. The association between compassion as an overall construct and self-compassion also creates difficulties as research is starting to indicate that they may not be a unified construct. Goetz et al. (2010) for example, talks about compassion as a process of enhancing other people's welfare even at the expense of one's own, indicating some separation from self-compassion, which may occasionally be above the welfare of others. It may be that some of the elements thought to be part of self-compassion may be involved in the process of increasing self-compassion as opposed to being core elements of the construct itself. Clearly, for further self-compassion research to be of use a single, valid and unique construct for self-compassion needs to be established.

Current Study and its Rationale.

The aim of this research was to establish a valid, operational, distinct construct of self-compassion and explore this construct's relationship with mental health and wellbeing. By exploring the underlying elements of self-compassion and developing an operational definition drawn from existing definitions and scales as well from general understanding of self-compassion, the definition should identify the core elements of self-compassion but

remain separate from processes that increase it, are outcomes of it, or are other constructs that potentially overlap with it.

It was anticipated that through the use of preliminary study, an operational definition could be developed. It was hypothesised that support for the construct validity of this definition would be established and that this may be associated with wellbeing and mental health, as demonstrated by previous research into this field.

Study 1

Establishing a construct.

In order to develop an operational definition of self-compassion, a critical review of current research was conducted as well as a focus group exploration, analysis of existing data using the FSCRS and SCS and discussions with research colleagues some of whom have published papers on compassion (Feldman and Kuyken, in press) (see Appendices B, C and D for further details).

Method

A focus group was used to ensure the definition of self-compassion and related item development would be set within people's general understanding of what self-compassion is as a psychological construct. The focus group consisted of seven, third year Trainee Clinical Psychologists with a range of understanding on self-compassion. A semi-structured interview was conducted to identify what participant's believed self-compassion to be and how it might be recognised within people's thoughts and behaviours.

Items for this construct were also established and reviewed to ensure that they represented the definition and allow for future validation. An existing dataset collected from

a community sample was analysed as part of this research. The data consisted of 101 participants from the general population who completed both the SCS (Neff, 2003b) and FSCRS (Gilbert et al., 2004).

Analytic Approach

Thematic analysis was used to identify over-arching themes from the focus group (Braun & Clarke, 2006). Principal Component Analysis (PCA) was used to explore the items required to represent self-compassion. This was performed using an oblique rotation to take account of the possible relationship between factors (see appendix C, for further details of the analysis).

Results

Themes developed from the focus group were; *Innate*- it is an ability to help cope with life, that it is inbuilt but growth dependable, which can affect a person's biology, psychology and social life. *Nurtured*- that it is complex and dynamic, individual, difficult, it can be encouraged /is encouraging, and involves an interpersonal element in its development. *Inner Voice*- that it involves using one's own inner voice, it is similar but different to sympathy /empathy/ self-esteem, it is not guilt/shame/self-blame/hatred, it involves acceptance and allowing and is the balance of one's own good and bad. Concerns over the possible negative impacts of self-compassion such as unjustified self-forgiveness were also highlighted.

Common elements within the discussions of self-compassion in previous research are; a general supporting of oneself, approaching pain with kindness and warmth, non-judgemental, mindfulness, awareness, empathy and a social element. Through the focus group and discussion, it was thought that mindfulness (Birnie et al., 2010), awareness,

empathy (Decety & Jackson, 2004) and the social element may bolster and improve self-compassion rather than form a core element of its construct and were not included in the definition to ensure the focus of the construct remained. The focus group process contributed to the development of the operational definition of self-compassion through the use of a reflective diary and professional discussions. The final established definition was; '*Self-compassion is the capacity to meet one's own pain (be it physical, emotional or pain felt by potentially harmful behaviour/ thoughts towards others) with kindness, warmth and supportive encouragement from oneself.*'

PCA indicated a four factor structure for the items used to represent self-compassion. The first factor was the only one of the four with strong factor loadings from both the SCS and FSCRS. This factor was deemed to represent the core elements of self-compassion as defined by the two main self-compassion scales developed by Neff (2003b) and Gilbert (Gilbert et al., 2004). The other factors related to self-criticism, self-hatred/punishment and mindfulness. The sixteen items from the first factor of the PCA were reduced through a process of comparison with the focus group themes, discussions with researchers in the area and the strengths of the items in the pattern and structure matrices (see Appendix C). This process identified three discrete items. A fourth item was then created to accurately reflect the focus group discussion and the developed definition (see Table 2 for items). The four items finally established were deemed to reflect ideas in Neff and Gilbert's definition of self-compassion but also fit well with the proposed definition (α = .84).

Study 2

Rationale and Method

Is self-compassion a valid construct?

In order to validate the construct, self-compassion was compared against other, similar pre-established constructs using an online survey and a multi-trait multi-method approach (MTMM). For the construct to be deemed unique and valid, significant convergence with the other constructs is required however, the self-compassion construct must remain demonstrably discrete.

The MTMM approach to construct validation was developed by Campbell & Fiske (1959). MTMM involves assessment of the discriminant and convergent validity of a construct's operational definition in comparison to two similar, related constructs. Convergent validity indicates whether theoretically related constructs are linked in reality and is determined by multiple methods used for measuring a construct. The discriminant validity identifies how much theoretically non-related constructs are unrelated, and is determined by a small correlation between the identified constructs and other similar established constructs (Trochim, 2006; Nussbeck, Eid & Lischetzke, 2006). There is precedence for the use of the MTMM approach in this form of study; for example Kollman, Brown and Barlow (2009) used this method to support the construct validity of acceptance.

Self-esteem, like self-compassion, has been shown to be associated with lower scores on depression and anxiety scales (Neff, 2003a). Neff (2011) and Gilbert (2010) have separately hypothesised whether self-compassion and self-esteem are similar in that they result in positive self affect but differ in that self-compassion is non-judgemental and may have a more robust impact on one's sense of wellbeing (Neff, 2011). Researchers have

queried whether self-compassion might underlie some of the positive elements of self-esteem (Leary et al., 2007). Self-esteem was therefore chosen as a comparison construct for self-compassion as they are thought to be similar but distinctly separate. Self-esteem is defined as '*a favourable or unfavourable attitude towards the self*' (Rosenberg, 1965, pp.15). Items used to represent the construct were selected from Rosenberg's (1965) Self-Esteem questionnaire which has been assessed and used by researchers internationally since its development. The construct of self-esteem was used to determine whether approaching one's own pain with warmth and encouragement is meaningfully different from believing in one's own worth and abilities.

Compassion for others is often referred to synonymously with self-compassion in current research (see Goetz et al., 2010). Compassion is defined as *'an orientation of mind that recognises pain and the universality in human experience'* (Feldman & Kuyken, in press). They argue that compassion is as important to the body as nutrition. Neff (2009a) explains that compassion and self-compassion are essentially the same. However, fear of self-compassion has been identified, which may not affect people's ability to be compassionate towards others as much as it affects their propensity for self-compassion (Gilbert, McEwan, Matos, & Rivis, 2010). Compassion for others was therefore chosen as a comparison construct for self-compassion as they are thought to be similar but distinctly separate. Compassion for others will therefore be used to determine whether approaching one's own pain with warmth and encouragement was markedly distinct from feeling sympathetic and wanting to help others.

Does self-compassion uniquely predict mental health and wellbeing?

In order to establish the relationship between self-compassion as defined above and wellbeing and mental health, the survey included standardised questionnaires covering

mental health and wellbeing (see Appendix I for full survey). A community sample was deemed the best target group because a range of well-being, prevalence of difficult life events and mental health problems should be represented. Results from standardised questionnaires were explored in relation to the proposed constructs of self-compassion, and established constructs of self-esteem and compassion for others. It was hypothesised that self-compassion would make a unique prediction of psychopathology and wellbeing. It was also predicted that self-compassion would make an independent contribution to the explained variance for wellbeing and psychopathology in terms of stressful life events and PTSD symptomology (Lee, Stopa & Karl, in press).

Participants and Recruitment

The sample consisted of 310 people from the general population who completed the survey, of these 3 had not provided any observable data and were removed. The data from the remaining 307 (99%) participants was analysed, comprising of 84 (27%) men and 223 (73%) women. One hundred and ninety nine (65%) of the participants were university students, 24% of which were postgraduates, see Table 1. Participants completed the study from within the UK (209; 68%) and countries such as USA (77; 25%) and Australia (5; 2%). Participants' age ranged from 18 to 71 (mean age 28). Participants who wished were entered into a prize draw for one of seven, £20 vouchers. Inclusion criteria were speaking English as a first language, access to the internet and the minimum age for participation was 18. Informed consent was gained from every participant. All data was securely held and password protected, emails provided for the prize draw were held separately to the data to ensure anonymity. Ethical approval was granted by the University of Exeter and the British Psychological Society Code of Ethics and Conduct (BPS, 2009) was adhered to throughout (see Appendix H).

Participants were recruited via the internet from the general population. Emails were sent to colleges and the research participant list within the University of Exeter for dissemination. Social networking sites, psychological research sites and snowballing techniques were utilised to disseminate the research. Survey Gizmo is an online survey tool and was used to create the survey and collect the responses (Survey Gizmo, n.d). The questionnaire took between 20 and 40 minutes to complete. The items for the three method approaches appeared at the beginning of the survey and were followed by the standardised questionnaires.

Justification of Sample Size

Nussbeck, Eid & Lischetzke (2006) investigated the number of participants needed to determine discriminant and convergent validity using an MTMM approach. When using a correlated trait-correlated method minus one [CT-C(M-1)] confirmatory factor analytic model, they found that approximately 250 participants are needed when 2-4 items per trait–method unit are used. This is supported by Kollmam et al. (2009) whose study included 210 participants for a multitrait-multimethod approach in their study of the construct validity of acceptance, where all participants answered all questions across three constructs and three questions types.

Table 1
Participant demographics

	Males	Females	Total
	Total population		
Gender	84 (27.4%)	223 (72.6%)	307 (100%)
Age	*M* = 28.65	*M* = 28.23	*M* = 28.35
Employment			
Full Time	27	88	115 (37.5%)
Part time	21	64	85 (27.7%)
Retired	1	5	6 (2%)
Not-employed	27	57	84 (27.4%)
Stay at home parent	1	6	7 (2.3%)
	Students Only		
Gender	50 (25.1%)	149 (74.9%)	199 (64.8%)
Age	*M* = 24.82	*M* = 24.93	*M* = 24.90
Employment			
Full Time	9	41	50 (16.3%)
Part time	15	49	64 (20.8%)
Retired	0	0	0 (0%)
Not-employed	21	54	75 (24.4%)
Stay at home parent	1	3	4 (1.3%)
Study Year			
1st	24	55	79 (25.7%)
2nd	8	32	40 (13%)
3rd	6	21	27 (8.8%)
4th	2	3	5 (1.6%)
Masters	3	5	8 (2.6%)
PhD	5	14	19 (6.2%)
Other postgrad	2	19	21 (6.8%)

Self-report questionnaires

Standardised questionnaires were used in the survey to identify participants' levels of wellbeing, anxiety and depression as well as occurrence of stressful and traumatic life events.

World Health Organisation's Quality of Life-BREF (WHOQOL-BREF; Skevington, Lotfy, O'Connell & The WHOQOL Group, 2004)*:* Wellbeing was assessed using a brief form of the WHOQOL measure. This is a self report measure with 26 items, covering physical health, psychological health, social relationships, and environment. Each item has a five point Likert scale response, the labels vary. An example scale and item from the WHOOQL-BREF is; 'How satisfied are you with yourself?' rated from 1 ('very dissatisfied') to 5 ('very satisfied'). In this study α =.85.

Depression Anxiety Stress Scales-21 (DASS-21; Lovibond & Lovibond, 1995; see also Henry & Crawford, 2005). The DASS-21 was used to assess elements of mental health. It is a self-report measure with 21 items in the brief form used, seven for each of three sub-scaled emotions of depression, anxiety and stress. The DASS-21 uses a four point Likert scale response from 0 ('Did not apply to me at all') to 3 ('Applied to me very much, or most of the time'), in regards to how much participants believe statements have applied to them over the past week. An example item on the DASS-21 is; 'I found it hard to wind down'. In this study α =.94.

Life Events Checklist (LEC; Gray, Litz, Hsu, & Lombardo, 2004). Occurrence of difficult life events was assessed using the LEC. It consists of 17 items relating to difficult life experiences. Each item is rated on whether this situation has happen, was witnessed or learnt about. Only events that the participant has experienced firsthand are included in the total score. An example item on the LEC is; 'Life-threatening illness or injury'. In this study α =.65.

