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STAGES OF CHANGE THEORY APPLIED TO
SELF-CRITICAL THINKING AND FEAR OF COMPASSION:
A BRIEF PSYCHO-EDUCATIONAL INTERVENTION

By

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in Clinical Psychology

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Clinical Psychology

Stages of Change Theory Applied to Self-critical Thinking and Fear of Compassion: A Brief Psycho-educational Intervention

Chairperson: Jennifer Waltz

Abstract Content

Self-critical thinking has been identified as a trans-diagnostic feature of several forms of psychopathology, including depression, and anxiety. Recent research has found that developing self-compassion skills reduces symptoms of distress and correlates with beneficial outcomes. Unfortunately, it also appears that some who experience high levels of self-criticism also experience a fear of compassion (i.e., a resistance to soothing and care when directed toward the self or when received from others). Fear of compassion has been identified as a barrier to engagement in, and efficacy of psychological treatment. The current study tested a brief psycho-educational intervention that integrated a stage of change conceptualization to address self-criticism and fear of compassion.

Introductory Psychology students who were (a) high in self-critical thinking and fear of compassion and (b) low in openness to working on self-criticism participated in this project. A single group, pre-post study was conducted with 26 participants. The study examined the effects of a single, two-hour, individual, psycho-educational intervention. The objectives of the intervention were to impart information, build insight, allow for emotional expression, present behavioral choices and their consequences, and bolster self-efficacy, as is consistent with recommended processes of change for early stages of change. Results revealed significant reductions in self-criticism, fear of compassion for self, and distress, and an increase in willingness to take steps toward changing self-criticism. Self-reassurance and recognition of self-criticism as a problem did not change.

Three additional research questions were addressed. Firstly, results of this study suggest that there are likely many factors that interfere with changing self-criticism, and fear of compassion is just one of them, rather than an overlapping construct with early stage of change characteristics (precontemplation and contemplation). Secondly, findings from this research supported theory and previous findings that early childhood experiences of hardship (e.g., feeling threatened and submissive) are strongly correlated with self-criticism and fear of compassion in adulthood. Thirdly, results showed that degree of these childhood hardship experiences did not appear to have an effect on response to the intervention. Findings and implications for clinical and research contexts are discussed.

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Introduction to the Literature Review

The following literature review provides an overview and exploration of the concepts that are central to this study: self-criticism and adverse childhood experiences, compassion, fear of compassion and stages of change theory. Following is an outline of how these concepts will be presented. It is important to note that the research for this study was drawn from several distinct bodies of inquiry that do not necessarily overlap. Therefore, it is useful to understand the literature review as a series of chapters.

The first topic reviewed is self-criticism. Self-criticism is defined, its sub-types and functions explored, its correlations with psychopathology described, and the theories of its etiology, from the various schools of psychology, reviewed. Special attention is given to the relations between self-criticism and adverse childhood experiences. Gilbert's (2009) theory describing three core systems of self-regulation: (1) *drive/excite*, (2) *threat/protect* and (3) *care/connect* is outlined and self-criticism is discussed in relation to this theory. Concepts closely related to self-criticism (perfectionism, shame and emotion dysregulation) are also discussed and distinguished from self-criticism.

The next section addresses compassion. Compassion is defined as a skill and self-compassion and receiving compassion from others are explored. The many new interventions aimed at improving compassion are outlined. In addition, the research on fear of compassion is presented. Fear of compassion is a barrier to developing compassion and often correlates with both self-criticism and adverse childhood experiences.

The last section of the literature review presents the transtheoretical model of change (Prochaska, & DiClemente, 1982). The stages of change and processes of change are presented.

These ideas are then considered as they may relate to addressing self-criticism, low self-compassion and fear of compassion.

Literature Review

Self-Criticism Defined

Researchers to date have demonstrated that self-criticism is a trans-diagnostic characteristic. People experiencing a wide range of psychological disorders have been found to experience self-criticism, and self-criticism has been found to be associated with significant emotional distress (Gilbert, McEwan, Matos & Rivas, 2011; Gilbert & Proctor 2006). Helping people reduce self-critical thinking appears likely to reduce psychological distress and increase well-being (Barnard & Curry, 2011).

Self-criticism is broadly understood as a negative style of self-definition (Thompson & Zuroff, 2004). Its forms, functions, theorized etiology, and effects on both mental and physical health have been studied. Holle and Ingram (2008) have defined self-criticism as including:

negative and critical thoughts directed toward one's own personal or physical characteristics, excessive self-blame for shortcomings, the inability to accomplish goals and tasks in accordance with unrealistically high standards, and the low regard with which individuals believe they are being appraised by others. (p. 55)

Cognitive behavioral research has indicated that self-critical thinking is highly correlated with interpersonal difficulty, depressive states, and feelings of shame (Gilbert, Clarke, Hempel, Miles, & Irons 2004). The direction of causality across these variables is not clear, both due to difficulties in measuring these relations with causal models, and due to the complex interaction that likely exists between affective and cognitive states (Holle & Ingram 2008). Additionally, self-criticism corresponds with and/or is triggered by hardship or challenges; self-critical

thoughts may occur as an unconscious response style to life difficulties that may then exacerbate stress, depression and anxious responding (Barnard & Curry, 2011; Gilbert & Proctor, 2006; Neff, 2012; Richter, Gilbert, & McEwan, 2009).

Self-criticism Subtypes

Some researchers have focused on further defining self-criticism by identifying more distinct and specific sub-types, forms, and functions. Thompson and Zuroff (2004) proposed a distinction between two forms of self-criticism: comparative and internalized. *Comparative self-criticism* is based on the a critical evaluation of the self in light of external standards, leading to “perceptions of hostility and criticism from others, and a sense of falling short in comparison with [superior] others” (p. 420) and “a global sense of inferiority and inability to cope with life, and thus an avoidant way of dealing with problems” (p. 420). *Internalized self-criticism* is based on critical evaluation of the self in light of internal standards, resulting in “a chronic sense of falling short of one’s own ideals” and “repeated attempts to meet (impossibly high) goals” (p. 421). This form is also marked by ever-increasing standards or a constant redefinition of success that results in a chronic sense of striving, failure, and worthlessness. Thompson and Zuroff (2004) developed the Levels of Criticism Scale (LOCS) to measure these subtypes, and confirmed the validity of two distinct factors.

Gilbert et al. (2004) also concluded that there are multiple forms of self-criticism, but their distinctions differ from those of the above theorists. They built upon the theoretical premise that self-to-self relating (i.e., how a person relates to him/herself) may mirror prominent social roles learned early in life. Self-to-self relating refers to how a person relates to him/herself and Gilbert et al. (2004) suggest that how one relates to one’s self is similar to, or reflects how the ways that important others related to an individual in childhood. They identify three ways of

self-to-self relating, specifically in the context of responding to hardships. First, *the Inadequate Self* is based on the idea that a type of attacking can occur between individuals in dominant and subordinate social roles, (such as in a parent and child relationship), which highlights failures and inadequacies and leaves the subordinate feeling internally put down. These attacking episodes occur in response to situations where a perceived mistake or error has been detected. These “corrective experiences” can then trigger a self-to-self relating that reflects this attack for the purposes of “getting it right,,” which ultimately relies on a self-critical tone. Second, *the Hated Self* is also based on social dynamics between dominant and subordinate roles, but in this case a dominant other strives to eliminate unwanted or “bad” elements and targets a subordinate with this purpose. The Hated Self has qualities of disgust and aggressive or persecutory desires to harm or destroy and has a cruel orientation toward the other. The self-criticism is directed at oneself as “bad” rather than at a behavior as “bad”. Lastly, *the Reassured Self* is a self to self relating in which one experiences encouragement, care, and concern when things go wrong, based on affiliative or secure attachment relational experiences. The qualities of this self-to-self relating are helpful: seeking to regulate emotions, reduce stress, and cope compassionately with disappointment. . Gilbert et al. (2004) developed the Forms of Self-Criticism and Self-Reassurance Scale (FSCRS) to assess these subtypes and found the three factors to be distinct and found Self-Reassuring was negatively correlated with depression. In 2013, Kupeli, Chilcot, Schmidt, Campbell, and Troop conducted a confirmatory factor analysis and validation of the FSCRS with a general population sample of 1570 people. They confirmed the three-factor model (Reassured Self, Inadequate Self and Hated Self) and made minor adjustments to scale items. In 2014, Baiao, Gilbert, McEwan, and Carvalho conducted secondary analysis of the data from twelve studies that used the FSCRS scale, with a total of 171 mixed diagnosis clinical and

887 non-clinical participants. Again, they confirmed the three-factor model. Baiao et al. (2014) found significant differences between the clinical and non-clinical samples in means of all three subscales ($p=.000$) with clinical samples reporting higher hated and inadequate self-criticism and lower self-reassurance. They conclude that, “This link between self-criticism and a wide range of psychopathology suggests that self-criticism should be considered as a process and transdiagnostic trait, rather than a simple symptom” (Baiao et al., 2014 p. 12).

Functions of self-criticism

In addition to sub-types, Gilbert et al. (2004) reviewed the theorized functions for self-critical thinking and proposed that it does not always represent the same behavior, but rather can serve multiple functions. First, self-criticism can serve the function of a corrective and/or striving influence. In other words, it can motivate a person to do better, work harder, accomplish goals and so forth. Alternatively, self-criticism can be an expression of self-loathing or self-hatred. In this case, self-critical thinking serves to punish or harm the self. Self-criticism may sometimes serve to protect an individual from risk-taking experiences, and thus be a form of avoidance. For example, if a person is afraid of social situations, his/her self-critical thoughts (e.g., “if I talk to that person, she will reject me”) may provide a sense of permission to avoid a feared situation.

Self-criticism may occur when a person is feeling frustrated or angry, and serve to express those feelings. Alternatively, it may reflect an indirect request for sympathy. Self-criticism may also serve the function, in managing relationships, of helping an individual maintain a subordinate stance. By telling one’s self that one is inferior, one may be more likely to behave in subordinate or pacifying ways. This stance may have been reinforced in early relationships, or may be maintained by current relationships in which asserting one’s self may be punished.

Utilizing these ideas along with commonly-stated reasons that clients give for being self-critical, Gilbert et al. (2004) developed the Functions of Self Criticism Scale (FSCS). Two primary factors emerged: (1) *Self Correction*, for items that suggested self-criticism can serve as a type of self-improvement strategy, and (2) *Self Persecution*, for items with aggressive sentiments aimed at harming the self. For example, after a prompt of ‘I get critical and angry with myself,’ an item from the self-correction factor is ‘to make sure I keep my standards up,’ whereas an item on the self-persecution factor is ‘to destroy part of me’. Both the Self Persecution factor of the FSCS and the Hated Self factor of the FSCRS had significantly stronger correlations with depression than did the other factors. The authors noted that the forms and functions of self-criticism are not necessarily discrete or trait-like, but rather can blend, and individuals can experience different ones at different times, depending on the circumstances (Gilbert et al., 2004).

Self-criticism and Psychopathology

Despite the distinctions between the subtypes and the various functions of self-criticism, the correlates of high self-criticism appear to be, by and large, quite negative. Generally speaking, high self-criticism correlates with challenges in adulthood functioning and significant emotional distress. Theory and research have long drawn the association between feelings of worthlessness, self-criticism, and psychopathology (for reviews see: Gilbert et al., 2012; Richter et al., 2009). Both theoretically and empirically, self-criticism has been identified as a prominent factor in depression (Gilbert et al. 2004; Holle & Ingram, 2008). It has also been shown to be associated with a wide range of other expressions of psychopathology, including emotion dysregulation, self-harm, anxiety, PTSD, eating disorders, interpersonal relationship challenges and substance abuse (Cox, MacPherson, Enns, & McWilliams, 2004; Gilbert et al., 2011; Gilbert

et al. 2010; Holle, & Ingram, 2008). It has been associated with a compromised ability to form and maintain positive social relationships and to experience interpersonal closeness (Whiffen & Macintosh, 2005). It also is theorized to inhibit exploratory behaviors, lead to avoidance, and, consequently, be associated with a self-imposed restricted range of functioning (Dunkley, Zuroff, & Blankstein, 2003; Gilbert et al., 2010). Similarly, self-criticism has been shown to be negatively correlated with individuals' ability to pursue and achieve goals that they have set, possibly due to its positive association with avoidance strategies (Breines & Chen, 2012). Given the wide reaching associations of self-criticism with illness, it is important now to look at the etiologies that are theorized to give rise to self-criticism.

Theorized Etiology

There are several theories addressing the etiology and maintenance of self-critical thinking.