PTSD checklist-Stressor Specific (PCL-S; Weathers, Huska & Keane, 1991). The PCL-S assesses the impact of life events, as identified by the LEC. It consists of 17 items on a five point Likert scale ranging from 1 ('Not at all') to 5 ('Extremely'). An example item on the PCL-S is; 'Trouble falling or staying asleep?'. In this study α =.94.

Marlowe-Crowne Personal Reaction Inventory (Strahan and Gerbasi, 1972; Crowne & Marlowe, 1960). The inventory was used as a measure of social desirability. The ten item version of the inventory used has been found to have good psychometric properties (Fischer & Fick, 1993; see appendix E). Due to the self-report nature of the study, it was felt important to account for the potential impact social desirability might have on responses. Items are rated either 'True' or 'False'. An example SD item is; 'I like to gossip at times'. In this study α =.62.

Analytic Approach

Is self-compassion a valid construct?

The MTMM approach to assessment of convergent and discriminant validity was performed using a Correlated Trait-Correlated (Method-1) Confirmatory Factor Analytic (CFA) model as the primary analysis strategy (CT-C(M-1; Nussbeck et al, 2006; Brown, 2006). CT-C(M-1) enables the researcher to exclude one of the method factors used in the MTMM design and uses this excluded method as a comparison standard (Eid, Lischetzke, Nussbeck & Trierweiler, 2003). The benefits of this analysis strategy have been summarised as enabling the investigation of relationships between the method factors and between the method and trait factors, as well as trait-specific method effects (Kollman et al., 2009). In this way, all the information gathered by the MTMM approach is utilised. Mplus version 6 was used to perform this analysis using a Confirmatory Factor Analysis process (Muthén & Muthén, 1998-2007; see Appendix F for syntax). A representation of the CT-C(M-1) was

created to define the model for CFA using all the variables and latent variables presented in Table 2 (see Figure 1). Method one is not represented in the figure as it was the method selected for the comparison standard, as a Likert scale response focusing on thoughts and emotions. The latent factors of self-compassion, self-esteem and compassion for others are specified in addition to the latent factors of each trait-method unit (e.g. SCM1, SEM1, COM1, SCM2, SEM2...).

High, significant correlations between all self-compassion measures within and across different question methods were expected. This would provide support for the convergent validity and therefore the reliability of the construct of self-compassion. In contrast, lower correlations were expected between self-compassion items and items for other similar, established constructs.

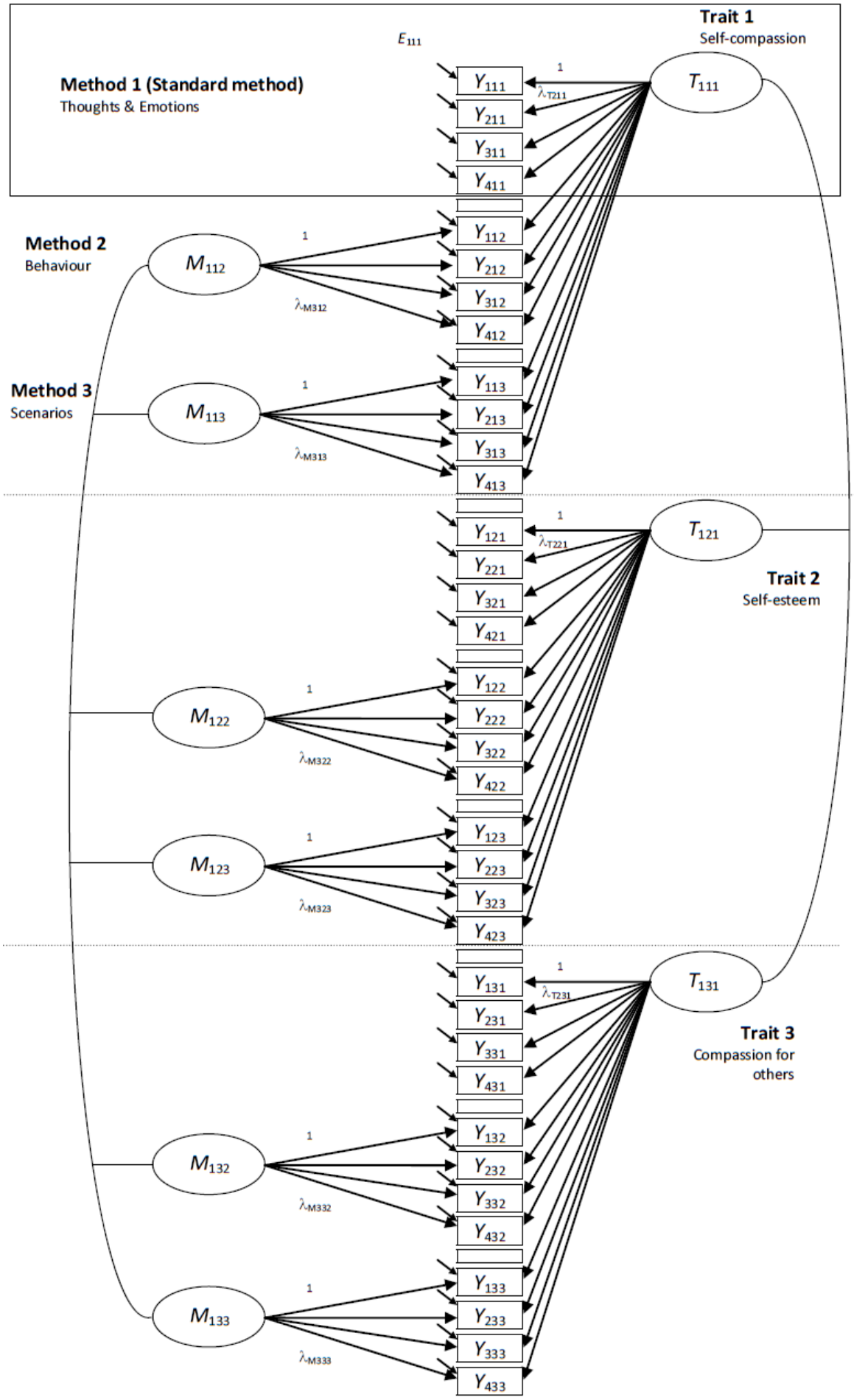
Trait 1
Self-compassion
Method 1 (Standard method)
Thoughts & Emotions
Method 2
Behaviour
Method 3
Scenarios
Trait 2
Self-esteem
Trait 3
Compassion for others

Figure 1. Multiple-indicator correlated trait-correlated method minus one [CT-C(M-1)] model. Y_{ijk} = observed variable; i = indicator; j = trait; k = method; T_{ijk} = latent trait variable (true score variable of the first indicator); M_{ijk} = trait-specific method factors; E_{ijk} = error variable. (Not all of the admissible correlations are depicted). λ_{Mijk}, λ_{Tijk} = factor loadings. Factor loadings are only depicted for one path for each factor, but they are estimated for all variables. The loading of the first indicator is fixed to one for all factors. Adapted from Eid et al. (2003).

To generate the data for the MTMM analysis, a survey was created containing three question methods, each containing four questions (indicator/ items) relating to each of the three constructs required for this approach (see Table 2). The indicators selected to represent self-esteem were based on the Rosenberg Self-esteem Scale (Rosenberg, 1965). Cronbach's alpha was run on previously acquired data from 77 participants, a third of whom were healthy controls, whilst 2 thirds had experienced traumatic incidents. The four items with the highest weighting on Cronbach's alpha were selected (n=77, α= .9). These items were compared to others selected for similar purpose in previous research and retained (see Schieman & Turner, 2001). The construct of compassion was represented by indicators from the Dispositional Positive Emotions Scale- Compassion Subscale (DPES; Shiota, Keltner & John, 2006). The DPES is a 38 item scale covering compassion joy, contentment, pride, love, amusement and awe. Cronbach's alpha for the compassion subscale has been demonstrated to be α = .80 (Shiota et al., 2006). The compassion subscale includes five items rated on a Likert scale response, one of which is 'I am a very compassionate person'. This item was removed for this study, but the remaining four items were used to represent compassion for others.

The self-compassion, self-esteem and compassion for others constructs were investigated using three questionnaire-based methods to facilitate the MTMM approach. The first of these (M1) involved Likert scale items using 'characteristic of me' response ranging from 1-'not at all characteristic of me' to 5-'extremely characteristic of me'. These items were feeling and thought focused. The second method (M2) utilised a semantic response format with a 5 point answer scale ranging from 'definitely yes' to 'definitely no'. These items had a more behavioural focus. The third method (M3) utilised scenarios, three presented with a fourth generated by participants. Each scenario had corresponding questions for each of the three constructs. An equal number of items for each of the three constructs were presented in each of the three methods (see Table 2). The items developed were assessed for face validity and construct clarity by researchers at the Exeter Mood Disorder Centre within a think tank and amended accordingly (see Appendix D).

Table 2

Indicators used for each trait across methods

M1	M2	M3 How would you rate your
	Self-Compassion items (α= .84)	
M1SC1: I am usually gentle and supportive with myself	M2SC1: I look after myself in a supportive way when I am having a difficult time	M3SC1: compassion for yourself?
M1SC2: I am kind to myself when I'm experiencing suffering	M2SC2: I do kind things for myself when I think I am suffering	M3SC2: compassion for yourself?
M1SC3: In general, I try to avoid my emotional pain (R)	M2SC3: I generally do things that distract me from my emotional pain (R)	M3SC3: compassion for yourself?
M1SC4: I am tolerant of my flaws and inadequacies	M2SC4: I tend to beat myself up when I recognise my flaws and inadequacies (R)	M3SC4: compassion for yourself?
	Self-Esteem items (α = .88)	
M1SE1: I feel that I'm a person of worth, at least on an equal plane with others	M2SE1: I am able to remind myself that I'm a person of worth, at least on an equal plane with others	M3SE1: self-esteem?
M1SE2: All in all, I am inclined to feel that I am failure (R)	M2SE2: I often tell myself that I am failure (R)	M3SE2: self-esteem?
M1SE3: On the whole, I am satisfied with myself	M2SE3: In general, I am able to feel satisfied with myself	M3SE3: self-esteem?
M1SE4: At times I think I am no good at all (R)	M2SE4: At times I tell myself I am no good at all (R)	M3SE4: self-esteem?
	Compassion for Others items (α = .46, without M3 α =. 86)	
M1CO1: I generally feel it is important to take care of people who are vulnerable	M2CO1: I feel it's important to take care of people who are vulnerable	M3CO1: compassion for your manager?
M1CO2: In general I feel a wish to help people who are suffering	M2CO2: When I see someone hurt or in need, I feel a powerful urge to take care of them	M3CO2: compassion for your friend?
M1CO3: Taking care of others gives me a warm feeling inside	M2CO3: It feels good when I help other people	M3CO3: compassion for the other person?
M1CO4: I can recognise when people are in emotional pain	M2CO4: I often notice people who need help	M3CO4: compassion for others involved?

Note. M1: Method 1 items with 5 point Likert scale of 'characteristic of me', feeling/thought focused. M2: Method 2 items with 5 point answer scale ranging from definitely yes to definitely no, behavioural focus. M3: Method 3 items with real life scenarios, feelings rated on a 10 point scale. Grey scale items were removed during analysis process. The following scenarios were used across all three traits; 1) You have noticed your manager at work looking stressed recently. An hour ago he/she came in to the office and shouted at you in front of your colleagues, saying your work has not been up to scratch. 2) You have been feeling very tired, however you agree to look after your friend's aged dog for the night. In the morning, you realise it died during the night, just as your friend arrives. This was an hour ago. 3) You are walking along the road when you trip over something on the floor. As you fall, you collide with someone else who then falls over with you. You both have some grazes but are ok. This was an hour ago. 4). Imagine a situation in the last two weeks where you have felt a little unhappy.

The data was screened prior to the CT-C(M-1) analysis. Missing data was limited and was managed by the maximum likelihood method. Due to the normal distribution of responses across methods and traits, the data was initially treated as continuous data within MPlus. The goodness of fit indicators used were; Chi-squared test of model fit (χ^2), standardised root meant square residual (SRMR), root mean square error of approximation (RMSEA) and the corresponding 90% confidence interval (90% CI) and the comparative fit index (CFI). These were used to compare each model to Hu and Bentler's (1999) model fit guidelines; SRMR $\leq$ .08, RMSEA $\leq$.06, 90% CI $\leq$ .06 and CFI $\geq$ .95. These multiple indicators of model fit were used together to provide a reliable and conservative evaluation of the model solution (Brown, 2006).