Psychodynamic conceptualization.

Among psychodynamic theorists, Sidney Blatt (1974; 2004; 2008) has written extensively and perhaps most directly about the development of psychopathology and self-criticism. Blatt (2008) proposes that humans have two dialectical drives: for autonomy or individual identity on the one hand, and for satisfying, caring relationships, companionship, and interrelatedness on the other hand. Both drives are central to human development and influence people throughout the lifespan. When something goes wrong in either of these areas of development (e.g., a painful relationship with a neglectful caregiver, abandonment, or the reception of repeated messages of inferiority or inadequacy from one's environment), dependency and/or self-criticism can develop, contributing to a range of expressions of psychopathology, including depression. This theory forms the basis for Blatt's conceptualization

of two types of depression: dependent and self-critical. Dependent depression expresses itself as preoccupation with and distress related to interpersonal relationships. Struggles with relationship loss, insecurity, and inability to find belonging characterize this expression of psychopathology (Blatt, 2008). Blatt (1974) theorized that in self-critically depressed individuals, self-criticism represents fear of losing the approval of significant others in those individuals who over-prioritize self-identity or autonomy. Highly self-critical people may seek achievement and perfection as a way of managing perceived inferiority and fear of disapproval. Their efforts are anxiety-driven, and their accomplishments yield little satisfaction, contributing to depression. This theory has been validated and elaborated upon in cognitive behavioral and psychodynamic research (Blatt, 2008). The Depressive Experiences Questionnaire (DEQ) assesses for the two types of depression (i.e., dependent and self-critical) (Blatt, 2004) and has been used extensively.

Cognitive behavioral theory

Beck (1967) proposed an information processing conceptualization of self-critical thought in depressed people, which is largely accepted as the basis for the cognitive behavioral therapy (CBT) framework. He proposed that depressed people have faulty information processing involving negatively biased appraisals of the self that constitute a persistent thinking error. This biased form of appraisal affects perception and memory, acting as a filter for gathering and retaining evidence that supports a critical view of the self and fails to allow in disconfirming evidence. Perceptions of oneself as unworthy, fundamentally flawed, or inadequate solidify into 'schemas' that, when activated, generate unconscious, confirming automatic thoughts and subsequent depressed affect and behavior (Beck, 1967; Beck, 1976; Holle & Ingram, 2008). This negative bias thought error, or shame-based thinking, can then lead to behaviors that confirm the thoughts and the self-critical perspective is mistaken for reality.

Developmental and biopsychosocial perspective

There are also developmental and biopsychosocial explanations of self-criticism, which overlap with a growing body of research on adverse childhood experiences (ACEs). Adverse early childhood experiences correlate with physical illness and psychopathology in adulthood, including self-critical thought patterns. Research has provided a strong evidence base for a dose-response relationship between the occurrence of ACEs and later life difficulties in physical, behavioral, and mental health domains (Anda et al., 2006; Chapman, Dube, & Anda, 2007; Gilbert, Cheung, Grandfield, Campey, & Irons, 2003; Slopen, Koenen, & Kubzansky, 2012). ACEs include such events as: exposure to emotional, psychological, or physical neglect or abuse; or household instability resulting from caregiver mental illness, substance abuse, or incarceration. Parental divorce, chronic poverty, or witnessing violence are also among the social adversities studied that may contribute to adult distress when experienced in childhood (Anda et al., 2006). These experiences have been found to be risk factors for depressive disorder, PTSD, social anxiety, suicidality, eating disorders, anti-social and borderline personality disorders, and substance use disorders (Anda et al., 2006; Chapman et al., 2007; Slopen et al., 2012). As for physical health implications, ACEs strongly predict a wide range of poor health outcomes, including cardio-vascular disease, diabetes, obesity, immune-response dysregulation, somatic complaints, and systemic inflammation (a disease precursor) (Anda et al., 2006; Burke, Hellman, Scott, Weems, & Carrion 2011; Chartier, Walker, & Naimark, 2010; Slopen et al., 2012). Research suggests that the more ACE's one has in one's history, the more at risk one is for depression and a wide range of physical health and psycho-social function challenges (Chapman et al., 2004; Chapman et al., 2007; Chartier et al., 2010; Nurius, Logan-Greene, & Green, 2012). Health risk behaviors and lower academic achievement are also

developmental features that correlate with high ACEs and shape adult functioning and health (Burke et al., 2011; Chartier, et al., 2010). Neurobiological and psychosocial developmental delays in childhood have been suggested as stressors that cascade into adulthood, leading to potential psychopathology (Anda et al., 2006; Nurius et al., 2012). It is important to note that while these ACEs cumulatively increase risk for adult hardship, they do not necessarily or inevitably lead to poor outcomes, particularly when only one or two are present. The biopsychosocial contributions to any outcomes over that much time are inevitably complex and arguably unpredictable. Additionally, this broad class of events and their interaction with a dynamic developmental process do not allow for simple predictions of any single case. Resilience researchers explore protective factors (such as personality and social environment variables) because there are so many people who survive these early hardships and go on to thrive (Davidson, Devaney & Spratt, 2010). However, recent research has been attempting to understand causal risk factors or mediators of ACE exposure with poor adult outcomes. Self-criticism has been implicated as one of the possibly many relevant variables.

ACEs and self-criticism.

The association between childhood hardships (particularly interpersonal ones) and the development of negative self-appraisal has been proposed and in some cases supported by research (Davidson et al., 2010; Irons, Gilbert, Baldwin, Baccus, & Palmer, 2006; Richter et al., 2009; Speranza et al., 2003; Thompsen & Zuroff, 1999). It is theorized that people learn to relate to themselves based on how others related to them as children and how they witnessed others relate to each other (Gilbert et al., 2004). From an attachment perspective, early childhood neglect or abuse is theorized to contribute to a working model of the self as unlovable and/or shameful (Whiffen & Macintosh, 2005). In support of this, Irons et al. (2006) found that

fearful attachment was negatively associated with Self-Reassurance/warmth and positively associated with Inadequate and Self-Hatred self-criticism. In a review of the link between child sexual abuse and adulthood distress, Whiffen and MacIntosh (2005) found that shame, self-blame, interpersonal difficulties, and avoidant behaviors served as mediators; that is, these factors better accounted for adult distress than did early childhood abuse. The definitions of shame and self-blame used in this research overlap with the construct of self-criticism. In another study seeking to understand mediators between child maltreatment and adult emotion dysregulation, Vettese, Dyer Li, and Wekerle (2011) found that self-compassion (the opposite of self-criticism) significantly mediated the relationship between emotion dysregulation and a maltreatment history with which it was negatively correlated. In other words, the authors found that the absence of self-criticism (the presence of self-compassion) mitigated the negative impacts of a history of childhood maltreatment on emotion regulation.

ACEs, stress and self-criticism.

One way to understand how self-criticism may mediate between ACEs and adult hardship is through maladaptive threat reactivity (Gilbert & Proctor, 2006). Gilbert et al. (2012) suggested that consistent soothing and care received in childhood allow for the development of self-soothing abilities, which support stress management. This is understood in part as social modeling or the development of internalized caring images. However, children who do not receive this care fail to develop the positive/soothing emotional memories, images, and thoughts needed to regulate stress. The inability to respond to stress and negative emotions during setbacks in a soothing and stress-reducing manner thus constitutes a significant and costly skills deficit (Gilbert et al., 2004; Richter et al., 2009). Additionally, after hardship, self-criticism can emerge in place of self-soothing. This development of an “internal hostile environment paired

with the outer hostile environment” produces additional stress (Gilbert & Irons, 2005). Research examining the neuro-physiological markers of adults with a history of ACEs reveals that those with high ACEs have impaired affect stress responsiveness and interpersonal sensitivity (Chapman et al., 2007). A bio-psychosocial explanatory model suggests that social stresses (particularly subordination) translate into biological stresses, in part via the hypothalamic pituitary adrenal (HPA) axis (Abelson et al., 2014; Anda et al., 2006; Ford, 2005; Gilbert et al., 2003; Rao, Hammen, Ortiz, Chen, & Poland, 2008; Somaini et al., 2011). The HPA axis, which is part of the neuroendocrine system, regulates stress and responses to threat and is influenced by a host of factors, one of which is experience. During threat responses, the HPA axis is stimulated; the sympathetic nervous system and a number of other physical systems that affect cognitive, emotional and physical functioning are affected. HPA dysfunction has been shown to result from chronic or extreme exposure to stressors during development, and has been proposed as a mediator of poor adulthood mental and physical health. When the HPA axis is dysfunctional, a wide range of impairments results (Rao et al., 2008; Slopen et al., 2012; Somaini et al., 2011). In summary, threat-sensitivity, impaired soothing abilities, and self-criticism are three developments that lead to greater cumulative stress and can create a trajectory of lifetime distress.

Integrated theory: Three systems of self-regulation.

The relationships between childhood hardship experiences, stress, adult distress, and self-criticism have been further developed in a recent bio-psychosocial theory integrating evolutionary and neurophysiology explanations. Gilbert (2009) proposes three primary systems that organize and regulate core human functions (Gilbert, 2006; 2009; Gilbert & Proctor 2006). The three systems are the (1) *threat and protection*, (2) *drive, resource-seeking and excitement*

and (3) *contentment, soothing and safeness* systems. These systems are theorized to organize a host of affective, cognitive, and physiological responses so as to promote optimal survival. The *threat response system* is the system that regulates stress responses in order to detect threat, mobilize appropriately, and protect against perceived danger. Fight, flight, freeze (also called submission) reactions are the most commonly known aspects of this system, and affective hallmarks of this system include anger, anxiety, despair and disgust (Gilbert, 2009). The neurophysiology involved in this system (which includes the HPA axis) is highly responsive to experience and, in particular, can develop lasting alterations based on repeated negative or distressing experiences. These alterations may provide some functional reactions under highly stressful situations, such as increased threat perception or inhibited expression, but they can underlie dysfunction when the environment no longer represents persistent threat (Gilbert, 2006). As has been indicated earlier, over- and under-developed aspects of this threat response system can lead to psychopathology.

The *drive system* is oriented around more positive and energetic affect and is activated during seeking, achievement, or accomplishment activities (Gilbert, 2009; Gilbert & Irons, 2005). This system is involved in procuring the supportive elements of a good life: food, shelter, friends, sexual partner(s), community, and a sense of purpose and positive identity in a group. Excitement, curiosity, exploration and goal-directed behaviors are hallmarks of the drive system. This system is thought to be overvalued in materialistic cultures such as our own and can sometimes be equated with a drive for happiness. That is, although this system involves positive affect, it also involves competition and can, when thwarted or over-activated, lead to distress.

Lastly, the *contentment or social safeness system* is proposed to provide a counter-balance with the other two systems and to function as a soothing, calming, and emotion-

regulating system (Gilbert, 2009). This is a system that operates when there is contentment: neither a threat to defend against nor a desire to fulfill. This system is theorized to develop in close association with the attachment system and social connectedness. Neurotransmitters of oxytocin and opiate receptor sites play a primary role in contentment and these are also key neurological structures of social connectedness (Gilbert, 2006). It is thus sometimes called the affiliative system because it is triggered by safe and intimate interactions with others. It has been shown to reduce stress, produce counter effects to distress, and de-activate the threat response system (Siegel & Germer, 2012; Gilbert, 2006; Gilbert & Irons, 2005). It is also the system that is activated by self-compassion.

When the contentment system does not have secure and safe interpersonal contexts in which to develop, it becomes under-stimulated and thus under-elaborated (Gilbert & Irons, 2004). The other two systems dominate self-regulation. Gilbert (2009) proposes that if the contentment system is impaired, then there are a host of negative affect regulation and stress management implications. Similarly, the threat response system can also be over-activated and when these occur simultaneously, self-criticism can arise as a coping mechanism (Gilbert, 2006; 2009). The following section discusses how this is proposed to occur.

Self-criticism as a submissive defensive coping strategy.

Within the threat response system, there are limited options for responding that would optimize one's chances for survival (Gilbert, 2006; Gilbert & Irons, 2005). In some circumstances, individuals can be low in power and yet rely, for survival, on the resources and/or the affiliation of hostile or unpredictable others who are high in power. In these cases, certain options for responding to threat, such as fight and flight, become unavailable. Instead, individuals have to cope by engaging in submissive or deferent behaviors. Utilizing a social rank

theory that builds on extensive behavioral research across species, Gilbert (2006) suggests that submissive, defeat-like behaviors are a viable option for maintaining safety and group inclusion. For example, a child with an abusive parent who behaves in an expressive manner and displays positive affect may be more likely to be the target of physical abuse. In contrast, a child who behaves in a submissive manner may avoid abuse, both because she is less likely to be noticed, and because her submissive cues may diffuse the parent's aggressive behavior when she is noticed.

Self-criticism facilitates a submissive, one-down stance by providing an internal 'hostile' voice to activate the threat response of submission (Gilbert & Irons, 2005). Characteristics of this submissive stance include heightened awareness of socially powerful others and social rank, social anxiety, a sense of inferiority, heightened attention devoted to error processing, avoidance of conflict, and appeasing behaviors (Gilbert, 2009). Additionally, shame typically triggers hiding, avoidance, and submissive behavior. In summary, self-criticism and the subsequent emotion of shame may help maintain submissive responding that is thus adaptive in hostile and uncertain situations. Self-criticism has subsequently been proposed as a coping strategy developed in disrupted developmental contexts (Holle & Ingram, 2008; Gilbert, 2006).

As with many coping strategies learned early in life, self-criticism has costs. First, when self-criticism is employed for submissive/defensive purposes, it activates threat responses. Gilbert and Irons (2005) suggest that internal hostile voices are not well differentiated from external hostile voices, and the mind/body may react as if they are one and the same. Even when no danger is occurring, threat perception and responding, as triggered by self-criticism, may override other important development, coping, and functioning goals (Gilbert, 2006; Ford, 2005). Across species, those who consistently occupy 'subordination' roles experience more stress and

consequently more physical and mental illness (Gilbert, 2006). Gilbert, et. al (2003) developed the Early Life Events Scale to assess personal feelings and behavior from childhood related to adult behavior that left the respondent feeling threatened and submissive, or safe and secure. They suggest that while events that were threatening or events of interpersonal subordination in childhood are useful to assess as objectively as possible, it may be more advantageous to assess the *personal experience* of the states of feeling threatened and submissive. Social rank theory suggests that it is these experiential states that may trigger psychopathological reactions. They found that the best predictor of depression were endorsed feelings and experiences of submissiveness. Lastly, although Gilbert (2006) explains how inducing depressive symptoms using self-criticism can be a functional strategy in a hostile and low power situation, these depressive processes may continue even after the context has changed. Chapman et al. (2004) found that of all the ACEs, emotional and psychological abuse best account for symptoms of depression in adulthood.

This engagement with self-criticism and the subsequent anxious and depressive results are proposed to become an over-learned and over-applied strategy. It is then given a 'retrieval advantage' when one faces difficulties even long after the childhood adversities have passed (Gilbert & Proctor 2006).

Social Injustice and Oppression

While much of the theory above implies the developmental contexts home and family as formative, patterns of self-criticism can arise in other developmental contexts and specifically, in relation to society at large. Thus, a final possible etiology of self-criticism takes into account a broader look at social contexts that may contribute to this pattern of responding to one's self. There are many societal messages and socio-cultural conditions that communicate unworthiness

and inferiority, and these have been theorized to have the potential to be internalized and incorporated into a critical view of the self. Additionally, adverse experiences in childhood or impaired opportunities for development are highly correlated with socioeconomic and political determinants, which then can cascade to negatively impact self-appraisal, wellbeing, and lifetime functioning of children as they age (Davidson et al., 2010; Slack et al., 2011). Addressing the prevalence of adverse childhood experiences has been identified as a social justice imperative, because ACEs disproportionately affect those low in resources and power.

Social injustice and oppression not only impact the conditions in which individuals develop and live, but are likely factors that contribute to an individual's sense of self. Prilleltensky and Gonick (1996) suggest that oppression cannot be fully understood without taking into account both macro-level (political) as well as micro-level (psychological) considerations. They define psychological oppression as: "the internalized view of self as negative and as not deserving more resources or increased participation in societal affairs, resulting from the affective, behavioral, cognitive, linguistic, and cultural mechanisms designed to solidify political domination" (p. 130). This idea of internalized oppression (sometimes referred to as internalized sexism, racism, heterosexism, etc.) has been a central consideration in liberation movements that seek to overcome oppression (for early examples see Fanon, 1963 or Memmi, 1965). Prilleltensky and Gonick (1996) compiled a list of empirically derived and researched psychological phenomena that contribute to this state of internalized oppression. These include pessimistic explanatory style, belief in a just world, conformity, learned helplessness, and internalization of inferior identity, to name a few. Of all the psychological variables involved, they theorize that the internalization of negative concepts of the self is the

primary feature of psychological oppression. Internalized or psychological oppression is thought to significantly limit a person's functioning and wellbeing.

For example, the research on stereotype threat with African Americans and women in learning settings supports the notion that culturally formed impressions of one's self-identity can have impacts on behavior (Croizet, Désert, Dutrévis, & Leyens, 2001; Steele & Aronson, 1995; Wheeler & Petty, 2001). Very generally, these experiments demonstrate that when negative stereotypes are primed (either consciously or unconsciously), members of the stereotype group perform worse than when those stereotypes are not primed. Stereotype threat, then, refers to the power of socially constructed ideas of inferiority to shape one's performance and experience of one's self. Overcoming these types of internalized aspects of identity has been an important clinical research area in multicultural and social justice oriented therapies (Sue & Sue, 2007). Similarly, Gilbert's (2009) review of the research on bullying suggests that any type of social shaming or social defeat can result in the development of debilitating self-criticism. This research suggests that work to address self-criticism must integrate an awareness and a critical view of the structures of oppression affecting those who are high in self-criticism.

Self-criticism and Related Constructs

Before moving from the topic of self-criticism to the next main topic of this review, it is important to highlight a few additional and closely related constructs. These are psychosocial challenges that overlap with self-criticism, are components of self-criticism, or are states accompanying self-criticism. Shame, guilt, low self-esteem, and perfectionism are often discussed in relation to self-criticism and sometimes are proposed as overlapping constructs (e.g., Holmes & Ingram, 2008; Thompson & Zuroff, 2004). Thompson and Zuroff (2004) offer the helpful distinction that while there are similarities, other constructs such as self-esteem,

perfectionism, and guilt do not suggest the same level of overarching or global hostility toward the self that self-criticism does. Perfectionism, emotion dysregulation, and impaired interpersonal relations all have been shown to be accompanying components of a self-critical mental habit. There is also significant overlap across self-criticism and generalized shame, where shame seems to be a prominent affective expression of self-critical thinking (Gilbert, 2011). The relationships between self-criticism and shame, perfectionism, and emotion dysregulation will briefly be explored below.

Shame is understood to be one of the self-conscious emotions, such as guilt, pride, or embarrassment (Feiring, 2005). These emotions rely on the ability to hold a mental representation of one's self being seen by others (mentalization), and thus have a consequent meaningful reaction related to a given social context. Shame is a negative feeling related to the whole self, not a feeling related to an action, as is the case with guilt. Shame, after failures or the awareness of shortcomings, is the sense of "being bad" rather than "having done bad" (Herman, 2007). Over-generalized or pathological shame is thus often understood as synonymous with self-criticism because of the self-loathing involved and the expectations of social rejection or attack. Gilbert (2011) defines shame as:

typically regarded as multifaceted, with feelings of anxiety, anger, disgust, and/or sadness and at times a "heart sink" feeling; a sense of self as inadequate, bad, or defective in some way; beliefs that other people look down on the self and hold us in a negative frame of mind; behavioral dispositions and urges to run away, freeze, hide, and avoid; and unpleasant physiological arousal. (p. 325)

Similar to the evolutionary explanation of self-criticism, over-generalized shame or a core sense of shame is theorized to be an experience associated with social comparisons,

submissiveness, disrupted attachment, and defeat (Feiring, 2005; Gilbert et al., 2010; Gilbert, 2011; Herman, 2007). Shame may result from being victimized or being rejected in earlier phases of life (Adriano, 2012; Herman, 2007). For example, Andrews (1995) found that shame about one's body was a mediator between childhood sexual and physical abuse and severe, recurrent depression in adulthood. Experiencing over-generalized shame is proposed to negatively affect interpersonal relationships in a wide range of ways, including difficulties with trust, boundary setting, withdrawal, expression of anger, and negative perceptions of others' intentions and behavior (Andrews, 1995). In sum, over-generalized shame (as with self-criticism) is proposed to mediate the relationship of past social rejections, insecure relationships and developmental hardships with later life struggles (Adriano, 2012; Feiring, 2005; Gilbert, 2011; Herman, 2007).

Perfectionism is proposed to be a mental habit marked by setting high expectations and experiencing self-criticism when standards are not met. On one hand, this cycle of setting unattainable goals and then failing to meet them, or meeting them but then reappraising them as failures, can result in a perpetual and over-generalized negative evaluation of one's self (Holle & Ingram, 2008). On the other hand, conceptualizations of perfectionism do not always suggest a punitive or self-denigrating response to failure and do not always lead to severe distress. (Thompson & Zuroff, 2004). There are many studies documenting the beneficial qualities of having and pursuing high expectations. Holding high expectations without self-criticism is thought to be possible and adaptive (Neff, 2012). However, as Thompson and Zuroff (2004) explain, high standards and the self-criticism that follows when they are not met can be one common expression of the(?) internalized form of self-criticism.

Self-criticism is also shown to correlate with emotion dysregulation (Gilbert et al., 2012). Learning to self-regulate both emotions and attention is thought to be an important developmental objective. In some circumstances of adversity during development, this learning gets disrupted (Ford, 2005). Emotion dysregulation is emerging in research as one of the most pronounced sequelae of ACEs (Adriano, 2012; Cook et al., 2005; Feiring, 2005; Ford, 2005). There are also many models of psychopathology that have emotion dysregulation and subsequent avoidance strategies as underlying processes (Gilbert et al., 2012; Speranza, 2003). Emotional intelligence is thought to develop early in life in relationship to attachment figures who provide a sense of safety and exploration, and later in life to peers (Ford, 2005). Openness to explore internal experiences, encouragement to express emotions, validation, empathy, and soothing may all be socially-learned skills that develop in relationships (Gilbert, 2009; Gilbert & Irons, 2005). In the absence of these safe interpersonal opportunities, emotions may take on an overwhelming and frightening quality, and pathological behaviors to self-regulate emotions may emerge (e.g., Speranza, 2003; Ford, 2005). These potential deficits in emotion regulation and intelligence are also sometimes accompanied by increased anxiety, stress reactivity, and threat perception associated with interpersonal activity (Ford, 2005). It is possible that self-criticism and emotion regulation are found to be consistently interrelated because they are embedded in the same interpersonal developmental contexts. In support of this, Gilbert et al. (2012) found correlations of self-criticism with alexithymia and with difficulties with mindfulness and feeling safe with others; all of these characteristics are components of emotion regulation.

Compassion, Self-Compassion and Self-Reassurance

Research on compassion in the field of psychology is part of a growing trend of drawing from eastern philosophies to inform research on psychological functioning. Self-compassion is a

construct recently investigated in western psychology and derived from Buddhist thought (Barnard & Curry, 2011). Self-compassion is not necessarily the mere absence or opposite of self-criticism, but rather may be a distinct skill with multiple components that can be developed and that may operate despite self-critical mental habits (Jazaieri et al., 2013). Neff (2012) describes compassion as the recognition of suffering, paired with kindness and understanding that naturally gives rise to the desire to help or soothe the suffering one sees. Self-compassion is simply this process focused on one's self. In a similar definition, Gilbert et. al. (2004) suggest that self-compassion requires several competencies: recognizing a distressing emotion, having motivation to soothe it, and then being able to both give compassion to the self and receive compassion from others, depending on the situation.

Neff (2012) has identified and developed a three-factor model of self-compassion. The factors are *self-kindness*, *common humanity*, and *mindfulness*. These components are considered in contrast to their distressing counterparts: "self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification" (Germer & Neff, 2013, p. 856). *Self-kindness* is marked by an absence of self-criticism or judgment and instead is an attitude of kindness that recognizes human fallibility as inevitable. It is a soothing or caring response to one's own suffering. *Common humanity* is the ability to see suffering or shortcomings as universal experiences. It is proposed to combat the feelings of isolation, shame, and self-loathing that can result from thinking failure or pain is unique to only one's self. Finally, *mindfulness* is conceptualized as the ability to recognize emotional and cognitive processes that accompany hardship and intentionally attend to these. Without the awareness or recognition of suffering, kindness cannot be offered. Mindfulness also refers to being nonjudgmental, accepting, and not over-identified with what one observes. Neff (2012) goes on

to differentiate self-compassion from self-pity and self-indulgence, with the explanation that self-compassion does not imply becoming self-focused, unaccountable for one's actions, or excessively lenient.