The model was initially specified using all four trait-method indicators as per Figure 1. This model was unable to converge, indicating possible problems of variance within some of the trait-method units. Cronbach's alpha was therefore applied to each trait-method unit and the lowest alpha for each removed, reducing the number of indicators in the analysis from 36 to 27, with three indicators for each of the nine trait-method units remaining within the limits specified by the CT-C (M-1) model, removed items are indicated in grey, Table 2 (Brown, 2006, pp. 189; Eid et al., 2003).

Does self-compassion uniquely predict mental health and wellbeing?

The relationship between the three constructs and measures of wellbeing and mental health were explored using Kendall's Tau correlation due to some multicolinarity between predictors, using SPSS (see Table 6). New variables were created from the sum of each of the three constructs, SC (Self-Compassion), SE (Self-Esteem) and CO (Compassion for others) across the three methods (the sum of nine items per construct). These were analysised using a multiple regression analysis which was conducted for mental health, wellbeing and trauma as outcome variables separately. A forwards stepwise approach was used after exploration of the data to provide an informed, stringent approach. All prerequisites for regression analysis were fulfilled and multicollinearity effects were controlled for. The results are presented in Table 7.

Results

Is self-compassion a valid construct?

To explore whether self-compassion was a unique construct, and MTMM approach was utilised initially using a CT-C (M-1) approach.

Table 3
CT-C(M-1) models assessed using in Mplus to explore convergent and discriminat validity

Model	CFI	SRMR	RMSEA	%90 CI for RMSEA	χ^2	df	Model Difficulties
1a							No convergence
1b	0.91	0.047	0.071	.065-.078	703.8	276	Negative variance
1c	0.9	0.056	0.074	.067-.080	736.9	276	Negative variance
1d							No convergence
2a	0.91	0.047	0.07	.063 -.076	686.1	276	Negative variance
2b	0.91	0.047	0.068	. 062 - .075	716.7	294	Negative variance

Note. M1 was the default method used as the comparison standard unless otherwise stated. Models could not be compared statistically in the model due to them not being nested and in model 2 because of the overlap in confidence intervals. 1a) All 4 items per trait/method, 1b) Three items per trait-method, 1c) Three Items per trait-method with M3 as comparison, 1d) Two items per trait-method. 2a) Three alternative trait-method items, 2b) Three alternative trait-method items including Social Desirability as a co-variate.

Despite the reduction in indicators and partially acceptable model fit indicators, the model solution contained negative variances (known as Heywood cases; Brown, 2006, pp. 126) which is an improper solution indicating a mis-specified model (see Table 3). Controlling for the impact of social desirability as a possible confounder for answering behaviour on the model, did not prove significant. As the sample size used was large (>300 cases, see appendix F for power calculation) the problem appeared to be the relationship between the model and the data. When modelling such data as continuous weighted root mean square residuals (WRMR), values can be inflated and CFI values underestimated, potentially leading researchers to discard plausible models (Satorra & Bender, 2010). Therefore to ensure this problem was not due to the indicators being treated as continuous

variables, the process was repeated specifying the data as categorical (see Table 4). Goodness of fit indicators used to assess the categorical models were as above, including the WRMR less than .90 is considered a good model fit (Muthen & Muthen, 1998–2004).

Table 4
CT-C(M-1) models assessed using Mplus specifying categorical data

Model	Chi-squared(c^2), df, p-value	CFI	RMSEA	WRMR	Model Difficulties
Cat M1 as Comparison					Model not identified
Cat M3 as Comparison	212.25(54), p<0.000	0.9	0.098	1.109	Negative variance
Cat M3 as Comparison, SD controlled	227.053(58), p<.000	0.9	0.097	1.105	Negative variance

Note. Chi-Square Test of Model Fit, CFI = comparative fit index, RMSEA = root mean square error of approximation and WRMR = weighted root mean square residual, SD =social desirability.

The categorical model provided a solution only when M3 was specified as the comparison standard and also provided negative variance. Exploratory factor analysis identified that M3 was emerging as a single factor alongside the three separate traits. This was the scenarios method that potentially created additional erroneous variance effecting the reliability of the CT-C(M-1) analysis. This process also identified difficulties with the trait of compassion for others which had large method effects for M3, indicating differences between participants' responses on M1 and M2 (general reports of feeling and behaviour) in comparison to M3 (specific real life scenario examples). Complex models such as those used in MTMM are commonly associated with negative variance difficulties (Brown, 2006, pp. 190), and the overall model fit indices indentified a relatively good final model; with SRMR scores less than the guideline of ≤ .08 (.047), RMSEA ≤.06 (0.68), 90% CI ≤ .06 (.062-.075) and CFI ≥ .95 (0.91) (see Model 2, Table 3). Unfortunately an improper solution remained and the model was therefore unreliable.

The relationships between the latent factors of self-compassion, self-esteem and compassion for others were important to explore because they did not behave as expected using the CT-C(M-1) model. A general MTMM matrix was therefore created to explore the convergent and discriminant validity of the data using the 27 indicators from the best model (continuous model 2) specified previously, using SPSS statistical package, version 18 (2009) (see Table 5).

Table 5

An MTMM representation of correlation co-efficients between latent trait-method units.

		Method 1			Method 2			Method 3		
	Traits	SC	SE	CO	SC	SE	CO	SC	SE	CO
Method 1	SC	(.672)								
	SE	.473**	(.670)							
	CO	.069	.012	(.677)						
Method 2	SC	.686**	.490**	.010	(.649)					
	SE	.529**	.719**	.018	.523**	(.690)				
	CO	.006	-.036	.803**	-.028	-.029	(.665)			
Method 3	SC	.410**	.421**	.018	.415**	.444**	-.037	(.599)		
	SE	.347**	.436**	-.059	.364**	.451**	-.118**	.529**	(.594)	
	CO	.063	.068	.201**	.051	.077	.217**	.134**	.162**	(.396)

Note. Latent variable were; SC= Self-Compassion, SE= Self-Esteem, CO= Compassion for Others. These were first created from the sum of the three items in each trait-method unit for each participant. Correlations were created using Kendall's Tau in SPSS due to the non-normal distribution of the newly created latent variables. N ranged between 304 and 265. Values on the diagonal in parentheses are indicator reliabilities and were calculated by dividing the sum of all nine correlations in each trait method unit by nine, to provide a more accurate correlation than an estimation of r =1. Light gray traiangles are the heterotrait-monomethod correlations which indicate method effects. White triangles represent the heterotrait-heteromethod correlations and are used to explore discriminant validity. The dark grey diagonals represent the monotrait-heteromethod correlations and are used to determine convergent validity. ** represents p<0.001. Matrix adapted from Trochim (2006).

The MTMM matrix (Table 5) shows relatively strong convergent validity for self-compassion ranging from .410 to .686 (monotrait-heteromethod diagonals). The convergent validity range is higher than the discriminant validity range in relation to self-esteem (.347 to .529, the white heterotrait-heteromethod triangles). The dicriminant validity is not as strong as anticipated possibly due to the high method effects between self-compassion and self-esteem as shown in the heterotrait-monomethod light grey triangles. However, self-compassion as identified in this context is similar but distinctly separate from self-esteem

(method 1, z=3.69, p<.001). Self-compassion has very strong dicriminant validity in regards to compassion for others (.006 to .063, white heterotrait-heteromethod triangles). However, compassion for others does not have uniformly high convergent validity and therefore cannot reliably contribute to the construct validity of self-compassion. The MTMM matrix partially supports the construct validity of self-compassion.

The diagonal correlates indicate low intra-items correlations within M3 across all traits but compassion for others has the lowest correlation with itself for M3. Participants' general compassion for others scores in M1 (.677) and M2 (.665) were lower than their expression of compassion for others in the real life examples in M3(.396) . These two difficulties may have contributed to the improper model solutions for the CT-C(M-1) using Mplus.

Does self-compassion uniquely predict mental health and wellbeing?

The correlational relationships between the constructs and mental health and well-being were first explored, followed by multiple regression analysis (Tables 6 and 7). Analysis of variance indicated that males had a significantly higher group main effect for self-esteem (males n= 78, M=31.7, females n=209, M=27.5, F(1,285)=15.6, p<.001) whilst females expressed a significantly higher group main effect for compassion for others (males n= 70, M=33.9, females n=188, M=36.3, F(1,256)=12.7, p<.001)). Self-compassion did not have any significant gender effects (F(1,280)=3.4). Exploring all of the DASS-21 sub scales together as an indication of mental health, self-compassion and self-esteem as predicted, were significantly negatively associated with mental health difficulties across the board. In contrast to initial predictions, compassion for others demonstrated a small but significant positive relationship to mental health, indicating that as mental health difficulties increased, expression of compassion for others also increased. Compassion for others in M3 only

followed self-compassion and self-esteem in having a significant negative relationship with mental health difficulties.

Table 6
Correlation co-efficients for each latent variable and measures of mental health, trauma and wellbeing.

	SCM1	SCM2	SCM3	SEM1	SEM2	SEM3	COM1	COM2	COM3
Gender	-0.08	-0.08	-0.06	-.13**	-.11*	-.29**	.17**	.19**	0.09
Age	.15**	.16**	.15**	.17**	.18**	.17**	0.03	-0.01	0.06
Uni Student	-0.04	-0.07	-0.04	-0.06	-0.05	-0.06	0.08	0.09	.134*
DASS Dep	-.39**	-.40**	-.35**	-.46**	-.52**	-.37**	0.06	.10*	-.11*
DASS Anx	-.30**	-.29**	-.24**	-.32**	-.35**	-.33**	0.03	.10*	-0.08
DASS Stres	-.34**	-.35**	-.26**	-.31**	-.36**	-.29**	0.07	.13**	-0.06
LEC	-.10*	-.10*	-0.04	-0.05	-0.04	-0.04	.09*	.14**	0.07
PCL	-.30**	-.33**	-.29**	-.36**	-.36**	-.30**	0.06	.14**	0.02
PTSD	-0.07	-0.07	-0.21*	-0.10	-0.07	-0.17	0.08	0.07	0.05
QOL Phy	.26**	.28**	.26**	.27**	.29**	.24**	0.08	0.05	.15**
QOL Psych	.38**	.36**	.39**	.43**	.47**	.34**	0.02	-0.03	.11*
QOL Social	.26**	.27**	.18**	.26**	.28**	.15**	-0.02	-0.04	.11*
QOL Enviro	.19**	.21**	.22**	.20**	.20**	.17**	0.05	0.00	0.08

Note. Mental Health is represented by DASS sub-scores showing depression, anxiety and stress. Difficult life events and trauma are represented by the LEC showing difficult life events, PCL showing trauma levels, from which PTSD levels were calculated. Wellbeing is represented by QOL measures showing quality of life across Physical, Psychological, Social and Environmental sub-scales. **p<.001, *p<.05. Missing data was controlled using pairwise.

The means for self-compassion M1 (*M*=8.87) and M2 (*M*= 9.02), were not significantly different from M3 (*M*=8.90, *t*(286)= -.167, n.s, *t*(284)= -.737, n.s respectively). However, M3 was significantly different to the other methods for both self-esteem (M1 *M*=10.59, M2 *M*=10.67, M3 *M*=7.44, *t*(291)= 19.16, *p*<.001, *t*(288)= 20.10, *p*<.001 respectively) and compassion for others (M1 *M*=12.92, M2 *M*=12.65, M3 *M*=10.12, *t*(257)= 18.62, *p*<.001, *t*(261)= 16.05, *p*<.001 respectively). The nature of MTMM is to recognise variance that might be created from method effects, therefore data from all three methods were included for each of the three constructs despite some significant differences. Variables were also created for mental health from the sum of the sub-scales score for the DASS-21, wellbeing from the WHOQOL-BREF and PTSD symptom severity as measured by the PCL (for participants who had experienced traumatic events indentified by the LEC).

Table 7
Hierarchical multiple regression analysis of mental health, trauma and wellbeing.

	n	B	SE B	β	R^2
Mental Health (DASS-21, Depression, Anxiety and Stress)					
Self-Esteem	287	-2.176	.168	-0.644***	.414
PTSD Symptom Severity (PCL-S total score for people with difficult life events)					
Self-Esteem	287	-1.048	.119	-0.525***	.276
Self-Esteem	287	-1.061	.118	-0.531***	.294
Compassion for Others	258	.451	.196	0.136*	
Well-being (WHOQOL-BREF)					
Self-Esteem	287	.522	.049	0.543***	.295
Self-Esteem	287	.558	.049	0.580***	.320
Gender	307	2.823	.896	0.162**	
Self-Esteem	287	.410	.078	0.426***	.335
Gender	307	2.584	.893	0.148**	
Self-Compassion	282	.196	.080	0.194*	

Note . Forward stepwise multiple regression presented. Missing cases were dealt with pairwise. ***p<0.001, **p<0.01, *p<0.05.