Self-reassurance is often discussed in conjunction with self-compassion. Gilbert et al. (2004) propose several components of self-reassurance including:

the ability to remind oneself of one's positives, past successes, and abilities, the capacity to tolerate disappointment and feeling vulnerable, and the ability to have compassion for the self. Some forms of reassuring may be about encouragement and . . . energizing, while others may be soothing and calming oneself down. (p. 47)

It is understood to be the active employment of several strategies aimed at soothing one's self during challenges or difficulties.

Correlates of self-compassion

Self-compassion has consistently been shown to correlate with a number of positive outcomes (Barnard & Curry, 2011; Hoffman, Grossman, & Hinton, 2011; Neff, 2012). There is now evidence that positive emotions have numerous enhancing effects on cognitive and social processes (Fredrickson, Coffey, Pek, Cohn, & Finkel, 2003). As explained earlier, Gilbert et. al. (2008) distinguish between positive emotions that are part of the drive system versus the content/affiliative system. They found that feelings of security, warmth, and safety constituted a unique component of positive affect. They found that endorsement of these experiences, which are associated with the affiliative system, had higher negative correlations with depression, anxiety, stress, self-criticism, and insecure attachment than did the affective experiences of the drive system. These feelings associated with the affiliative system are the ones evoked when one is self-compassionate. Gilbert et al.'s (2008) research suggests that lower stress, anxiety, and

depression may result from regularly experiencing feeling safe, cared for, and content in the world. Similarly, affective (emotional) and somatic (physiological) self-regulation skills or self-soothing have been identified as protective factors for children in unstable environments and adults defending against depression (Ford, 2005; Irons et al., 2006). In reviews of the research on self-compassion and well-being (Barnard & Curry, 2010; Gilbert, 2009; Hoffman et al., 2011; MacBeth & Gumley, 2012), self-compassion positively correlates with positive affect (optimism, happiness and positive reappraisals), life satisfaction (i.e., sense of purpose, low stress, and self mastery), social connectedness (such as perceived social support), emotional intelligence (less suppression of emotions), and immune functioning. Negative correlations of self-compassion include shame, depression, anger, distress, ruminative tendencies, anxiety, stress, and avoidance strategies.

Self-compassion also has been studied in relation to goal achievement and motivation (Neff, 2012). Self-compassion correlates with some dimensions of higher performance, such as negative associations with procrastination or maladaptive perfectionism (Barnard & Curry, 2011; Neff, 2012; Neff, Hsieh, & Dejitterat, 2005). In one study, those who set intrinsically motivated goals driven by enjoyment or curiosity had high self-compassion, whereas those who were motivated by fear of failure or the desire to improve self-image had low self-compassion (Neff et. al, 2005). Breines and Chen (2012) conducted four experiments that examined the effects of brief induction of self-compassion on performance and self-appraisal. They found evidence that self-compassion may be a powerful tool for helping individuals learn and grow from failures or shortcomings. Their work built on previous findings that those high in self-compassion tend to appraise themselves more accurately. They reported that those in the self-compassion condition of the experiments were more likely to view a weakness as changeable, express desire to make

amends for past failures, express the desire to avoid future transgressions, and apply higher effort to improve after a perceived failure than those in control and self-esteem induction groups. They hypothesized that a more self-accepting style actually allowed approach behaviors (such as accurate self-appraisal or motivation and effort toward improvement) as opposed to defensive and avoidant behaviors when confronted with shortcomings. They concluded “Self-compassion is unique in that it provides a safe and nonjudgmental context to confront negative aspects of the self and strive to better them” (p. 8).

Receiving compassion from others

In addition to the research on self-compassion, the ability to receive compassion from others has also been the focus of investigation. Accepting compassion from others can be seen as an extension of the skill of self-compassion. Secure and caring relationships have long been understood to be fundamental to well-being both in childhood and in adulthood. Specific nervous system and neurological functions enable this interpersonal dimension inherent to human development and well-being; oxytocin is one of the better known of these biological ‘affiliative’ building blocks (Gilbert et al., 2008; Gilbert & Irons, 2005; Rockliff et. al, 2011). Being able to seek out and be soothed by others and receive compassion from trustworthy people is an important component of healthy self-regulatory processes (Gilbert, 2014; Gilbert et al., 2010). This may be even more important for those with early life difficulties. Having a sense of safe relationships and receiving compassion from others has been recurrently found to be a critical part of resilience and a powerful protective factor (Davidson et al., 2010). A sense of safety with others allows for a wide range of cognitive, interpersonal, and exploratory functions that perceived threat disallows (Gilbert et al., 2012; Ford, 2005). Also, there is evidence that socio-emotional support moderates the effects of adverse childhood experiences and that those

with exposure to higher ACEs are *more* affected by the presence or absence of social and emotional support (Hill, Kaplan, French, & Johnson, 2010; Nurius et al., 2012). Learning to feel trusting and relaxed around safe others is identified as an important psychosocial competency (Gilbert, 2009).

Compassion-based interventions

New research has demonstrated that self-compassion skills (and by extension skills related to receiving compassion from others) are likely learnable rather than innate. (Gilbert & Iron, 2005; Jazaieiri et al., 2013; Neff & Germer, 2013; Siegel & Germer, 2012). Additionally, recent research has demonstrated some benefit of teaching self-reassuring and self-compassion practices to those who experience hardships and who are high in self-criticism, although this work is still very preliminary and studies are often either pilot studies or conducted with small sample sizes (Barnard & Curry, 2011; Gilbert & Procter, 2006; Hoffman et al., 2011; Irons et al., 2006). Self-compassion is conceptualized as not just the opposite of self-criticism, but as acting in separate and unique pathways, serving as a buffer to depression regardless of the existence of self-criticism (Irons et al., 2006). The intentional ‘practice’ of compassion plays a role in minimizing the retrieval advantage and influence of self-criticism (Gilbert & Irons, 2005).

In describing people who survive ACEs, Ford (2005) suggests that lack of knowledge about other values and modes of perceiving, feeling, thinking, and recalling contributes to underlying emotion dysregulation. Interventions aimed at teaching about the pitfalls of self-criticism and the benefits of compassion, and teaching techniques to cultivate self-compassion, may address part of this missing knowledge. Fredrickson et al. (2008), Neff (2012), Neff and Germer (2013), Jazaieiri et al. (2013), and Gilbert (2009) all have developed self-compassion training strategies and, in some cases, interventions. Although a brief review of strategies and

interventions follows, Gilbert's work is the most specifically targeted for those with high self-criticism and thus the research most applicable to the current study.

Fredrickson et al. (2008) have developed and tested a *broaden-and-build theory* of positive emotions, which posits that positive emotions enable an increase in personal resources across many domains and thus improve overall functioning. These positive emotions allow for changes that can positively affect attention, cognition, psychological resilience to challenges, social interactions, and physical health. In this way, positive emotions are theorized to contribute to well-being rather than simply being an outcome of well-being. One of the practices Fredrickson et al. has used to develop positive affect is Loving Kindness Meditation (LKM), a meditation adopted from Buddhist traditions. In Fredrickson et al.'s (2008) version of LKM, individuals concentrate on evoking and offering feelings of warmth and tenderness toward an object of attention: themselves, loved ones, neutral others, or difficult others. The meditation can come with a thought component such as a phrase like: "may they be free from suffering," or it can be simply a felt exercise with corresponding mental images. Although this seven-week Loving-Kindness Meditation (LKM) intervention was not targeted at self-critics in particular, it did result in several relevant improvements, including more self-acceptance and more positive social relations, including improved ability to receive social support. Researchers identified that the mechanism of change was an increase in positive emotions, which then secondarily supported these additional gains.

Neff and colleagues (2012, 2008) have investigated self-compassion primarily in the domain of social psychology with college populations. They have developed brief compassion 'inductions' that are utilized in this research such as visualization and journaling exercises and which have demonstrated benefit for improving self-compassion. In addition, Neff and Germer

(2013; Germer & Neff, 2013) have piloted the *mindful self-compassion (MSC)* program, an 8-week “resource building” program aimed at increasing self-compassion for general population participants (i.e., those who do not necessarily have mental health concerns). MSC is modeled on Mindfulness Based Stress Reduction (MBSR), with weekly meetings lasting two hours and integration of mindfulness and compassion trainings that are both meditation and everyday practices. They conducted two studies to assess the benefits of the intervention. The first was a pilot study with 21, primarily female participants. Neff and Germer (2013) found that post-MSC measures revealed significant reductions in depression, anxiety, and stress, and significant increases in self-compassion, mindfulness, life satisfaction, and happiness. Similarly, the second study was a randomized, waitlist-control trial, and results demonstrated that the MSC program had a significant impact on self-compassion, mindfulness, and wellbeing measures.

Another initiative to develop a compassion-training program is taking place through Stanford University’s CCARE program. Jazaieri, Jinpa et al. (2013) tested a 9-week *Compassion Cultivation Training (CCT)* with a randomized control trial design and found that training in compassion practices resulted in significant improvements in compassion. Additional analysis of this CCT study (Jazaieri, McGonigal et al., 2013) found that those who received the training also experienced significant improvement in self-reported mindfulness and happiness, and reported lower emotional suppression and worry. Perceived stress was not affected by the intervention. The researchers hypothesize that these changes result from the cultivation of compassion and support adaptive functioning and psychological flexibility more broadly.

Gilbert’s compassion interventions are tailored for individuals with over-generalized shame and high self-criticism. Gilbert’s (2009) work on compassion-focused therapy is built on the foundation of the threat/drive and safe/content systems theory discussed earlier. Over-

activity of the threat and/or drive system and underdevelopment of the safe/content system is theorized to play a major role in psychopathology. Self-criticism can serve to initiate a submissive defensive safety strategy to defend against perceived danger (Gilbert, 2006). This strategy becomes over-applied due to inaccurate threat perception and it develops a retrieval advantage. Gilbert (2009) proposes that first helping clients to understand self-criticism as a safety strategy of the threat system, and then exploring this idea with them as it applies to their own experience, is especially useful. Gilbert (2009) explains:

The first aspects of compassion grow out of this part of the formulation because it helps the client recognize that their pathology and symptoms are ‘not their fault’ but have often emerged with safety strategies. From here it is possible to begin to develop compassionate and validating reflection on the fact that they needed to develop these safety strategies. (p. 201)

Gilbert (2009) suggests that intentional work to cultivate compassion can then activate the safe/content system. Through the utilization of concepts from attachment theory, Gilbert’s interventions strive to help people develop, elaborate on, and access an inner ‘nurturing, compassionate source’ that allows them to feel contented and to self-soothe when distressed.

Compassion-Focused Therapy (CFT) is a supplemental approach to general psychotherapy that involves direction for addressing client cognitions, feelings, behaviors, images, attention, and sensation as they relate to self-criticism, and conversely self-compassion (Gilbert, 2009; Gilbert & Proctor, 2006). CFT addresses both what concrete information can be offered to the client and how therapists might behave with the client during therapy interactions. It builds on preexisting treatments and supplements them with an emphasis on compassion, particularly for those individuals with self-criticism and shame.

Gilbert has piloted several strategies to address self-criticism and develop self-compassion, but few have undergone further empirical analysis. Additionally, the research to date has been applied with small sample sizes. For example, Gilbert and Irons (2004) conducted a several-month long CFT pilot investigation with eight people who identified themselves as self-critical and who were already enrolled in a group therapy treatment. The clients were seen as research collaborators, and the researchers solicited their feedback about the interventions. Clients kept a criticism journal to document triggers, subsequent cognitive and affective experiences, and levels of intensity of these experiences. They also recorded their abilities to self-soothe during these times and rated the effectiveness of compassionate imagery exercises to reduce distress. Gilbert and Irons (2004) found that the journal recording about self-criticism revealed to each participant the contexts and triggers for their thoughts and made apparent the negative feelings that resulted. Gilbert and Irons (2004) also identified both utility and challenges with the imagery work. Ultimately, they found increased self-soothing abilities in eight self-critical clients after this brief supplemental pilot work. Mayhew and Gilbert (2008) found that a three-month, weekly, hour-long compassion intervention with three individuals suffering from malevolent delusions led to less hostile voices and lower ratings of distress. In another small group study, Gilbert and Proctor (2006) found that a 12-week long CFT led to reductions in shame, self-criticism, depression, anxiety, and stress in a sample of six day hospital patients. Drop-out rates affected the results of these studies, as did methodological constraints (Hoffman et al., 2011), but the preliminary data from these studies is likely to be useful in the development of future interventions. CFT is currently being applied to other issues such as eating disorders and bipolar disorder, and results are still pending (Neff, 2013).