In contrast to the initial hypothesis and the correlation co-efficients self-compassion did not explain significant unique variance when entered together with self-esteem into the multiple regression analysis for mental health (Table 7). Self-esteem was the best individual predictor of mental health, accounting for 41% of variance when analysed as a single predictor. Self-Esteem appears to have a limited role in PTSD and self-compassion was not a predictor of PTSD. Together self-esteem and compassion for others explained 29% of the variance in PTSD symptom severity. Self-esteem, gender and self-compassion accounted for the 34% of the variance in wellbeing. In support of the initial hypothesis, the regression analysis identified a small but significant unique contribution of self-compassion in the prediction of wellbeing (sr^2 =.121, p<0.05). Although multicollinearity assumptions were not violated, self-compassion and self-esteem were highly correlated in all of the regression

analyses at r=.777, which was stronger than the correlation co-efficients of self-esteem and self-compassion individually with the outcome variables.

General Discussion

The aims of this study were to develop an operational definition of self-compassion grounded in theoretical and general understanding of the construct, to assess the construct validity of self-compassion and explore its role in mental health and wellbeing. For this, an internet survey assessing self-compassion, self-esteem, compassion for others, mental health, wellbeing and PTSD was developed. The definition and survey were created on the basis of a preliminary study and discussions with other professionals. British universities and internet websites were used to invite the general population to participate, resulting in 310 completed responses. Analyses for construct validity included CT-T(M-1), CFA approach and a traditional MTMM approach because the CFA did not provide reliable results. Results of the MTMM revealed partial support for the construct validity of self-compassion and results from the regression analysis revealed that self-compassion has a small but significant unique role in the prediction of wellbeing.

Is self-compassion a valid construct?

Discussion of the CT-C(M-1)approach.

The originally intended process of assessing construct validity using CT-C(M-1) provided an improper and therefore unreliable solution due to the presence of negative variance. Although this is a common occurrence with an MTMM approach, this may have been due to the nature of the construct relationships or the items selected to represent each construct. The construct of compassion for others behaved in a different way to both self-compassion and self-esteem. This may be indicative of a naturally large discrepancy between

how people feel or behave towards others and how they feel or behave towards themselves. This may not have been identified in previous MTMM research using constructs that focus only on how the individual feels and behaves towards themselves (see Kollman et al., 2009). Compassion for others was included because recent research has theorised the joint nature of compassion for others and compassion for self (Feldman & Kuyken, in press; Goetz et al., 2010). However a distinct separation between the two constructs was found that may have been overlooked in previous research. Method 3 also appeared to be significantly different to Method 1 and Method 2, especially in regard to compassion for others and self-esteem, which might also have accounted for the improper solution during the CT-C(M-1) analysis. This variability might have been due to the impact of other emotions elicited during the real life scenarios of M3, such as anger, shame or embarrassment negatively impacting on self-esteem and compassion for others.

Discussion of the traditional MTMM approach.

Traditional MTMM (Trochim, 2006) was conducted to explore the relationship of self-compassion with self-esteem and compassion for others across the three different methodologies used. The results provide support for the discriminant validity of self-compassion as a construct in relation to both self-esteem and compassion for others. In contrast to the hypothesis that self-compassion would show high convergent validity with compassion for others the convergent validity of self-compassion was only evident in relation to self-esteem. Therefore, partial support for the construct validity of self-compassion has been demonstrated.

Compassion for others is predominantly considered interchangeable with self-compassion (Feldman & Kuyken, in press; Goetz et al., 2010). It is felt that compassion as a construct is simply applicable to both self and others and that a less compassionate person

would be lacking in both and a more compassionate person would be compassion to themselves and others. This theory has not been supported by this research, demonstrated by the low correlations between self-compassion and compassion for others. The reason for this cannot be established from this research. It is possible that some people who find it difficult to be compassionate to themselves may over compensate by showing compassion to others or conversely, that some people who have high self-compassion do not show extra compassion for others. It might be that compassion for others is easier to achieve as there is always an element of 'at least its not me'. It could be that compassion for others and self-compassion are fundamentally different. It has been argued that compassion for others involves an appraisal of whether the person deserves the suffering (Goetz, Keltner & Simon-Thomas, 2010). It may be that people find it more difficult to be self-compassionate because it is easier to believe that they deserve their suffering than that others deserve their suffering. Although the unique construct of self-compassion was only partially supported, the findings maintain the idea that self-compassion and compassion for others are distinctly separate constructs within the general population.

Within the MTMM analysis, Method 3 appeared to be creating unexpected variance to self-esteem and compassion for others compared to Method's 1 and 2. Self-esteem and compassion for others were significantly affected by M3, but self-compassion was not. It is possible that the real life examples used in M3 tapped into a more ecologically valid measure. This possibility indicates the vulnerability of self-esteem and compassion for others to negative life events that involve an element of judgement by self or others, guilt, anger or shame. Whilst all the scenarios were designed to impact on all three constructs, self-compassion remained relatively stable across the three methods. This may have been due to self-compassion being generally lower in the first two methods and remaining so in M3. Alternatively it may indicate that when present, self-compassion might be more robust in

nature than compassion for others or self-esteem in emotional daily situations. This is in support of previous findings suggesting self-compassion is associated with higher emotional resilience and is less likely to be influenced by external circumstances (Neff & Vonk, 2009).

Does self-compassion uniquely predict mental health and wellbeing?

In order to investigate whether self-compassion uniquely predicts mental health and wellbeing, multiple linear regression was conducted with the DASS-21, WHOQOL-BREF and PCL as outcome measures. Self-compassion was expected to uniquely predict mental health and wellbeing, however a unique significant contribution of self-compassion was only identified in relation to wellbeing. This is in line with numerous studies and supports the previously highlighted importance of this construct for an individual's wellbeing (Leary et al., 2007). Previous studies indicate that self-esteem uniquely predicts mental health and wellbeing (Neff, 2011). This was supported in this research and self-esteem acted as a better predictor than self-compassion for both mental health and wellbeing.

The absence of a significant role for self-compassion in regards to mental health (general and PTSD) is in contrast to a variety of recent studies (Lee, Stopa & Karl, in press). Upon closer inspection, it is however apparent that the negative subscales of the SCS (isolation and judgement) are mostly driving these associations between mental health and self-compassion (Van Dam et al., 2011) whereas self-kindness (the subscale closest to how we conceptualised self-compassion here) is less consistently linked with mental health. Therefore in refining the definition of self-compassion to its core elements, it appears that its predictive link to mental health has diminished. This may be due to the accessibility of negative emotions such as self-criticism and judgement in people experiencing mental health difficulties. However further research is required to assess whether self-compassion, as defined by this study, becomes more accessible with psychological support.

The results indicated that self-esteem was a better predictor of mental health and wellbeing than self-compassion. It could be concluded that self-compassion, as defined in this study, does not have a role in predicting mental health. However, the results indicated that self-compassion and self-esteem total scores were highly correlated. It is likely that self-compassion and self-esteem accounted for some of the same variance within the regression analyses. It is difficult therefore to conclude the impact of self-esteem and self-compassion separately on mental health and wellbeing. Self-esteem items used were selected because they correlated well together and not because they represented the elements of self-esteem that have previously been highlighted as independent from self-compassion, such as judgement (Neff, 2011). The items selected may have represented an element of self-esteem that was more closely linked to self-compassion than self-esteem as a whole, such as; '*All in all, I am inclined to feel that I am failure.*'(self-esteem) and '*I am kind to myself when I'm experiencing suffering.*'(self-compassion). Therefore, further research could compare the construct of self-compassion as defined here with the judgemental elements of self-esteem and explore the effect of this separation on mental health and wellbeing.

Strengths and Limitations

The strength of this study lies in the attempt to understand and validate the core elements of self-compassion in a way that has not (to the author's knowledge) been done before. This study does however have a number of limitations. First, despite a preliminary study, the items for self-compassion, compassion for others and methods included in the survey may have been problematic. This was indicated by the absence of an acceptable model fit for the CFA and subsequently identified significant differences between Methods 1 and 2 with Method 3. These were problematic in the MTMM analysis for self-esteem and compassion for others, and may have been the result of poor method and item choice or poor scenario development. MTMM research predominantly utilises self-report data alongside

reports from participants' friends and family. Limiting the data to self-report solely in this study will have increased the risk of self-report bias. Previous research does however support the use of self-report data using only different questionnaire methods for the three method approaches in this way (Muis, Winnie, & Jamieson-Noel, 2007; Brown, 2003). Using compassion for others as a comparison construct may have limited the study further as research is not yet clear on its psychological benefits and as a construct in itself is still a controversial issue.

Participants were not asked about their understanding of self-compassion, whether they practice meditation or receive psychological support that might be increasing their self-compassion. Research utilising samples of people who are practiced in the cultivation of self-compassion, meditate or practice self-awareness may be a vital step in understanding self-compassion. Such work might discover self-compassion is more easily identifiable within peoples' thoughts, feelings and behaviours and therefore the construct may be validated in these samples more readily.

Self-compassion may generally be difficult to achieve or recognise in oneself, which may account for the difficulties in establishing strong support for its construct validity here. Research suggests that some people may even be afraid of showing themselves self-compassion (Gilbert et al., 2010; Neff, Kirkpatrick & Rude, 2007). The focus group highlighted that some people believe self-compassion to be a process of unjustified self-forgiveness and may therefore be deemed undesirable in western societies as opposed to other eastern cultures where Buddhist ideas incorporate elements of self-compassion (Neff, 2009b). It might also be that people whose culture supports self-compassion (Neff, Pisitsungkagarn & Hseih, 2008) or individuals who practice meditation may be more accepting of the importance of self-compassion. In this way, culture is likely to impact on

actual or perceived self-compassion however, ethnicity data was not collected as part of this study.

Future Research and Practice

The operational definition of self-compassion developed here could contribute to future research. It does however, require further validation. A review of the definition and the items used to represent it here may identify amendments to the items to ensure closer representation to the operational definition of self-compassion prior to further construct validation. Given the close relationship identified between self-compassion and self-esteem as defined here, further work comparing self-compassion with the separate elements (such as judgement) of self-esteem could identify the uniqueness of the constructs further. The construct validation process could also be replicated using other similar constructs that researchers have hypothesised self-compassion is closely associated with, such as forgiveness, empathy and awareness. This would provide the foundation for future self-compassion research, where support for the core elements of the construct could increase, rather than research that only supports broad definitions of self-compassion where it is conjoined to other constructs and processes.

It may be consistently difficult to establish the role of self-compassion on wellbeing and mental health, if people find self-compassion difficult to do or even recognise in themselves. It may be that other processes such as empathy or awareness are required to achieve self-compassion or for it to be clearly measured. For example, self-compassion may be a higher order mentality that requires practice and awareness to reach as Neff (2009b) suggests, or a deep innate ability that one is taught to overcome, ignore, or fight against. By, first establishing how people can develop or recognise their own self-compassion, increased support for the unique construct could be established.

Once established, research could then focus on using the unique elements of the construct to assess the biological implications of self-compassion, how self-compassion could be or perhaps already is incorporated in to therapy and increase understanding of how it is involved in improving wellbeing. This being achieved, clinical and community psychology practice could be enhanced by the inclusion of self-compassion as another tool for achieving wellbeing and mental health. Reciprocally, psychological practice could then contribute to the evidence base of self-compassion as a unique function in improvement in mental health and wellbeing.

Unexpected findings from this research included the separate nature of self-compassion and compassion for others, and the potential emotional resilience of self-compassion in comparison to self-esteem and compassion for others. Future research should be mindful of the potential differences between self-compassion and compassion for others and further exploration is required to establish the nature and extent of the differences between the two constructs. The potential emotional resilience of self-compassion in the face of external circumstances requires further attention for conclusions to be drawn and establish the implications of this potentially protective self-compassion effect.

Summary

This research has identified an operational definition of self-compassion based on Neff and Gilbert's theories, research in the area and general understanding of self-compassion, which is distinct from other similar constructs. Results demonstrate partial support for the construct of self-compassion. Self-compassion's unique role in the prediction of wellbeing was confirmed. In contrast to current theories, self-compassion and compassion were poorly correlated. Further construct validation is required to support this definition of the construct of self-compassion and its role in mental health and wellbeing.

References

Birnie, K., Speca, M., & Carlson, L. E. (2010). Exploring self-compassion and empathy in the context of mindfulness-based stress reduction (MBSR). *Stress and Health, 26*(5), 359-371. doi:10.1002/smi.1305

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3,* 77-101. doi: 10.1191/1478088706qp063oa

British Psychological Society (BPS). (2009). *Code of Ethics and Conduct*. Leicester: British Psychological Society, Division of Clinical Psychology.

Brown, T. A. (2006). *Confirmatory Factor Analysis for Applied Research.* London: Guilford Press

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56,* 81-105.

Compassionate Mind Foundation. (2007). *Compassion Focused Therapy: Training Material.* Retrieved November 22, 2010, from http://www.compassionatemind.co.uk/11.html.

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

Decety, J., & Jackson, P. J. (2004). The functional architecture of human empathy. *Behavioral and Cognitive Neuroscience Reviews, 3*(2), 71-100. doi:10.1177/1534582304267187

Eid, M., Lischetzke, T., Nussbeck, F. W., Trierweiler, L. I. (2003). Separating trait effects from trait-specific method effects in multitrait-multimethod models: A multiple-indicator CT-C(M-1) model. *Psychological Methods, 8*(1), 38-60. doi: 10.1037/1082-989X.8.1.38

Feldman, C., & Kuyken, W. (in press). Compassion in the landscape of suffering. *Contemporary Buddhism.*

Fischer, D. G., & Fick, C. (1993). Measuring social desirability: Short forms of the Marlowe-Crowne social desirability scale. *Educational & Psychological Measurement, 53*, 417–425.

Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology, 95*(5), 1045-1062. doi: 10.1037/a0013262

Gilbert, P. (2010). An Introduction to Compassion Focused Therapy in Cognitive Behaviour Therapy. *International Journal of Cognitive Therapy, 3*(2), 97-112.

Gilbert, P. (2009). *The Compassionate Mind.* London: Constable & Robinson.

Gilbert, P., Baldwin, M., Irons, C., Baccus, J., & Clark, M. (2006). Self-criticism and self-warmth: An imagery study exploring their relation to depression. *Journal of Cognitive Psychotherapy, 20*, 183–200.

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

Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2010). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy: Theory, Research and Practice, in press.* doi: 10.1348/147608310X526511

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology and Psychotherapy, 13,* 353-379. doi: 10.1002/cpp.507

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

Goetz, L., Keltner, D., Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin, 136*(3), 351-374. doi: 10.1037/a0018807

Gray, M. J., Litz, B. T., Hsu, J. L. & Lombardo, T. W. (2004). The psychometric properties of the Life Events Checklist. *Assessment, 11*, 330-341.

Harman, R., & Lee, D. (2010). The role of shame and self-critical thinking in the development and maintenance of current threat in post-traumatic stress disorder. *Clinical Psychology & Psychotherapy, 17*(1), 13-24. doi: 10.1002/cpp.636

Henry, J. D., & Crawford, J. R. (2005). The 21-item version of the Depression Anxiety Stress Scales (DASS–21): Normative data and psychometric evaluation in a large non-clinical sample. *British Journal of Clinical Psychology, 44*, 227–239.

Hu, L., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling, 6*, 1–55.

Kollman, D., Brown, T., & Barlow, D. (2009). The construct validity of acceptance: A multitrait-multimethod investigation. *Behavior Therapy, 40,* 205-218.

Leary, M. R., Tate, E.B., Adams, C. E., Batts Allen, A., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology, 92*(5), 887-904. doi: 10.1037/0022-3514.92.5.887

Lee, V., Stopa, L., & Karl, A. *Views of the self in posttraumatic stress disorder*. Submitted for publication.

Lovibond, S.H. & Lovibond, P.F. (1995). *Manual for the Depression Anxiety Stress Scales*. (2nd. Ed.) Sydney: Psychology Foundation.

Mayhew, S. L., & Gilbert, P. (2008). Compassionate mind training with people who hear malevolent voices: a case series report. *Clinical Psychology & Psychotherapy, 15*(2), 113-138. doi: 10.1002/cpp.566

Muis, K., Winnie, P., & Jamieson-Noel, D. (2007). Using a multitrait-multimethod analysis to examine conceptual similarities of three self-regulated learning inventories. *British Journal of Educational Psychology,77* (1), 177–195.

Muthén, L. K., & Muthén, B. O. (1998-2007). *Mplus user's guide* (5th ed.). Los Angeles, California: Muthén & Muthén.

Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*, 85-102. doi: 10.1080/15298860390129863

Neff, K. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223-250. doi: 10.1080/15298860390209035

Neff, K. (2009a). *Self-Compassion Part 1: Video.* Retrieved April 2, 2011, from http://www.self-compassion.org/.

Neff, K. (2009b). The role of self-compassion in development: A healthier way to relate to oneself. *Human Development, 52,* 211-214. doi: 10.1159/000215071

Neff, K. (2011). Self-Compassion, Self-Esteem, and Well-Being. *Social and Personality Psychology Compass, 5*(1), 1-12.

Neff, K., Kirkpatrick, K., & Rude, S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality, 41,* 139-154. doi:10.1016/j.jrp.2006.03.004

Neff, K., Pisitsungkagarn, K., & Hseih, Y. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology, 39,* 267–285. doi:10.1177/0022022108314544

Neff, K., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality, 77*(1), 23-50. doi:10.1111/j.1467-6494.2008.00537.x

Nussbeck, F. W., Eid, M., & Lischetzke, T. (2006). Analysing multitrait-multimethod data with structural equation models for ordinal variables applying the WLSMV estimator: What sample size is needed for valid results? *British Journal of Mathematical and Statistical Psychology, 59,* 195-213. doi:10.1348/000711005X67490

Pace, T. W. W., Negi, L. T., Adame, D. D., Cole, S. P., Sivilli, T. I., Brown, T. D., ... Raison, C. L. (2009). Effect of compassion meditation on neuroendocrine, innate immune and behavioral responses to psychosocial stress. *Psychoneuroendocrinology, 34*(1), 87-98. doi: 10.1016/j.psyneuen.2008.08.011

Rosenberg, M. (1965). *Society and the Adolescent Self-image*. Princeton, NJ: Princeton University Press.

Satorra, A., & Bentler, P. M. (1994). Corrections to test statistics and standard errors in covariance structure analysis. In A. Von Eye & C. C. Clogg (Eds.), *Latent variable analysis: Applications for developmental research* (pp. 399-419). Thousand Oaks, CA: Sage.

Schieman, S., & Turner. H. A. (2001). "When feeling other people's pain hurts": Psychosocial resources and the relationship between empathy and depressive emotions. *Social Psychology Quarterly* 64:376–89.

Shiota, M. N., Keltner, D., & John O. P. (2006). Positive emotion dispositions differentially associated with Big Five personality and attachment style. *Journal of Positive Psychology, 1*, 61-71. doi:10.1080/17439760500510833

Skevington, S. M., Lotfy, M., Oconnell, K., & The WHOQOL Group. (2004). The World Health Organisation's WHOQOL-Bref quality of life assessment: Psychometric properties and the results of the international field trial. *A Report from the WHOQOL Group, Quality of Life Research, 13*(2), 299-310.

SPSS Inc. (2009). *SPSS for Windows, Rel. 18.0.0.* Chicago: Author.

Strahan, R., & Gerbasi, K. C. (1972). Short, homogeneous versions of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology, 28*, 191–193.

Survey Gizmo (n.d). Retrieved February 18, 2010, from http://www.surveygizmo.com.htm .

Thomson, B. L., & Waltz, J. (2008). Self-compassion and PTSD symptom severity. *Journal of Traumatic Stress, 21*(6), 556-558.

Trochim, W. M. (2006). *The research methods knowledge base, 2nd edition*. Retrieved February 18, 2010, from http://www.socialresearchmethods.net/kb .

Van Dam, N. T., Sheppard, S. C., Forsyth, J. P., & Earleywine, M. (2011). Self-compassion is a better predictor than mindfulness of symptom severity and quality of life in mixed anxiety and depression. *Journal of Anxiety Disorders, 25*(1), 123-130.

Weathers, F.W., Huska, J.A., Keane, T.M. (1991). *PCL-S for DSM-IV*. Boston: National Centre for PTSD - Behavioural Science Division.

Appendices

Appendix A: Extended Introduction

In this manuscript, mental health refers to all experiences and distress that might lead someone to seek help from mental health professionals and is inclusive of PTSD related difficulties. Wellbeing incorporates everyone and refers to feeling good about one's self and one's life. When mental wellbeing is mentioned, this refers to both general wellbeing and mental health issues. These words are used for clarity only and are not meant to imply any sort of division between people who are currently experiencing difficulties and the general population.

Appendix B: Focus Group

Introduction

Previous research such as that conducted by Gilbert and Neff (Gilbert et al., 2004; Neff, 2003b) have demonstrated the validity and reliability of the measures they developed to study self-compassion in both clinical and general samples. These processes have produced growing interested in the role of self-compassion on people's mental health and well-being. However their research was grounded on their own theoretical understanding of self-compassion and it remains unclear how well these fit with people's general idea of what self-compassion is. In Neff, Kirkpatrick and Rude's (2007) research for example, clinicians were trained in self-compassion as per Neff's definition before they were asked how well they felt Self-Compassion Scale (SCS) represented self-compassion. The results demonstrated that the SCS represented self-compassion as per Neff's definition, not necessary providing support for the SCS representing true self-compassion. It was hoped that by piloting this research with an open discussion on what people believe self-compassion to be, the definition of self-compassion used in this research could be founded within a general psychological understanding of what self-compassion is. It was felt that trainee clinical psychologists would have some insight into positive self affective and the awareness to explore self-compassion without receiving any specific training on self-compassion beforehand.

Methodology

The sample consisted of seven clinical psychology trainees in the third year of their course at the University of Exeter, including five females (71%) and two males (29%) all aged between 29 and 32. The participants volunteered their own time and received nothing for their participation.

A semi-structured interview was followed and the focus group was recorded with participant consent. Participants were first asked whether they had any prior experience of literature or training on self-compassion; one participant had attended a self-compassion seminar and read some literature, three had read a small amount on self-compassion and three had not read anything on self-compassion. Participants were asked to discuss issues raised by three questions; 1) What do they think self-compassion is and is it something we are born with or something we develop, 2) How would they recognise self-compassion in themselves, 3) How might they recognise self-compassion in their clients?

The discussion was analysed using thematic analysis (Braun and Clarke, 2006, pg. 87). Thematic analysis is a six stage process; Familiarisation with the data, generating initial codes, searching for themes, reviewing those themes, defining and naming the themes and producing the report. These processes were closely followed and the researcher moved backwards and forwards through the stages to ensure the themes represented the data.

Results

The emerging overarching themes of self-compassion indicated it is something that is innate, that it is could also be nurtured and that it is an inner voice. These themes incorporated the following; *Innate*- A coping ability that is inbuilt but growth dependable, which can affect a person's biology, psychology and social life. *Nurtured*- that it is complex and dynamic, individual, difficult, it can be encouraged /is encouraging, and involves an interpersonal element in its development. *Inner Voice*- that it involves using one's own inner voice, it is similar but different to sympathy /empathy/ self-esteem, it is not guilt/shame/self-blame/hatred, it involves acceptance and allowing and is the balance of one's own good and bad. Concerns over the possible negative impacts of self-compassion such as unjustified self-forgiveness were also highlighted.

Discussion

These results support the work of most self-compassion research in identifying self-compassion as an innate ability that can be nurtured or neglected depending on someone's life experiences (Gilbert, 2009). The complexity of self-compassion also emerged, in that it is similar but unspecifiably different to other constructs such as self-esteem and defiantly is not about self-blame and guilt. This is also in-line with previous broad definitions of self-compassion used (Neff, 2003a and Gilbert 2009) and that many studies focus on self-blame, self-criticism to support self-compassion rather than exploring self-compassion itself (Gilbert et al., 2004). The negative elements were highlighted by one participant only but replicate other findings where people feel that self-compassion might unduly reduce someone's guilt or reduce their motivation (Gilbert & Irons, 2005). Although these fears are not supported by research it does highlight why self-compassion might be difficult in general and probably clinical populations.

One limitation of the pilot study was that participants did not get the opportunity to comment on the themes created, which would have increased the validity of themes or created the opportunity for them to have been amended. Of the seven members of the sample four had some prior information on self-compassion, mainly from Paul Gilbert's compassionate mind work (Gilbert & Proctor, 2006) which is likely to have impacted on their ideas of what self-compassion is.