In addition to specific treatments aimed at increasing compassion, researchers have proposed that mechanisms of change within pre-existing treatments work to address low self-compassion and self-criticism (Barnard & Curry, 2011; Hoffman et. al., 2011). For example common factors found in therapy such as exposing a client to an empathic caring other, reviewing client behavior and experiences in de-centered, emotionally regulating and nonjudgmental ways, and examining client's faulty beliefs about the self are effective, likely because they alleviate self-criticism and increase self-compassion.

Additionally, Dialectical Behavior Therapy (DBT) and Acceptance and Commitment Therapy (ACT) are two treatments that address some components of compassion, such as mindfulness and reducing self-blame and isolation through training in non-judgment and de-centering. In summary, there have been many advances in the very recent past in developing compassion training programs and clarifying related principles. However, for those clients who fear this type of interpersonal and intrapersonal relating, the contact and vulnerability that most psychotherapy treatments represent may be intolerable. Treatment seeking and engagement may still be significant obstacles for those individuals with high self-criticism who most need these interventions.

Fear of Compassion

This barrier to the efficacy of compassion-based interventions is a construct that has been labeled "fear of compassion" (Gilbert, 2011). Research and clinical observation have shown that some people who are high in self-criticism also tend to fear, resist, and/or reject affiliative, soothing, and compassionate behavior, both from others and from themselves, for a host of reasons (Gilbert et al., 2011; Gilbert et al., 2012; Gilbert & Procter, 2006; Germer & Neff, 2013). Additionally, Gilbert et al. (2011) found significant, positive correlations between self-criticism

and fears of compassion from self and from others. In other words, individuals who are high in self-criticism reject compassionate responses from others, and are less likely to engage in compassionate ways of responding to themselves. One can see the inherent bind; people who likely most need to increase their ability to respond to themselves compassionately, rather than critically, also experience a fear of doing so. In another illustration of fear of compassion, Germer and Neff (2013) cite common reactions to their Mindful Self-Compassion (MSC) program. They explain: “most MSC participants feel ambivalent about self-compassion because they sense that it will make them vulnerable and open old wounds. . . . Men, in particular, seem to worry that self-compassion will diminish their capacity to deal with adversity” (p. 866).

Fear of compassion has also been found to relate to a variety of other psychosocial stressors and difficulties. For example, fear of compassion for self has been found to be associated with insecure attachment style, stress, fear of positive affect, and depression (Gilbert et al., 2011; Gilbert, McEwan, Catrino, Baiao, & Palmeira, 2014). Kelly, Vimalakanthan, and Carter (2014) found that fear of self-compassion was the strongest predictor of eating disordered behavior in 97 patients seeking inpatient care for eating disorders. In addition, Gilbert et al. (2012) found that fear of compassion *from others* and *for self* were also associated with alexithymia, difficulties with mindfulness, depression, anxiety, and stress, and negatively associated with feeling safe and being self-reassuring. In recent research using mediation modeling to clarify the relationships between self-criticism, fear of compassion, and depression, Joeng and Turnert (2015) found that self-criticism appears to predict depression, and that fear of self-compassion and the absence of self-compassion may mediate the relationship between self-criticism and depression.

Theories of etiology

A variety of explanations have been formulated to explain why some people develop a fear of compassion. Gilbert et al. (2011) theorized that the association of affiliative care, positive affect, or self-compassion with an aversive experience or outcome leads to these experiences becoming associated with a sense of anxiety. For example, if a child experiences both nurturing care and emotional abuse from the same caretaker, the child might stay connected to the caregiver so as to receive needed care, but may also develop anxiety and guardedness in response to the abuse. The learned guardedness and anxiety that might be paired with the caring relationship could become generalized so that all care from others elicits anxiety and distrust.

Alternatively, it has been suggested that experiences of compassion may bring feelings of loneliness, loss, and unmet needs for care into one's awareness (Gilbert, 2009). According to this hypothesis, extension of a compassionate response from another person may remind the recipient of how little social support he/she has in his/her life currently or had in the past. This may lead to painful emotions, and to the person subsequently fearing, and perhaps avoiding, situations where they might again experience those painful emotions. Also, shame and its consequent impulses to hide the defective self or avoid interpersonal attention have been identified as core motives for avoiding disclosure, or engagement with caring others (Feiring, 2005). Coupled with self-criticism, compassionate experiences may cause shame, and then secondarily induce despair and/or hopelessness. For example, a person who rarely receives compassion from others and attributes this to being unlovable may be reminded of that fact when he/she does receive care (Adriano, 2012). The shameful feelings that arise would lead to reactions to hide or avoid. If the individual is successful in shutting down the interaction (to avoid shame), then a subsequent sense of despair or hopelessness about ever creating caring relationships may emerge.

Regardless of the reason, compassion can be accompanied by anxiety and evoke distress in some who are insecurely attached, who have had childhood hardship, or who have a low sense of social safety for other reasons (Gilbert, 2009; Rockliff et al., 2011). Some research suggests that a dysregulated ability to engage with others with a sense of safety, and/or to be self-reassuring, is a potentially permanent neuro-developmental feature (e.g., Anda et al., 2006). Anda et al. (2006) have reviewed and conducted research that points to neurobiological changes in those with ACEs (including hardships that are interpersonal in nature). This research reveals lasting physiological changes impairing stress regulation, social attachment, and cognitive and affective functioning. Additionally, specific neural developments occur during sensitive periods and when these opportunities for development pass, achieving specific interpersonal growth may be permanently limited (Zeanah, 2009). However, other research suggests that fear of compassion may be akin to a delayed development or a maladaptive coping strategy and that, with treatment and practice, may diminish and be replaced with self-compassion and safe/content affect in relationships (Siegel & Germer, 2012; Zeanah, 2009). Research on brain plasticity and effects of meditation have offered hope in this regard, revealing alterations in neurophysiology previously thought to be less malleable (Davidson et al., 2003; Slagter, Davidson, & Lutz, 2011).

Fear of compassion & physiology

Research has begun to examine the physiological correlates of self-critical behavior, fear of compassion, and exposure to compassion-oriented interventions. One important finding in this area is that, for individuals with traits of high self-criticism and interpersonal insecurity, being in compassion-based interventions may not produce soothing or safe effects, but rather increase stress, as measured by physiological indicators (Longe et al., 2010; Rockliff et al., 2008; Rockliff et al., 2011). In an fMRI study looking at the neural correlates of self-criticism, areas

of the brain that manage error processing and inhibitory processes became activated when individuals reviewed self-critical statements. These responses were stronger in those with high self-criticism, suggesting more developed error processing and behavioral inhibition. Those with high self-criticism also showed unique brain activity when presented with self-reassuring statements that suggested the presence of stress when hearing these statements. The researchers speculated that those high in self-criticism may experience both difficulty down-regulating stress responses to the negative scenarios and difficulty with self-reassurance.

Researchers have also examined how the administration of oxytocin may affect responses to compassion focused imagery (CFI) interventions (Rockliff et al., 2011). As explained earlier, oxytocin is understood to play a key role in affiliative interactions and interpersonal bonding. Rockliff et al. (2011) conducted a double blind placebo treatment intervention in which the intervention group was given oxytocin. The purpose of the study was to understand better the potential benefits of oxytocin administration for those who struggle with self-criticism and the subsequent interpersonal challenges. Following administration of either the placebo or oxytocin, participants were all asked to participate in a guided CFI exercise. Researchers predicted that oxytocin would positively supplement or enhance the CFI practices. They also predicted that social safety, self-criticism, and attachment could influence the outcome. While there were group effects for enhanced ease of receiving compassion in the oxytocin condition, there were many significant findings related to individual differences of self-criticism and attachment. High self-critics reported more negative experiences of the CFI exercise while in the oxytocin condition than those low in self-criticism. Also, those with low self-reassurance and low social safeness scores reported significantly more difficulty experiencing compassionate emotions and significantly less safe/content positive affect following the CFI practices in the oxytocin

condition than those with high self-reassurance and high social safeness. Upon qualitative inquiry with those high in self-criticism, the authors discovered that the CFI and oxytocin condition “was associated with a range of unpleasant experiences such as anger and frustration about the inability to generate a compassionate image, sadness about loss, feeling depressed, and describing the experience as ‘a bit scary’ (p. 1393).” In contrast, those with high self-reassurance and high social closeness experienced the positive enhancements expected from oxytocin paired with CFI. The physiologically markers discovered in this research add support to the clinical observations that some self-critical individuals experience discomfort with and resistance to compassion.

In a related study (Rockliff et al., 2008) heart rate variability (HRV) was assessed while individuals were presented with compassion focused imagery (CFI) practices. High HRV is linked to feeling safe and the ability to soothe oneself when stressed, whereas low HRV is associated with mental and physical illness and threat response. Cortisol was also assessed following the presentation of CFI. Cortisol is understood to reflect stress responses, with higher levels indicating greater stress response. Rockliff et al. (2008) found that when presented with CFIs, some people had higher HRV, suggesting they were soothed by the images (i.e., HPA axis activity was attenuated), whereas others were not. Those who were not soothed were those who had reported more self-criticism and insecure attachment styles. The effects of CFI on cortisol revealed that those high in self-criticism had significantly less reduction of cortisol following CFI. Once again, this research provides further evidence that fear of compassion is a barrier, even at the level of physiology, and that one’s self-to-self relating and conditioning around social safeness affects how compassion is accessed and experienced in the present.

Interpersonal results of fear of compassion

Self-criticism, when accompanied with fear of compassion, presents a host of interpersonal difficulties. For those who have this challenge, fear of compassion arises when they imagine receiving care or work to be self-compassionate. It can also arise when confronted with compassion from others or when engaged in particular interpersonal experiences. Interpersonal difficulties are common experiences for those high in self-criticism, both in terms of the quality of their relationships and the amount of social support sought and received. (For a review see: Holle & Ingram, 2008.) Specific relationship skill deficits affect those with high self-criticism and include: a poor sense of safety and discomfort with emotions (one's own or another's); impaired ability to seek social support when needed; reluctance to share vulnerability; and extreme sensitivity to criticism (Holle & Ingram, 2008; Gilbert et al., 2010; Gilbert et al., 2012; Gilbert et al., 2014). Whiffen and Macintosh (2005) hypothesized that a self-critical or shameful sense of the self may act as a self-fulfilling prophecy and perpetuate insecure or difficult adult relationships. People high in self-criticism have also been found to have less successful outcomes in therapy (Holle & Ingram, 2008; Rector et al., 2000). Additionally, perceived self-stigma (i.e., the feeling of low self-worth as a result of seeking help) has been identified as a barrier to engaging in therapeutic treatment even when it is known that therapy could be beneficial (Vogel, Wade, & Haake, 2006). It is suspected that many of the interpersonal difficulties found in those high in self-criticism are, in part, affected by fears of compassion. The predisposition to avoid care from others and not offer it to one's self as a result of discomfort with affiliative emotions creates another barrier to individuals becoming free from stress induced by a self-critical mental habit.

It is important to address fear of compassion in self-critics skillfully so as to allow those with this barrier to access the benefits of self-reassurance and compassion, which have been

shown to reduce distress and correlate with higher well-being (Gilbert, 2009; Neff, 2012). Additionally, reducing fear of compassion would enable access to compassion from others. Socio-emotional support is a primary protective factor for those from difficult backgrounds (Davidson et al., 2010; Gilbert et al., 2010; Nurius et al., 2012).

Transtheoretical Model and Stages of Change.

The Transtheoretical model (TTM) was developed to explain the stages of intentional behavior change, originally as they related to overcoming addictions. It has subsequently been applied to a variety of other problem behaviors and behavioral targets as well (Prochaska, DiClemente, Velicer, & Rossi, 1992). The overall Transtheoretical Model identifies several layers of variables that interact to help predict behavior change; however, the central and most widely applied variables in the TTM are the *stages of change*. The TTM proposes that behavior change occurs in temporal stages, and that each stage is qualitatively distinct.

The five stages of change in the TTM are: Precontemplation, Contemplation, Preparation, Action, and Maintenance (DiClemente & Velasquez, 2002; Norcross, Krebs, & Prochaska, 2011; Prochaska, & DiClemente, 1982; Prochaska et al., 1992). Precontemplation is a stage where there is no intention to make a change. For individuals in this stage, there is either no awareness of the issue as a problem or the awareness is very minimal. There is likely little insight into the behavior itself and little sense of agency; that is, the behavior does not seem optional or alternatives are not known. Contemplation is a stage marked by ambivalence, in which one's attachment to the problematic behavior competes with a growing understanding of (and pull towards) an alternative. In contemplation, an individual has a growing awareness of the problem but no clear commitment to change and little confidence that change would be possible. Preparation is a stage where a decision has been made to effect change and, in some cases, steps

are being taken to prepare for the change. For example, a person with a substance use problem now sees the use behavior as problematic and is aware of its negative effects. The individual has a desire to change, and he/she is beginning to think about how to change. Action is the stage where individuals act on behavior change goals. Individuals in the action stage change their environment, behavior, and experiences to support a new way of being. This is the most visible stage of change to others who might witness another's process. For example, the substance abusing person may go to treatment, begin an abstinence program, attend AA meetings, etc. Maintenance is the stage where behavior change is made stable. Competing replacement behaviors are put in place and individuals continue to create and occupy environments that support the behavior change. Relapses are negotiated and overcome and permanent adjustments are made to maintain the new behavior. Individuals in this stage also generalize their new behavior to new contexts and levels of challenge. The stages of the TTM are not intended to be understood as a one-way, linear progression but rather stages that people revisit at different levels of competency (Petrocelli, 2002; Prochaska et al., 1992).

Processes of change, relational stances, and stage-matched interventions.

In conjunction with *stages* of change that outline a temporal sequence of change, DiClemente et al. (1991) also identified *processes* of change, which are strategies people use to effect change with or without the help of therapy. The processes of change were originally identified in a comparative analysis of psychotherapy orientations and the change strategies used therein (McConaughy, Prochaska, & Velicer, 1983; Petrocelli, 2002). The ten processes of change are theorized to be differentially effective in the different stages of change (Petrocelli, 2002; McConaughy et al., 1983). The ten processes and a short description of each follow (DiClemente et al., 1991; McConaughy et al., 1983; Petrocelli, 2002; Prochaska & DiClemente,

1983): (1) *Consciousness-raising* involves becoming educated about the problem behavior. (2) *Self-reevaluation* is the process of developing personal insight into current behavior, coming to understand the antecedents of the behavior and beginning to think about personal solutions. (3) *Self-liberation* refers to the process of considering one's ability and willingness to commit to change, while also thinking more about the benefits of change. (4) *Counter-conditioning* involves trying out alternatives to the problem behavior. (5) *Stimulus control* is the management of the triggers for the problem behavior. (6) *Reinforcement management* is the intentional application of reinforcement contingent on making the desired changes. (7) *Helping relationships* refers to the development of connections with people who support the behavior change. (8) *Dramatic relief* refers to the emotional aspect of becoming aware of the problem behavior and the expression of this emotion. (9) *Environmental reevaluation* is the consideration of how to change the environment to better support the behavior change, and (10) *Social liberation* refers to a collective change where society becomes more supportive of valued behaviors. Processes of change have been associated with stages of change (Petrocelli, 2002). The more insight-oriented processes (e.g., consciousness raising, self-reevaluation, and dramatic relief) are believed to be most useful for people in precontemplation and contemplation. The action-oriented stage is associated with strategies that directly support behavior change, such as stimulus control and reinforcement management (Petrocelli, 2002; Norcross et al., 2011). Matching treatments to support the processes of change at different stages of change has been identified as useful.

When treatments are utilized to assist in the change process, unique relational stances or ways of interacting with clients, given stage of change, have been identified (Norcross et al., 2011). For example, precontemplation is proposed to be best matched with a "nurturing parent".

The nurturing parent role might involve more supportive and empathic listening. People in precontemplation are at risk for not returning to treatment, and aversive interactions with helping professionals may increase the risk of not getting help. The “nurturing parent” role takes into account the fact that the person may see little reason to change, but may be more inclined to accept help from a kind, nurturing provider. The theory suggests that those in contemplation respond best to a “socratic teacher” role. The socratic teacher role involves engaging the client around questions that may help him/her clarify the impact of the problem behavior, how it is affecting his/her life, and what his/her goals are. In contrast, a more active “coach” role serves those in an action phase better. That is, those in action benefit from someone who can offer specific expertise on strategies that work best for change, and who can provide energizing encouragement and support through the various ups and downs of behavior modification. Interestingly, the only known study to examine stage of change theory with self-compassion theory supports this idea. Kelly, Zuroff, Foa, and Gilbert (2010) found that when using self-compassion inductions versus self-energizing (drive system) and self-controlling (threat system) inductions to aid individuals during smoking sensation, those in early stages of change (regarding smoking behavior) responded best to the self-compassion induction whereas those in later stages of change (regarding smoking behavior) responded better to self-energizing inductions. This finding is consistent with recommendations for supporting processes of change (Norcross et al., 2011) as it suggests that the supportive strategy that will be most useful for change differs depending on readiness to change.

Investigation into the benefits of tailoring interventions to stages of change (stage-matched treatments) is a new area of research, and primarily developed in health psychology. (Dijkstra, Conijn, & De Vries, 2006; Norcross et al., 2011; Prochaska et al., 1992). However,

research does provide support for treatments that match processes of change to stages of change. Outcomes of some interventions have been reliably predicted by stages of change matched or mis-matched with corresponding process of change (Norcross et al., 2011). For example, highly action-oriented therapies such as exposure or behavioral interventions predictably have high drop-out rates among those in precontemplation and contemplation stages (Norcross et al., 2011; Soler et al., 2008). Norcross et al. (2011) conducted a meta-analysis to examine whether matching treatments to particular stages affects outcomes. Findings suggest that the stage of change that individuals are in at pretreatment can affect treatment outcomes for different treatment approaches. In fact, research suggests that a common problem in psychotherapy delivery is the use of action-oriented therapies when most clients are actually not in an action stage of change. In these cases, few people may enroll in the treatment and/or remain in therapy. Across the studies reviewed by Norcross et al. (2011), they estimated that the percent of people in action or preparation stage was only 20%, while those in precontemplation constituted 40% of people, and contemplation another 40%. These percentages were of individuals already enrolled in some type of research intervention for mental or behavioral health challenges. Because of this surprising finding, they suggest psychotherapists move to a “stage paradigm” rather than remain in an “action paradigm.”

Researchers have contributed adaptations to the transtheoretical model to include other important behavior change variables as they develop stage-matched interventions and clarify distinctions between stages (Dijkstra et al., 2006; Dijkstra, De Vries, & Bakker, 1996; McConaughy et al., 1983). For example, the Social Cognitive Stage Model (SCSM) uses stage of change theory but also integrates Bandura’s Social Cognition Theory (SCT) which predicts that behavior change is influenced by (1) outcome expectation (what people believe will occur

(pro's and cons) when they change or do not change and (2) self efficacy, which refers to the individual's confidence in whether change is possible (Dijkstra et al., 1996). These constructs are echoed by the concept of the decisional balance of weighing pros and cons in the TTM. In both models, individuals in precontemplation have very different outcome expectations and self-efficacy than those in action. Precontemplation stage is marked by awareness of the pros of not changing, the cons of changing, and low self-efficacy. Action is marked by the opposite: pros of change, cons of continuing, and high self-efficacy. There is evidence that tailoring strategies to match these differences improves outcomes (Dijkstra et al., 2006; Norcross et al., 2011). Stage-matched interventions are a growing research interest and preliminary studies suggest that they can be effective (Norcross et al., 2011).

Stages of change and psychopathology.

The vast majority of stage of change research has been done in the field of behavioral health for issues such as: managing addictions, implementing exercise or diet routines, participating in preventative care, or complying with post-operative treatment (Norcross et al., 2011). However, the TTM has been used to understand not only health behaviors, but also processes in psychotherapy and psychopathology. There is much less research concerning the application of stages and processes of change to mental health concerns, despite theory and case study that suggests utility in doing so (DiClemente & Velasquez, 2002; Norcross et al., 2011). In a meta-analysis of stage of change studies applied to mental health research, Norcross et al. (2011) found 39 studies addressing such issues as: PTSD, domestic violence for both the survivor and perpetrator, depression, eating disorders, and general therapy. In one example of an application of stages of change to a mental health treatment, Soler et al. (2008) applied the TTM to treatment of borderline personality disorder by assessing stage of change before and after a

standard brief, 3-month DBT treatment. They found a significant relationship between being in precontemplation and drop-out. In a review of studies like Soler et al.'s (2008), Norcross et al. (2008) found that in each study, there was evidence in support of matching treatments to stages. Thus, some research does support the utility of applying the TTM for understanding change processes in the context of mental health issues.

Intervention considerations for early stages of change

The stages of change of central interest for this study are precontemplation, contemplation, and preparation. Precontemplation and contemplation are the stages that come before the decision to change and that tend to be poorly matched with action-oriented treatments but rather benefit from a focus on increasing awareness and insight. Preparation is the 'in-between' stage marked by awareness of the need to change, and motivation to change but no apparent action in this direction, possibly due to lack of knowledge, lack of self-efficacy or the continued presence of significant obstacles. These may also be the stages most likely to be experienced in populations neither seeking nor engaged in treatment. A review of intervention considerations for each stage follows.

Prominent characteristics of people in precontemplation are that they underestimate the benefits of changing, overestimate the costs of changing, and are unaware that they are making these evaluation errors (Norcross et al., 2011). DiClemente and Velasquez (2002) outline four ways of responding, feeling, and thinking in the precontemplation stage that impede movement toward change: reluctance, rebellion, resignation, and rationalization (the "four R's"). *Reluctance* is a type of attachment to the current behavior supported by a passive, risk averse quality where lack of knowledge and fear of change support acceptance of current conditions. *Rebellion* is an energetic response, marked by defensive and argumentative investment in the problem behavior.

Those with this reaction may have adequate information but, for any number of reasons, be adamant about pursuing their current path. In contrast, *resignation* is marked by hopelessness and powerlessness. People experiencing resignation are easily overwhelmed by the challenge of change and low in self-efficacy, not believing they have the resources required for change. Finally, *rationalization* reactions are intellectual arguments justifying the continuation of the problem behavior. Sometimes projection of blame or minimization of harm is employed.

Given the wide array of resistance types that can keep someone in precontemplation, there have been several processes of change identified as useful in this early stage. Many of these are about creating or increasing motivation for change. First, consciousness-raising and self-reevaluation have been most widely identified as useful and they entail learning factual information about the problem behavior, increasing one's awareness of his/her engagement in the behavior and its impacts, considering the pros and cons of the behavior and, developing awareness of alternatives (DiClemente & Velasquez, 2002; Norcross et al., 2011). In particular, research suggests that increasing awareness of the benefits of changing is an especially appropriate strategy to use with those in precontemplation (Dijkstra et al., 2006). Additionally, self-liberation (i.e., instilling hope, building confidence, and creating a sense of possibility in change by increasing self-efficacy) is identified as important (DiClemente & Velasquez, 2002). Finally, in general, suggestions for action intensive treatments are discouraged and may actually entrench precontemplators in their sense of hopelessness or resistance (DiClemente & Velasquez, 2002; Norcross et al., 2011). Instead, nonthreatening approaches with many options and 'small step' strategies are understood to be more useful for those in precontemplation. Suggesting action is done only with the intentions to identify and address barriers that may exist to change, but not as a "push back" strategy to counter resistance.

Contemplation has been characterized as “being stuck,” knowing about and possibly wanting change, but being unable to commit to action. Individuals in this stage benefit from similar strategies as precontemplation (consciousness raising and self-reevaluation), with additional emphasis on building confidence in change (self-liberation) and on highlighting the cons of remaining stuck as a way to use emotional awareness to shift the ambivalent ‘decisional balance’ (dramatic relief) (DiClemente, & Velasquez, 2002; Norcross et al., 2011). Strategies to work with the decisional balance include empathic listening, affirmation, and summaries or reflections that capture the competing perspectives. As with precontemplation, trusting the client’s timing and willingness to decide on change for himself is critical.

Finally, those in Preparation want change and may take initial steps but still face obstacles common to the two earlier stages discussed. They benefit from information that helps them clarify and strengthen their resolve to change (self-liberation) and guidance on how to enact change (consciousness-raising) with an emphasis on strategies and small steps (counter-conditioning and reinforcement strategies) (Norcross et al., 2011; Petrocelli, 2002).

Application of Stages of Change Model to Self-Criticism

The stage of change model may be well suited for application to the problem of self-critical thinking. This is evident from the research on fear of compassion. While some people may be very comfortable with a self-compassionate approach and eager to develop these skills further (Neff, 2012), others fear changing their thinking patterns and have a more entrenched self-critical style (Gilbert, 2009). These individual differences in terms of receptiveness to self-compassion are of interest and may suggest the presence of different stages of change.