Researching the public's perception of what self-compassion is could be explored on its own. This focus group was a very heterogeneous sample of people with a great deal of psychological understanding and their thoughts are likely to differ from that of the general public. Understanding of self-compassion is also likely to vary across cultures and if researched could be very instrumental in understanding how self-compassion can be

cultivated, expressed and impact on mental wellbeing. The participants' thoughts highlighted some of the negatively held beliefs about self-compassion as a process of undeserved self-forgiveness. This requires further attention as a potentially cultural process which is likely to add shame to the process of self-compassion itself. Whilst this seems very much at odds to what clinicians and researchers might perceive self-compassion to be, it may be very difficult for many people with such beliefs to consider self-compassion as an option for increased mental wellbeing.

Appendix C: Analysis of Existing Data

Introduction

Most self-compassion related research uses either Neff or Gilbert's validated measures (SCS, Neff, 2003b; Forms of self-criticizing/attacking and self-reassuring scale (FSCRS) and Functions of self-criticizing/attacking scale (FSCS) in Gilbert, et al., 2004). They do however both appear to incorporate other processes that may increase self-compassion (such as mindfulness in the SCS and self-punishment in the FSCS) which may not be part of the core construct of self-compassion. Neff and Gilbert's broad definitions do however seem to contain some common elements such as a focus on *warmth* and *self-kindness.* It was felt that the core elements of self-compassion might be part of both scales but these would need to be separated from other similar constructs in the scales.

Methodology

Existing data was utilised to explore the main factors of the three scales analysed together. An existing dataset collected as part of different research projects in control samples was explored. The data consisted of 101 participants from the general population who completed both the SCS (Neff) and Forms of self-criticizing/attacking and self-reassuring scale (FSCRS; Gilbert). Principle Component Analysis (PCA) was used with an oblique rotation to take account of the possible relationship between factors.

Results

The 26 item SCS and the 22 item from part one and 21 items from part two of the FSCRS were analysed using principal component analysis (PCA) using SPSS Version 18. Prior to performing PCA the suitability of the data for factor analysis was assessed. The Kaiser-Meyer-Oklin value was .75, exceeding the recommended value of .6 (Kaiser, 1970,

1974) and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix.

PCA indicated the removal of four of the SCS and four of the FSCRS items and excluded cases listwise, leaving 98 participant's data. PCA revealed the presence of six components with eigenvalues exceeding 2, explaining 16%, 4.9%, 4.5%, 2.9%, 2.4% and 2.1% of the variance respectively. An inspection of the scree plot (see Figure 2) revealed the last break after the fourth component. Using Catell's (1966) scree test, it was decided to retain four components for further investigation.

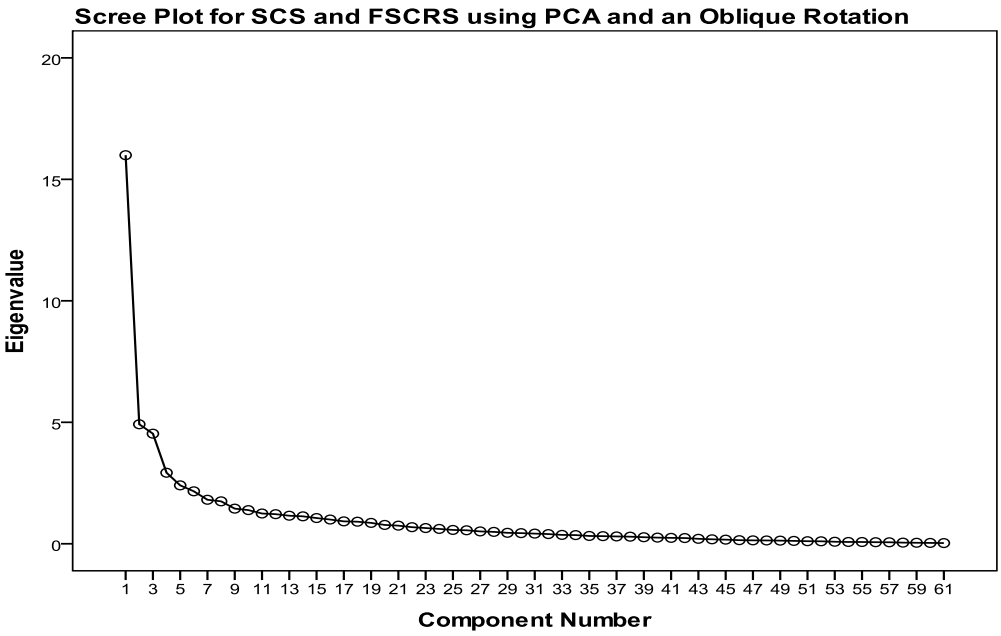

Figure 2: Shows the number of factors identified during PCA of the SCS and FSCRS. Four SCS and four FSCRS items were removed before this analysis. Four main factors were identified.

To aid in the interpretation of these four components, an oblique rotation was performed. This highlighted a four factor model, with strong factor loadings for each component. The four-component solution accounted for 46.5% of the variance; with component 1 (26.2%), component 2 (8.1%), component 3 (7.4%), component 4 (4.8%). These two scales have not, to the author's knowledge, been analysed together in this way

before. The factor loading suggested one factor where elements of both SCS and FSCRS came together, with the other three factors weighing heavily on one specific element of either questionnaire.

Table 8

Confirmatory factor analysis loadings for factor one and related themes from the focus group.

Item	Code	Pattern Matrix	Structure Matrix	Relating Theme from Focus Group
1. I am gentle and supportive with myself.	FSCRS_P1_16	-.830	-.765	Encouragement Inner Voice
2. I'm disapproving and judgmental about my own flaws and inadequacies.	SCS1	.719	.741	Acceptance and allowing
3. I am easily disappointed with myself.	FSCRS_P1_1	.707	.730	Acceptance and allowing
4. There is a part of me that puts me down.	FSCRS_P1_2	.697	.787	Not self-blame
5. I find it easy to like myself	FSCRS_P1_13	-.692	-.712	Acceptance and allowing
6. I can still feel lovable and acceptable	FSCRS_P1_11	-.653	-.657	Acceptance and allowing Own good and bad
7. There is a part of me that feels I am not good enough.	FSCRS_P1_6	.653	.693	Empathy Acceptance and allowing
8. I'm tolerant of my own flaws and inadequacies.	SCS23	-.645	-.621	Balance of own good and bad Acceptance and allowing Empathy
9. I'm kind to myself when I'm experiencing	SCS19	-.617	-.581	Empathy

suffering				
10. There is a part of me that wants to get rid of the bits I don't like	FSCRS_P1_20	.616	.652	Not self blame/shame/hatred
11. When I'm going through a very hard time, I give myself the caring and tenderness I need	SCS12	-.605	-.598	Empathy Inner voice Helps coping
12. I am able to remind myself of positive things about myself	FSCRS_P1_3	-.592	-.571	Balance of own good and bad Inner voice Encouraging
13. When I fail at something important to me I become consumed by feelings of inadequacy	SCS6	.587	.680	Not self blame/shame/hatred
14. I try to be understanding and patient towards those aspects of my personality I don't like	SCS26	-.550	-.614	Balance of own good and bad
15. I try to be loving towards myself when I'm feeling emotional pain	SCS5	-.541	-.525	Empathy
16. I can be a bit cold-hearted towards myself when I'm experiencing suffering	SCS21	.500	.568	Empathy

Note. FSCRS codes relate to Forms of self-criticizing/attacking and self-reassuring scale (Gilbert et al., 2004) and SCS relate the Self-Compassion Scale (Neff, 2003b).

Factor 1 (Table 8) is a mixture of variables from both the FSCRS and the SCS, specifically with the 'non self-judgemental' and 'self-kindness elements from the SCS (as identified by Neff, 2003b). It was thought that this factor could relate to the core elements of self-compassion from the two questionnaires. The items and themes were reflected on and discussed with other professionals in the field. From this process the items in Table 8 were reduced to nine items. After an initial Cronbach's alpha analysis, another item was deselected. Cronbach's alpha was then repeated on the remaining eight items (n=101, α=.84 with inter-item correlations ranging from .499 to .627). These items were reflected on further in regards to the themes and the final three were selected; items 1, 9, 8 from Table 8 were selected. A fourth item was created to reflect the final element of self-compassion that seemed to be missing from the SCS and FSCRS scales; '*In general, I try to avoid my emotional pain'.*

Items from the FSCRS P2 were the only ones that weighted onto factor 2 and were focused on being self-critical. Factor 3 encompassed some FSCRS variables from P2 with some P1 which seemed to focus on self-hatred/self-punishment whilst SCS variables only weighted onto factor 4. Of the five strong factor loadings, four were from 'mindfulness' variables and the last from an 'isolation' variable. Factor 1 has a negative relationship with Factor 3 but a positive relationship with Factor 4. Factor 2 appeared to be separate from the other factors.

Discussion

The first factor was the only one of the four with strong factor loadings from both the SCS and FSCRS. This factor was deemed to be the core elements of self-compassion as understood by the two main authors in this field (Neff and Gilbert). The other factors related to self-criticism, self-hatred/punishment and mindfulness. The self-criticism factor may have

been very separate due to the difference in questions utilised in that part of the scale. However, factor 3 indicates that self-hatred/ punishment isn't necessarily the opposite of the self-compassion element identified in factor 3 which is in opposition to Gilbert understanding of self-compassion (Gilbert et al, 2004). It is of interest that the mindfulness items weighed on the separate factor to what seems to be self-compassion is in contrast to Neff's (2003b) understanding that it forms part of self-compassion.

The reliability of this pilot study is limited by the sample size used. However, it was able to identify correlated items from the main self-compassion scales used in research that may specify the core elements of self-compassion. These findings would be supported by replication research using a larger sample in both community and clinical populations to specify the similarities and differences between the two main measures of self-compassion currently being used.

Appendix D: Development of Definition and Items

The research proposal was presented to the University of Exeter's Mood Disorder Centre Think Tank. Feedback indicated the operational definition developed was supported by professional's own understanding of self-compassion. Feedback did however indicate that the three methods initially proposed were felt to be too similar for the MTMM approach. M1 was considered the default method approach as Likert scales of this type are commonly used in psychological research. The third method was therefore adapted to be very different from a scaled question answer approach and therefore real life scenarios were developed.

Appendix E: Standardised Measures

Permission for the use of the WHOQOL-BREF was sort and granted on the 24th January 2011 by WHO Field Centre for the Study of Quality of Life, University of Bath. All other formal questionnaires used are available in the public domain. The shorten version of the Marlowe-Crowne Social Desirability Scale used is presented below. For full survey and questionnaires see Appendix I.

PERSONAL REACTION INVENTORY
(Marlowe-Crowne Social Desirability Scale)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is True or False as it pertains to you personally, then circle that answer.

(1) I like to gossip at times. TRUE FALSE

(2) There have been occasions when I took advantage of someone. TRUE FALSE

(3) I am always willing to admit it when I make a mistake. TRUE FALSE

(4) I always try to practice what I preach. TRUE FALSE

(5) I sometimes try to get even rather than forgive and forget. TRUE FALSE

(6) At times, I have really insisted on having things my own way. TRUE FALSE

(7) There have been occasions when I felt like smashing things. TRUE FALSE

(8) I never resent being asked to return a favour. TRUE FALSE

(9) I have never been irked when people expressed ideas very different from my own. TRUE FALSE

(10) I have never deliberately said something that hurt someone's feelings. TRUE FALSE

Appendix F: Expanded Methodology

Procedure

Information sheets were emailed but information was repeated at the beginning of the survey for people recruited via social networking sites and psychology research websites. Every page had an 'exit survey' now button (apart from the first two due to the randomisation of questions on these pages) which took participants straight to the last page providing helpline numbers and useful web links and debrief information (Appendix I). In M3 Participants were asked to imagine they are in each scenario, reminded there are no right or wrong answers and at the end told that they do not need to remember these scenarios anymore. Trainee feedback from completion of the survey indicated that they did not find the final survey overly distressing (above that experienced by daily life such as through the media), that it took less than 40 minutes to complete and felt they were able to understand and answer the items.