Some compassion-based interventions for people who are highly self-critical, similar to many other forms of psychotherapy, may assume that the client is in the action stage. They may

utilize interventions that encourage the client to generate and concentrate on compassionate images, repeat compassionate phrases, engage in self-compassionate behavior and work to affectively and attentively receive compassion from self, therapists, and others. However, the descriptions of fear of compassion very much reflect the hallmarks of precontemplation and contemplation. In fact, where Norcross et al. (2011) make a primary recommendation that one treat those in precontemplation “gingerly,” Gilbert (2009) similarly warns clinicians to prepare for the fears and resistance of clients when faced with compassion interventions and explains, “Many clients cannot easily access the soothing and social safeness system that underpins compassion. In fact, much of the work in compassion-focused therapy addresses people’s fears and resistances to becoming self-compassionate . . .” (p. 206). It appears that assessing a self-critical client’s stage of change may provide the opportunity to better match the treatment approach to their needs. Moving prematurely to interventions that reflect an action stage of change may result in treatment drop-out, non-compliance, negative beliefs about compassion, increased fears of compassion, stress reactions to compassion imagery, painful affect (grief, loneliness, sadness), and difficulties with generating compassion imagery (Gilbert, 2009; Gilbert et al., 2011; Gilbert et al., 2012; Gilbert & Irons, 2005; Jazaieri et al., 2013; Rockliff et al., 2008).

Applying the stages of change model, particularly to the early, pre-action stages, for those with high levels of self-critical thinking may have useful implications for treatment approaches with this population. It may be that processes of change for early stages are applicable to people engaged in self-criticism who have fear of compassion. It seems likely that many people experiencing self-critical thinking may be unaware of this thought pattern, its functions and impacts. Additionally, research supports the idea that self-criticism and its subsequent

distressing results are idiosyncratic (Gilbert et al. 2004; Joeng & Turner, 2015; Thompson & Zuroff, 2004). People may also not be aware that there are other ways to engage with themselves. If they are aware of the problem and of alternatives, they may feel afraid or helpless to change for a variety of reasons. The stage matched treatment suggestions identified for those in precontemplation and contemplation appear to be quite applicable to people who are high in self-criticism and who have fear of compassion. Helping an individual become more aware of the research on self-criticism and their personal expression of self-criticism, its consequences, and how it may serve as a safety strategy are likely useful first steps. Additionally, teaching about self-compassion so they can decide whether changing it is in their best interest or not is also likely useful and in line with stage of change theory. It is likely that, even when self-critical clients are fully prepared to develop a compassionate approach, the change may require much work, time and involve upsetting emotions. Helping clients better prepare for this hard work by employing a stage-matched treatment approach may improve treatment acceptability and delivery.

Purpose of Study

Self-criticism is a prevalent feature of many forms of psychopathology, and training in compassion has been proposed as a remedy (Gilbert & Irons, 2005). The challenge is that many in need of compassion training are also resistant to it, perceiving compassion from both self and others as anxiety provoking and untrustworthy (Gilbert et al., 2011). Interventions to address self-criticism have revealed that fear of compassion may pose an obstacle to treatment. This current study proposes that treatments addressing self-critical thought behavior and treatments that seek to develop a self-compassionate approach can benefit from application of the stages of change theory. Applying the stages of change theory to self-critical thinking would then call for

different intervention strategies at different stages, depending on a client's fear of compassion and investment in maintaining a self-critical approach. Developing ways to address fear of compassion is a priority for treating those high in self-criticism (Gilbert et al., 2010). Clarifying mechanisms of change for becoming more self-compassionate has also been highlighted as a research need (Barnard & Curry, 2011). Additionally, following a meta-analytic review of stage of change research, Norcross et al. (2011) identified two issues as underrepresented in the over 1500 studies they reviewed: first, the stages of change model is not often applied to Axis I or mental health disorders, and second, too few studies intentionally assessed stage of change prior to treatment and then matched an intervention for that stage. A stage-matched intervention for individuals who are high in self-criticism and high in fear of compassion and who are in early stages of change contributes to all of these identified research priorities.

In general, providing psycho-education interventions has been shown to be an effective, evidence-based approach for a wide range of psychological and behavioral changes (Lukens & McFarlane, 2004). Less intensive interventions, such as psycho-education, have also been identified as useful for those in precontemplation/contemplation. Additionally, studies of compassion that involve very brief compassion-based exercises still produce positive effects on subsequent thought and behavior (Barnard & Curry, 2011; Breines & Chen, 2012; Hoffman et al., 2011; Neff, 2012). A very brief, stage of change-based psycho-education approach is likely a useful prerequisite to ultimately developing a more self-reassuring and self-compassionate style. The approach for those in early stages of change would entail providing feedback on the person's nature and level of self-critical thinking and helping them to develop insight into the functions and costs of self-critical thinking. Providing participants with basic, introductory information about the research on self-compassion would also take place. Lastly, if fitting for the stage,

addressing participants' barriers to self-compassion skills and encouraging self-efficacy for self-compassion would also occur.

Research Questions

The first research question was: can a brief, stage-matched, psycho-educational intervention aimed at those with high self-critical thinking, high fear of compassion and in precontemplation, contemplation or preparation stages regarding self-criticism move individuals toward greater openness to changing self-critical thinking and openness to learning skills of self-compassion? Secondly, would an intervention like this, based on the research work of Paul Gilbert, PhD, reduce self-criticism and fear of compassion? This study attempted to address these questions by assessing stage of change in those with high self-criticism and high fear of compassion, and conducting a brief intervention for those in early stages of change. Individuals who were (a) high in self-criticism, (b) high in fear of compassion, and (c) located in precontemplation, contemplation or preparation were invited to participate in a brief psycho-educational intervention. The intervention was based on Dr. Gilbert's theory and research, and informed by processes of change matched for the specific stages of change. The study compared pre- and post-intervention levels of self-criticism, self-reassurance, fear of compassion, stage of change, and general distress. Third, this study addressed the question of whether reports of early childhood hardship, which have been identified as a risk factor for self-critical thinking, are correlated with self-criticism and fear of compassion. The fourth question addressed whether reports of early childhood hardship would predict response to the intervention. Lastly, the fifth question addressed by the study is whether, in those with high self-criticism, fear of compassion correlates with early stages of change, and if so, to what extent. This final question is aimed at trying to assess whether fear of compassion and early stages of change (precontemplation and

contemplation) are better understood as distinct or overlapping constructs when it comes to changing self-critical thinking.

Methods

Recruitment

In the spring of 2014, 201 college students 18 and older were recruited through The University of Montana's Psychology research subject pool to participate in initial screening data collection. The recruited students were seeking research credit for a psychology course and had several options for how to fulfill this credit. All students completed measures of self-criticism, fear of compassion, and stages of change regarding self-critical thinking.

Data from these measures were used to select participants for the intervention phase of the research. Students who met inclusion criteria and qualified for the intervention were contacted to participate. Specifically, we worked from the highest scores down, meaning we tried to maximize participation of those who had the highest scores in fear of compassion and self-criticism and who were in the earliest stages of change. Recruitment for the intervention first looked at those who endorsed being in precontemplation or contemplation stages *and* who were in the top third of self-criticism and top half of fear of compassion. Then we selected from those who scored in the top third in fear of compassion who were also in the top half of self-criticism. Of the 38 people who fell into this group, 21 agreed to participate. Reasons given for choosing not to participate included having already fulfilled their research credits with other studies, not replying to calls, or when contacted, not being interested in the study subject. Next we recruited 5 additional participants from those who reported preparation stage of change, again working from those with highest scores in both fear of compassion and self-criticism (of those who scored in the top third in both categories). In total, 26 participants began and completed the

intervention phase of the research. All students who began the study also completed the intervention.

In the fall of 2014, another sample of 167 students was recruited through The University of Montana's Psychology research subject pool to answer research question #3; what are the correlations of reports of early life hardships with fear of compassion and self-criticism? All students in each sample were told that participation was voluntary and confidential. Research credit for their Psychology course(s) was provided to all students based on the amount of time spent involved in the research.

Participants

This study included four samples. The first sample was the screening sample (N=200) from which the intervention sample was drawn. The intervention sample (N=26) consisted of participants who completed the intervention and two-week follow-up. The third sample (N=88) consisted of those in the screening sample who scored above the mean on the self-criticism measure. The fourth sample (N=167, Study 2) was recruited separately and data were collected on measures of childhood hardship (ELES), self-criticism (FSCSR), self-reassurance (FSCSR), and fear of compassion (FoC). A description of all samples follows.

Study 1: Sample 1 (Full Screen Sample)

The first sample ($N = 201$; 113 females) was drawn from a pool of Psychology students interested in gaining research credits. The ages of the participants ranged from 18 to 62, with a mean of 19. See Table 1 for a description of demographics.

Table 1

Demographics of Study 1: Screening Sample of 200

Variable	Frequency	Percent
Gender Identity		

Male	82	41.0		
Female	116	58.0		
Transgender	1	.5		
Ethnic or Racial Group Identity				
Caucasian	176	88.0		
Hispanic	3	1.5		
Native American	2	1.0		
Asian American	5	2.5		
African American	1	.5		
Mixed Ethnicity	6	3.0		
Other	2	1.0		
Eastern Indian	1	.5		
Age				
N	Min.	Max.	M	SD
199	17	62	19.99	3.78

Study 1: Sample 2 (Intervention Sample)

Sample 2 (N=26; 11 female) was derived by selecting and recruiting from the Screening Sample those who had endorsed relatively high self-criticism, high fear of compassion for self, and early stages of change (via a 5-question measure), as described in the recruitment section.

The ages of the participants ranged from 18 to 42, with a mean of 21. See Table 2 for participant demographics.

Table 2

Demographics of Study 1: Intervention Sample of 26

Variable	Frequency	Percent		
Gender Identity				
Male	15	57.7		
Female	11	42.3		
Transgender	0	0		
Total	26	100.0		
Ethnic or Racial Group Identity				
Caucasian	26	100.0		
Age				
N	Min.	Max.	M	SD
26	18	42	21.23	4.95

Study 1: Sample 3 (High Self-Criticism)

Sample 3 (N=88; 53 female) was derived from selecting the data of those in the screening sample who scored above the mean (21 and above) on self-criticism. The ages of the participants in this sample ranged from 18 to 62, with a mean of 20. See Table 3 for participant demographics.

Table 3

Demographics of Participants That Scored Above the Mean on Self-Criticism: Sample of 88

Variable	Frequency	Percent		
Gender Identity				
Male	34	38.0		
Female	53	60.0		
Transgender	1	1.1		
Ethnic or Racial Group Identity				
Caucasian	76	86.4		
Hispanic	2	2.3		
Native American	1	1.1		
Asian American	3	3.4		
African American	0	0		
Mixed Ethnicity	2	2.3		
Other	1	1.1		
Eastern Indian	1	1.1		
Missing	2	2.3		
Age				
N	Min.	Max.	M	SD
88	18	62	20.48	5.00

Study 2: Sample 4

Sample 4 (N=167; female 116) was collected in the fall of 2014. These undergraduate students were in the University of Montana psychology subject pool and interested in receiving research participation credits. The ages of the participants in this sample ranged from 17 to 41, with a mean of 19. See Table 4 for characteristics of this sample.

Table 4

Demographics of Study 2: Sample of 167

Variable	Frequency	Percent
Gender Identity		
Male	51	30.5
Female	116	69.5
Total	167	100.0
Ethnic Identity		
African American	1	.6
Asian American	4	2.4
Caucasian	141	84.4
Hispanic/Latino	1	.6
Native American/ Alaskan Native	4	2.4
Southeast Asian	2	1.2
Two or More	9	5.4
Other	3	1.8
Missing	2	1.2

Age

N	Min.	Max.	M	SD
166	17	41	19.63	3.72

Procedure

Three phases of data collection occurred, and the three separate procedures are described below.

Procedure for Study 1: Screening Sample

Participants for Study 1 (N=200) were taking part in The University of Montana's psychology research screening session. Participants were Introductory Psychology students who were participating in research as an optional way to earn research course credit. They were in classrooms of 50-80 participants when filling out surveys. Participants were provided and gave informed consent prior to filling out surveys. All had the option to not participate.

Confidentiality was also explained to the students, and confidentiality was maintained when survey measures were collected.