Mplus Syntax for Model 2

```
Variable:
  Names are
    gender age student m1sc1 m1sc2 m1sc3 m1sc4 m1se1 m1se2 m1se3 m1se4
    m1co1 m1co2 m1co3 m1co4 m2sc1 m2sc2 m2sc3 m2sc4 m2se1 m2se2 m2se3
    m2se4 m2co1 m2co2 m2co3 m2co4 m3se1 m3co1 m3sc1 m3se2 m3co2 m3sc2
    m3se3 m3co3 m3sc3 m3se4 m3co4 m3sc4
  Missing are all (-9999) ;
Usevariables are m1sc1 m1sc2 m1sc4 m1se1 m1se2 m1se4 m1co1 m1co2
```

```
    m1co3 m2sc1 m2sc2 m2sc4 m2se1 m2se2 m2se4 m2co1 m2co2 m2co3 m3sc1
    m3sc2 m3sc4 m3se1 m3se2 m3se4 m3co1 m3co2 m3co4;
Analysis:
  Iterations = 1000;
Model:
  SC by m1sc1 m1sc2 m1sc4 m2sc1 m2sc2 m2sc4 m3sc1 m3sc2 m3sc4;
  SE by m1se1 m1se2 m1se4 m2se1 m2se2 m2se4 m3se1 m3se2 m3se4;
  CO by m1co1 m1co2 m1co3 m2co1 m2co2 m2co3 m3co1 m3co2 m3co4;

  M2SC by m2sc1 m2sc2 m2sc4;
  M2SE by m2se1 m2se2 m2se4;
  M2CO by m2co1 m2co2 m2co3;
  M3SC by m3sc1 m3sc2 m3sc4;
  M3SE by m3se1 m3se2 m3se4;
  M3CO by m3co1 m3co2 m3co4;

  SC with M2SC@0 M3SC@0;
  SE with M2SE@0 M3SE@0;
  CO with M2CO@0 M3CO@0;

Output: standardized;
```

Appendix G: Expanded Results

Means and standard deviations for all sum total scores of the three traits, mental health and wellbeing were created (see Table 9). This indicated that the community sample used reported lower levels of self-compassion than self-esteem and higher levels of compassion for others. All mental health sub-scales measured by the DASS-21 indicated that on average, the sample represented mild levels of anxiety, depression and stress (i.e, higher than normal). The sample had experienced 2-3 difficult life events on average. Of the people who had experienced difficult life events (246), 73 of these had high scores of PTSD symptmatology in a range that might suggest a diagnosable post traumatic stress disorder.

Table 9
Means and standard deviations of traits and mental health and wellbeing

	Mean	SD	
Self-compassion	26.77	7.74	(highest possible score: 45)
Self-esteem	28.66	8.11	(highest possible score: 45)
Compassion for others	35.67	4.87	(highest possible score: 45)
Mental Health Total (DASS-21):	40.44	27.40	
Anxiety	9.16	9.45	Mild
Depression	13.45	11.04	Mild
Stress	17.47	10.42	Mild
Wellbeing (WHOQOL-BREF)	54.65	7.79	
Difficult life events (LEC)	2.71	2.21	(number of events)
PTSD symptomatology (PCL)	36.51	16.19	
PTSD (possible diagnositic level; PCL)	57.79	9.84	

Appendix H: Ethics Documentation

Psychology Research Ethics Committee

Psychology, College of Life & Environmental Sciences

Washington Singer Laboratories
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EX4 4QG

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Fax +44 (0)1392 264623
Email Marilyn.evans@exeter.ac.uk

To: **Claire Jones**

From: **Cris Burgess**

CC: **Anke Karl**

Re: **Application 2010/152 Ethics Committee**

Date: **September 9, 2011**

The School of Psychology Ethics Committee has now discussed your application, ***2010/152 – The construct validity of self-compassion.*** The project has been approved in principle for the duration of your study.

The agreement of the Committee is subject to your compliance with the British Psychological Society Code of Conduct and the University of Exeter procedures for data protection (http://www.ex.ac.uk/admin/academic/datapro/). In any correspondence with the Ethics Committee about this application, please quote the reference number above.

I wish you every success with your research.

Cris Burgess

Chair of Psychology Research Ethics Committee

Appendix I: Survey

Coping with Stressful Life Events

Page One

This study aims to identify strategies people use to cope with life's difficulties. For this we have developed a survey with questions around the types of stressful events you may have experienced as well as questions around how you deal with these emotionally. We would like to invite anyone aged 18 or over, who is able to read and for whom English is their first language to take part in this study.

The study will involve one online survey which should take no longer than 40 minutes. Some questions will be about stressful life events (which some people may find temporarily upsetting, others may not) and current psychological well-being. Helpline numbers will be available when you leave or complete the survey, alternatively you may contact myself or Dr. Anke Karl at the Mood Disorder Centre, University of Exeter on 01329 725753. Some people may not feel distressed at all. In the unlikely event that you experience strong distress we will be able to advise you.

It is up to you to decide whether or not to take part. If you do decide to take part you will be directed to a consent form at the beginning of the survey. If you decide to take part you are still free to withdraw from the study or parts of it at any time and without giving a reason. All information collected about you during the course of the research will be kept strictly confidential. Personal information will not be released to or viewed by anyone other than researchers involved in this project. All of the data collected will be coded so that it is anonymous and will be stored securely. Any data you supply will be anonymous and will not be traced back to you in any way. Results of this study will not include your name or any other identifying characteristics.

The data from this study is accessible by the researcher Claire Jones and the supervisor of the study Dr Anke Karl. The results of the study will be presented in the School of Psychology, University of Exeter and research is often reported on the Mood Disorders Centre website at: http://www.centres.ex.ac.uk/mood. The study will be included in a Clinical Psychology Doctorate dissertation as part of the School of Psychology at the University of Exeter and may be published.

To thank you for taking part in this study, anyone who would like to will be entered in to a prize draw to win one of 7 £20 Amazon vouchers. If you would like to receive information about the results of the research when they are available please email me on cej02@ex.ac.uk. This information will be kept securely and separately from your survey responses.

Click 'next' to take part

Thank you in advance, Claire Jones (cej202@ex.ac.uk). Ethics No: 2010/152

Consent

1.) I confirm that I have read and understood the information sheet for the above study and have had the opportunity to ask questions
( ) Yes
( ) No

2.) I am age 18 or over
( ) Yes
( ) No

3.) English is my first language
( ) Yes
( ) No

4.) I understand that the data I provide will be kept securely and anonymously in accordance with the data protection act
( ) Yes
( ) No

5.) I understand I am participating voluntarily and that I can withdraw from this study at any time, without giving a reason
( ) Yes
( ) No

6.) I agree to take part in this study
( ) Yes
( ) No

Demographics

) What is your gender?
( ) Male
( ) Female

) What is your age?
_____

) Are you a university student?
( ) Yes
( ) No

) What are you studying?
_____

) What year of study are you in?
( ) 1st Year
( ) 2nd Year

( ) 3rd Year
( ) 4th Year
( ) Masters Student
( ) PhD
( ) Other postgraduate course
( ) Other

) Are you in any type of employment?
( ) Full Time
( ) Part time
( ) Retired
( ) Not-employed
( ) Stay at home parent

M. 1 (Response scale 1-5)

1. I am usually gentle and supportive with myself
2. I am kind to myself when I'm experiencing suffering
3. In general, I try to avoid my emotional pain
4. I am tolerant of my flaws and inadequacies
5. I feel that I'm a person of worth, at least on an equal plane with others
6. All in all, I am inclined to feel that I am failure
7. On the whole, I am satisfied with myself
8. At times I think I am no good at all
9. I generally feel it is important to take care of people who are vulnerable
10. In general I feel a wish to help people who are suffering
11. Taking care of others gives me a warm feeling inside
12. I can recognise when people are in emotional pain

M. 2 (Response scale 1-5)

1. I look after myself in a supportive way when I am having a difficult time
2. I do kind things for myself when I think I am suffering
3. I generally do things that distract me from my emotional pain
4. I tend to beat myself up when I recognise my flaws and inadequacies

5. I am able to remind myself that I'm a person of worth, at least on an equal plane with others
6. I often tell myself that I am failure
7. In general, I am able to feel satisfied with myself
8. At times I tell myself I am no good at all
9. I feel it's important to take care of people who are vulnerable
10. When I see someone hurt or in need, I feel a powerful urge to take care of them
11. It feels good when I help other people
12. I often notice people who need help

M. 3

1) You have noticed your manager at work looking stressed recently. An hour ago he/she came in to the office and shouted at you in front of your colleagues, saying your work has not been up to scratch.

On a scale of 1-10 (1 being very low, 10 being very high)

	How would you rate your self-esteem?	How would you rate your compassion for your manager?	How would you rate your compassion for yourself?
1-10	___	___	___

) What might you be thinking?

_____

) 2) You have been feeling very tired, however you agree to look after your friend's aged dog for the night. In the morning, you realise it died during the night, just as your friend arrives. This was an hour ago.

On a scale of 1-10 (1 being very low, 10 being very high)

	How would you rate	How would you rate your compassion for	How would you rate your compassion for

	your self-esteem?	your friend?	yourself?
1-10	___	___	___

) What might you be thinking?

_____

) 3) You are walking along the road when you trip over something on the floor. As you fall, you collide with someone else who then falls over with you. You both have some grazes but are ok. This was an hour ago.

On a scale of 1-10 (1 being very low, 10 being very high)

	How would you rate your self-esteem?	How would you rate your compassion for the other person?	How would you rate your compassion for yourself?
1-10	___	___	___

) What might you be thinking?

_____

) 4) Imagine a situation in the last two weeks where you have felt a little unhappy. Please give a very brief description of the situation.

_____

) During this situation, on a scale of 1-10 (1 being very low-10 being very high)

	How would you rate your self-esteem?	How would you rate your compassion for others involved?	How would you rate your compassion for yourself?
1-10	___	___	___

) What were you thinking?

_____

)
If you would like to withdraw from this study click here:
[ ] 'exit survey now'

DASS-21

) Please read each statement and put a tick on the numbers 0, 1, 2, or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

	0 Did not apply to me at all	1 Applied to me to some degree, or some of the time	2 Applied to me to a considerable degree, or good part of time	3 Applied to me very much, or most of the time.
I found it hard to wind down	( )	( )	( )	( )
I was aware of dryness of my mouth	( )	( )	( )	( )
I couldn't seem to experience any positive feeling at all	( )	( )	( )	( )
I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	( )	( )	( )	( )
I found it difficult to work up the initiative to do things	( )	( )	( )	( )
I tended to over-react to situations	( )	( )	( )	( )
I experienced trembling (eg, in the hands)	( )	( )	( )	( )
I felt that I was using a lot of nervous energy	( )	( )	( )	( )

I was worried about situations in which I might panic and make a fool to myself	( )	( )	( )	( )
I felt that I had nothing to look forward to	( )	( )	( )	( )
I found myself getting agitated	( )	( )	( )	( )
I found it difficult to relax	( )	( )	( )	( )
I felt down-hearted and blue	( )	( )	( )	( )
I was intolerant of anything that kept me from getting on with what I was doing	( )	( )	( )	( )
I felt I was close to panic	( )	( )	( )	( )
I was unable to become enthusiastic about anything	( )	( )	( )	( )
I felt I wasn't worth much as a person	( )	( )	( )	( )
I felt that I was rather touchy	( )	( )	( )	( )
I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	( )	( )	( )	( )
I felt scared without any good reason	( )	( )	( )	( )
I felt that life was meaningless	( )	( )	( )	( )

Life Events Checklist Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate that: (a) it *happened to you* personally, (b) you *witnessed it* happen to someone else, (c) you *learned about it* happening to someone close to you, (d) you're *not sure* if it fits, or (e) it *doesn't apply* to you. Be sure to consider your *entire life* (growing up as well as adulthood) as you go through the list of events.					
	Happened to me	Witnessed it	Learned about it	Not Sure	Doesn't apply
1. Natural disaster (for example, flood, hurricane, tornado, earthquake)	[ ]	[ ]	[ ]	[ ]	[ ]
2. Fire or explosion	[ ]	[ ]	[ ]	[ ]	[ ]
3. Transportation accident (for example, car accident, boat accident, train wreck, plane crash)	[ ]	[ ]	[ ]	[ ]	[ ]
4. Serious accident at work, home, or during recreational activity	[ ]	[ ]	[ ]	[ ]	[ ]
5. Exposure to toxic substance (for example, dangerous chemicals, radiation)	[ ]	[ ]	[ ]	[ ]	[ ]
6. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)	[ ]	[ ]	[ ]	[ ]	[ ]
7. Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)	[ ]	[ ]	[ ]	[ ]	[ ]
8. Sexual assault (rape, attempted rape, made to perform any type of sexual act	[ ]	[ ]	[ ]	[ ]	[ ]

through force or threat of harm)					
9. Other unwanted or uncomfortable sexual experience	[ ]	[ ]	[ ]	[ ]	[ ]
10. Combat or exposure to a war-zone (in the military or as a civilian)	[ ]	[ ]	[ ]	[ ]	[ ]
11. Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)	[ ]	[ ]	[ ]	[ ]	[ ]
12. Life-threatening illness or injury	[ ]	[ ]	[ ]	[ ]	[ ]
13. Severe human suffering	[ ]	[ ]	[ ]	[ ]	[ ]
14. Sudden, violent death (for example, homicide, suicide)	[ ]	[ ]	[ ]	[ ]	[ ]
15. Sudden, unexpected death of someone close to you	[ ]	[ ]	[ ]	[ ]	[ ]
16. Serious injury, harm, or death you caused to someone else	[ ]	[ ]	[ ]	[ ]	[ ]
17. Any other very stressful event or experience	[ ]	[ ]	[ ]	[ ]	[ ]

If you would like to withdraw from this study click here:
[ ] 'exit survey now'

PCL

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing memories, thoughts, or images of the stressful experience?	( )	( )	( )	( )	( )
2. Repeated, disturbing dreams of the stressful experience?	( )	( )	( )	( )	( )
3. Suddenly acting or feeling as if the stressful experience were happening again (as if you were reliving it)?	( )	( )	( )	( )	( )
4. Feeling very upset when something reminded you of the stressful experience?	( )	( )	( )	( )	( )
5. Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of the stressful experience?	( )	( )	( )	( )	( )
6. Avoiding thinking about or talking about the stressful experience or avoiding having feelings related to it?	( )	( )	( )	( )	( )
7. Avoiding activities or situations because they reminded you of the	( )	( )	( )	( )	( )

stressful experience?					
8. Trouble remembering important parts of the stressful experience?	( )	( )	( )	( )	( )
9. Loss of interest in activities that you used to enjoy?	( )	( )	( )	( )	( )
10. Feeling distant or cut off from other people?	( )	( )	( )	( )	( )
11. Feeling emotionally numb or being unable to have loving feelings for those close to you?	( )	( )	( )	( )	( )
12. Feeling as if your future will somehow be cut short?	( )	( )	( )	( )	( )
13. Trouble falling or staying asleep?	( )	( )	( )	( )	( )
14. Feeling irritable or having angry outbursts?	( )	( )	( )	( )	( )
15. Having difficulty concentrating?	( )	( )	( )	( )	( )
16. Being "super-alert" or watchful or on guard?	( )	( )	( )	( )	( )
17. Feeling jumpy or easily startled?	( )	( )	( )	( )	( )

)

If you would like to withdraw from this study click here:

[ ] 'exit survey now'

New Page

Well done, you are nearly at the end of the survey!

Your help is very much appreciated.

WHO-QOL- BREF

The following questions ask how you feel about your quality of life, health, or other areas of your life. Please read each question, along with the response options. Please choose the answer that appears most appropriate. If you are unsure about which response to give to a question, the first response you think of is often the best one. Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last four weeks.

) How would you rate your quality of life?
( ) Very poor
( ) Poor
( ) Neither poor nor good
( ) Good
( ) Very good

) How satisfied are you with your health?
( ) Very Dissatisfied
( ) Dissatisfied
( ) Neither satisfied nor dissatisfied
( ) Satisfied
( ) Very Satisfied

) To what extent do you feel that physical pain prevents you from doing what you need to do?
( ) Not at all
( ) A little
( ) A moderate amount
( ) Very much

( ) An extreme amount

) How much do you need any medical treatment to function in your daily life?
( ) Not at all
( ) A little
( ) A moderate amount
( ) Very much
( ) An extreme amount

) How much do you enjoy life?
( ) Not at all
( ) A little
( ) A moderate amount
( ) Very much
( ) An extreme amount

) To what extent do you feel your life to be meaningful?
( ) Not at all
( ) A little
( ) A moderate amount
( ) Very much
( ) An extreme amount

) How well are you able to concentrate?
( ) Not at all
( ) A little
( ) A moderate amount
( ) Very much
( ) Extremely

) How safe do you feel in your daily life?
( ) Not at all
( ) A little

( ) A moderate amount

( ) Very much

( ) Extremely

) How healthy is your physical environment?

( ) Not at all

( ) A little

( ) A moderate amount

( ) Very much

( ) Extremely

) Do you have enough energy for everyday life?

( ) Not at all

( ) A little

( ) Moderately

( ) Mostly

( ) Completely

) Are you able to accept your bodily appearance?

( ) Not at all

( ) A little

( ) Moderately

( ) Mostly

( ) Completely

) Have you enough money to meet your needs?

( ) Not at all

( ) A little

( ) Moderately

( ) Mostly

( ) Completely

) How available to you is the information that you need in your day-to-day life?
( ) Not at all
( ) A little
( ) Moderately
( ) Mostly
( ) Completely

) To what extent do you have the opportunity for leisure activities?
( ) Not at all
( ) A little
( ) Moderately
( ) Mostly
( ) Completely

) How well are you able to get around?
( ) Very poor
( ) Poor
( ) Neither poor nor good
( ) Good
( ) Very good

) How satisfied are you with your sleep?
( ) Very Dissatisfied
( ) Dissatisfied
( ) Neither satisfied nor dissatisfied
( ) Satisfied
( ) Very Satisfied

) How satisfied are you with your ability to perform your daily living activities?
( ) Very Dissatisfied
( ) Dissatisfied
( ) Neither satisfied nor dissatisfied
( ) Satisfied
( ) Very Satisfied

) How satisfied are you with your capacity for work?
( ) Very Dissatisfied
( ) Dissatisfied
( ) Neither satisfied nor dissatisfied
( ) Satisfied
( ) Very Satisfied

) How satisfied are you with yourself?
( ) Very Dissatisfied
( ) Dissatisfied
( ) Neither satisfied nor dissatisfied
( ) Satisfied
( ) Very Satisfied

) How satisfied are you with your personal relationships?
( ) Very Dissatisfied
( ) Dissatisfied
( ) Neither satisfied nor dissatisfied
( ) Satisfied
( ) Very Satisfied

) How satisfied are you with your sex life?
( ) Very Dissatisfied
( ) Dissatisfied
( ) Neither satisfied nor dissatisfied
( ) Satisfied
( ) Very Satisfied

) How satisfied are you with the support you get from your friends?
( ) Very Dissatisfied
( ) Dissatisfied
( ) Neither satisfied nor dissatisfied
( ) Satisfied

( ) Very Satisfied

) How satisfied are you with the conditions of your living place?
( ) Very Dissatisfied

( ) Dissatisfied

( ) Neither satisfied nor dissatisfied

( ) Satisfied

( ) Very Satisfied

) How satisfied are you with your access to health services?
( ) Very Dissatisfied

( ) Dissatisfied

( ) Neither satisfied nor dissatisfied

( ) Satisfied

( ) Very Satisfied

) How satisfied are you with your transport?
( ) Very Dissatisfied

( ) Dissatisfied

( ) Neither satisfied nor dissatisfied

( ) Satisfied

( ) Very Satisfied

) How often in the last four weeks have you had negative feelings such as blue mood, despair, anxiety, depression?
( ) Never

( ) Seldom

( ) Quite often

( ) Very often

( ) Always

)
If you would like to withdraw from this study click here:
[ ] 'exit survey now'

Personal Reactions Inventory

) I like to gossip at times.
( ) True
( ) False

) There have been occasions when I took advantage of someone.
( ) True
( ) False

) I am always willing to admit it when I make a mistake.
( ) True
( ) False

) I always try to practice what I preach.
( ) True
( ) False

) I sometimes try to get even rather than forgive and forget.
( ) True
( ) False

) At times, I have really insisted on having things my own way.
( ) True
( ) False

) There have been occasions when I felt like smashing things.
( ) True
( ) False

) I never resent being asked to return a favour.
( ) True
( ) False

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

) I have never deliberately said something that hurt someone's feelings.
( ) True
( ) False

) *If you would like to withdraw from this study click here:*
[ ] 'exit survey now'

Prize Draw and Credit

) Thank you for completing the survey.
If you would like to enter the prize draw to win one of 7 £20 Amazon vouchers please enter an email address that you would be happy for us to contact you on. You do not need to provide any more information to be able to claim a prize if you win.
_____

) If you are an Exeter University psychology student and wish to receive a course credit please provide a code that you can recall without remembering. The code could comprise the first two letters of your mother's first name, the month of your birth, and the first two letters of your father's name. For example, MA03JO (Mary, March, John)'. This list of codes will be keep separately from the study and you do not need to provide your name. Using your code, you can get your credit form signed and collect an information sheet the week after completing the survey from Dr. Anke Karl at the Mood Disorder Centre, in Washington Singer Laboratories.
_____

) Would you like to be added onto the University of Exeter Mood Disorder Centre's research participant list, so that you will be considered for future research projects? If 'yes' the email you have given above will be held separately from your data and used to contact you regarding future research.

( ) Yes

( ) No

) If you wish to receive a summary of the results after the study has been completed, please email me on cej202@ex.ac.uk and I will forward the summary to you when the research is complete.

The space below is for any comments/ feedback about the survey you may have:

Thank you for your time

Sorry, the answers you provided indicate that you do not qualify to take this survey. If you think you have answered any of the questions incorrectly please feel free to click the 'back' button to continue with the survey.

Thank You!

Thank you for taking part in this survey!

The aim of this study was to investigate how people feel towards themselves and whether there may be a link between how people feel towards themselves and whether they have had difficult experiences in the past or are feeling low in mood or anxious.

The questions you answered about your experiences, your current feelings and the way you feel about yourself in general, tell us about the links between these three areas. It is hoped that this research will indicate whether looking at how people feel about themselves is an important area for psychological research to focus on in the future.

Your responses on this survey will not be linked to your name or any other identifying characteristics.

There is a possibility that focusing on negative life events or how you feel, may cause discomfort. Typically, such distress is usually short-lived and temporary.

Some people may however be going through difficult times in their life or be experiencing on-going distress. Anxiety and depression for example are common experiences where people may feel stressed, panicked or low in mood. If you are experiencing difficulties, we would recommend that you talk to your local doctor and look at some of the websites below with helpful information on common mental health difficulties.

If you would like further information, advice or if you feel you have been adversely affected by this study, please contact Claire Jones or Dr. Anke Karl at University of Exeter, Mood Disorder Centre on 01392 725753 and we will be able to advise you further.

Below are some links you may also find helpful:

Mental Health Information: The royal college of psychiatrists mental health information
http://www.rcpsych.ac.uk/mentalhealthinfoforall.aspx

Moodjuice Forth Valley is a site design to offer information, advice to those experiencing troublesome thoughts, feelings and actions.
www.moodjuice.scot.nhs.uk/

ASSIST (Assistance Support and Self-help In Surviving Trauma)
http://www.assisttraumacare.org.uk/
+44 (0)1788 560800

Samaritans (24 hours a day)
www.samaritans.org
08457 90 90 9

UK Trauma Group
www.uktrauma.org.uk includes listings of specialist UK trauma services.

University of Exeter Counselling Service,
Tel: • (01392) 264381
Email: counselling@exeter.ac.uk

Depression and Anxiety
http://www.depressionalliance.org/

http://www.anxietyuk.org.uk/

Saneline: help for people with mental health difficulties
http://www.sane.org.uk/SANEline

The British Psychological Society
http://www.bps.org.uk/

Potentially useful book:
Gilbert, P. (2009). The Compassionate Mind. London: Constable and Robinson.

We are not responsible for the content available on any of the links or resources provided above.

Appendix J: Dissemination Statement

This manuscript will be amended and prepared appropriately for submission to Behaviour Research and Therapy. The journal was selected because it is an international, peer-reviewed journal with a focus on theoretical and experimental analyses of psychopathological processes and predictors, moderators and mechanisms of behaviour change. It also currently has a relatively strong impact factor of three. This publication was therefore selected as an appropriate journal for submission of this research.

The research will be presented at a conference as part of the doctorate course at the University of Exeter. It will also be presented to the University of Exeter's Mood Disorder Centre Think Tank which provided feedback on the proposal of this research. Other interested parties will also be welcome to attend. Research focusing on self-compassion and compassion for others is ongoing in the department and this presentation may contribute to future research and publications in the area.

A full report or brief summary (as required) will be made available to all participants who requested further information and other interested psychologists and researchers. The full report will also be made available to Paul Gilbert, Kirsten Neff and the World Health Organisation in recognition of their questionnaires that were utilised in this study.