Participants were given self-report measures to complete that measured self-criticism and self-reassurance (FSCSR), fear of compassion (FoC), and stage of change with regard to self-criticism (SOCRATES and five stages questionnaire).

Procedure for Study 2

Participants for Study 2 (N=167) followed the exact same procedures as those in Study 1, with one exception: instead of completing the SOCRATES and five stages questionnaire, Study 2 participants completed the early childhood hardship experiences (ELES) questionnaire.

Procedure for Intervention

Participants of Study 1 screening sample who met inclusion criteria (see recruitment section) were contacted by phone and the study was explained to them. Those who agreed to participate in the intervention (N=26) were given full opportunity for informed consent and had confidentiality explained to them. Those who agreed to participate in the study met one-on-one with the primary investigator in a clinical psychology clinic testing room. The first meeting lasted two hours and included completion of three self-report, pre-screen measures to assess general level of distress (DASS21), early childhood hardships (ELES), and knowledge of the material about to be presented. After completing the measures, participants engaged in the intervention (see Intervention section below). They then completed a knowledge test based on the intervention which was the same test they had completed prior to the intervention.¹ This meeting was followed two weeks later by a 30-minute administration of follow-up measures. At the follow-up meeting, participants were given measures to complete on self-criticism and self-reassurance (FSCRS), fear of compassion (FoC), general distress (DASS21), and stages of change regarding self-criticism (SOCRATES and five stages questionnaire). They also

¹ Four participants did not complete this post-intervention test but were assessed on knowledge at pre-intervention and at two-weeks follow-up

completed the same test completed at pre- and post-intervention to assess information comprehension and retention. Lastly, participants filled out a brief treatment acceptability survey and then engaged in a brief (approximately five minute), informal interview to review their answers to the survey with the primary investigator. Notes were taken on these interactions and these conversations, paired with the survey, were used to assess what was and was not useful about the intervention meeting. In total, participants engaged in the intervention for approximately two and a half hours.

Intervention

The psycho-educational intervention consisted of treatment objective modeled on self-criticism and compassion-based research and theory and cognitive-behavioral theory, and guided by stage-matched treatment recommendations, all reviewed herein. The intervention procedure and content was administered relatively consistently across participants, but delivery varied based on stage of change indicators such as engagement or resistance, or questions or particular confusions a participant may have expressed. Processes of change for each stage informed these decisions. For example, if a participant was particularly resistant to changing a self-critical style (i.e., precontemplative), self-compassion was introduced briefly as an option, and the pros and cons of both strategies were emphasized. Alternatively, if a person was eager to change self-criticism, more time was spent on how to cultivate self-compassion.

The following is an overview of intervention components, followed by an outline of the intervention. The intervention guide with visual aids and handout materials can be found in Appendix A. Two pilot trials of the intervention were completed and only very minor adjustments were made to the intervention. Specifically, the pre- and post-test was adapted to more closely match the intervention material covered. Additionally, two components of the

intervention (self-compassion versus self-esteem and self-compassion versus self-pity) became optional given the time constraints and their relevance to only some participants. These components are included as the last two visual aids of Appendix A. The majority of the visual aids were taken directly from informally published, publicly available presentations of Dr. Gilbert's work and, in one case, Dr. Neff's work. In some cases, the visual aids were adapted for this intervention. The specific source for each visual aid is cited in Appendix A.

Overview of intervention components

Insight

The primary objectives at early stages of change are to develop insight into the problem behavior. Gilbert et al. (2004) have suggested that self-criticism can serve varied and complex functions, have many sources of origin, and be quite idiosyncratic for each individual. They argue that it is likely a useful step to help people understand these origins, and the types and functions of their own self-critical behaviors. It is possible that self-criticism can evolve in several points in development: in the home with attachment figures; with bullying peers during adolescence; in young adulthood during challenges to individuate; and at all stages in our cultural context when faced with marginalizing circumstances such as low socio-economic status or oppressed ethnic minority status, or when lacking in traditionally idealized physical or character features. Additionally, specific circumstances associated, for an individual, with the origins of self-criticism may selectively trigger self-critical reactions. Considering a wide range of contexts may allow for individuals to develop a better understanding of the expression of their unique self-critical thinking. Based on both Dr. Gilbert's theory and stage of change theory, development of insight (or self-reevaluation in process of change language) could serve as a first step to building capacity and motivation for addressing self-critical behavior and developing self-

reassurance habits. (See the Behavioral Analysis exercise in Appendix A that was used to help explore each participant's self-critical style and fears of compassion.) In addition, at each stage of the educational presentation (see below), participants were asked about how the information pertained to them.

Education

It is possible that those in very early stages of change may not be aware of their self-criticism and may not know that this way of relating to themselves is associated with mental and, in some cases, physical challenges such as stress, urges to withdraw from people or activities, or reduced ability to engage with complex thought and expression. Providing this and related information was an objective of this intervention, and the explanatory model provided by Dr. Gilbert's research was relied upon for this explanation. Additionally, explaining the advantages of behavior change for those in early stages of change has also been identified as important. For self-critics, this means informing them about the benefits of self-compassion, and the fact that triggering the affiliative/self soothing system is linked to resilience. During the intervention, the primary investigator presented the research on correlates of self-criticism with psychological and physical distress and the correlates of self-compassion with well-being, including positive performance. In all cases, the information was provided in a manner that did not preclude the fact that self-criticism had once been functional and had served an important purpose. Also, self-criticism and self-reassurance were presented as distinct but not mutually exclusive skill sets, consistent with Dr. Gilbert's theory and approaches that are better received at earlier stages of change.

Emotional Catharsis and Self-efficacy

In addition to promoting insight and education, we anticipated that discussing the topic of self-criticism directly would likely have important emotional impacts. Opportunities to express sadness, fear, shame, and hope were all provided. These were emotional experiences that were intentionally planned for by some of the components of the intervention, based on the research that indicates that contacting the emotional impact of our problem behaviors is one way to promote change. We offered this experience by providing structured opportunities for participants to discuss the reasons and impacts of their self-criticism and to identify their experiences with the three emotion regulation systems. We also worked to build hopefulness and a sense of possibility by explaining self-compassion as a learnable skill with attainable steps toward mastery.

Intervention Outline

The outline below gives a brief overview of the intervention protocol. For more details, see the intervention materials in Appendix A.

1. Define self-criticism: its functions, prevalence, and diversity of expressions. Provide feedback about participants' reported self-criticism and discuss how this tendency works for them in particular.
2. Provide instruction and then ask them to complete a self-criticism behavioral analysis with three instances of triggering events, self-critical thoughts, subsequent feelings, and behavioral consequences.
3. Discuss each of these examples in detail.
4. Introduce Dr. Gilbert's theory of the three emotion regulation systems and solicit examples from their lives in which they were engaged in each of these systems.

5. Present information on safety seeking. Discuss how self-criticism is an effective submissive defensive strategy that triggers automatic reactions that could promote safety (e.g., urges to self-isolate, avoid connection, silence one's expression, scan for threat, or monitor one's own behavior for errors).
6. Explain the connections between physiology and the imagination, using taste as an experiential example and also mentioning sex. Explain how self-criticism induces the threat-protect affect regulation system and again discuss this as a possible safety seeking strategy.
7. Discuss reactions, discrepancies with their own experience and questions
8. Discuss self-criticism costs and benefits
9. Break
10. Define compassion and how it works as self-compassion and assess reactions to this idea.
11. Discuss the three components of compassion and discuss the challenges with each step.
12. Show how self-compassion fits within the framework of three affect regulation systems, when one uses imagination to engage affiliative /safety physiology (similar to previous examples of imagining food, sex, and bullying).
13. Discuss the challenges with self-compassion such as it being under-developed. When appropriate (when individuals express interest), provide very basic instruction on practices to strengthen this skill.
14. Discuss self-compassion costs and benefits.

15. Optional components include providing distinctions between self-compassion and self-esteem, self-pity, and self-indulgence.

Measures

One measure was used to assess the interrelated constructs of self-criticism and self-reassurance. One measure was used to assess fear of compassion for self and from others. Two scales were used to assess stages of change. One scale assessed general distress and one scale assessed personal feelings and behaviors related to childhood hardship experiences. The inclusion of this latter scale is to assess the feelings of submissiveness and threat that are highlighted as formative experiences due to exposure to adverse childhood experiences. Descriptions of each scale and the context in which they were used follow. Additionally, treatment acceptability questions were asked (by survey and by brief 5 minute check-in) at the two-week follow-up for those who completed the intervention, and an information test was given pre-, post-intervention, and at two-week follow-up to those who completed the intervention. These measures can all be found in Appendix B along with scoring information, survey and information retention measures. To view sample items from each scale, review Appendix B. All alphas reported below for each scale are from cited, published research rather than the current study.

Forms of Self-criticism and Self-reassuring Scale (FSCRS)

To measure self-criticism and self-reassurance, the Forms of Self-criticism and Self-reassuring Scale (FSCRS) (Gilbert et al., 2004) was used. After reading the prompt: ‘When things go wrong for me . . .’, participants answer 22 questions with 5-point Likert scale responses (from 0 equating to ‘not at all like me’ to 4 equating to ‘extremely like me’). This measure considers three self-to-self relating styles. *The inadequate self* subscale has items that suggest

focus on personal shortcomings and dissatisfaction with the self. *The hated self* subscale has items that reveal disgust or loathing directed toward the self. *The self-reassuring* subscale has items that reveal an attitude of self-care or comforting after hardships. Scores on the *Inadequate self* and *hated self* subscales were combined to make up a *self-criticism total* score, which was used for inclusion criteria and post intervention measurement. The scale has demonstrated good reliability with Cronbach's alphas of .90 for inadequate self, .86 for hated self, and .86 for reassured self (Gilbert et al., 2004). This scale was administered to Study 1 participants at screening (Sample 1 & 2) and to Study 2 participants (Sample 3). For the intervention sample (Sample 2), it was repeated at two weeks post-intervention.

Fear of Compassion (FoC)

Gilbert et al. (2011) developed the FoC scales to measure fears of compassion (1) directed toward others, (2) directed from others, and (3) directed toward self. The scales have 10, 13 and 15 items respectively and are presented as separate but related questionnaires. Options for responding consist of a 5-point Likert scale from "Don't agree at all" to "Completely agree." The first sub-scale of fear of compassion toward others was not a focus of this research, but the other two subscales were administered to all samples. The sub-scales had good reliability with Cronbach's alphas of 0.85 for fear of compassion from others and 0.86 for fear of compassion for self (Gilbert et al., 2011). The two subscales of fear of compassion from others and for self were administered to Study 1 participants at screening and to Study 2 participants (Sample 3). For the intervention sample (Sample 2), it was repeated at two weeks post-intervention.

Depression, Anxiety and Stress Scale (DASS21)

This is a 21-item, self-report scale assessing general distress, divided into three factors: depression, anxiety, and stress (Lovibond & Lovibond, 1995). It assesses these factors for the past week. Participants respond using a four-point Likert scale. The DASS21 subscales had Cronbach's alphas of .94 for depression, .87 for anxiety, and .91 for stress (Antony, Bieling, Cox, Enns, & Swinson, 1998). The overall score was of primary interest for this study rather than sub-scales. This scale was administered to intervention participants at pre-intervention and two weeks post-intervention.

Early Life Events Scale (ELES)

This scale was developed to measure memories related to feeling de-valued, subordinate, or frightened within one's family context (Gilbert et al., 2003). It asks respondents to rate how often a statement was true for them, using a five-point Likert scale ranging from 1 "Completely Untrue" to 5 "Very True." Cronbach's alpha of .92 for the total score was found by Gilbert et al. (2003). This scale was administered once for intervention participants (Sample 2) and once with Study 2 (Sample 3) participants.

Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES)

This scale is a 19-item, self-report questionnaire that assesses for three factors of change, which map on to the stages of change from the Transtheoretical Model (Miller & Tonigan, 1996). The three factors are Recognition, Ambivalence, and Taking Steps. Participants respond using Likert ratings of 1 to 5. The scale's original design assessed substance use stage of change, and that scale had Cronbach's alphas ranging from .87 to .96. For the purposes of this study, the questions were adapted to fit the problem behavior of self-critical thinking. The sub-scales which were the foci of analyses in this study were the Taking Steps scale, as this indicates the willingness to make change, and the Recognition scale, as this indicates a person's

acknowledgement that self-criticism is a problem behavior. The SOCRATES was administered with Study 1 participants both at screening (Sample 1) and with the intervention sample (Sample 2) two weeks post intervention.

Clinical context stages of change questionnaire

Another way to assess for stages of change for any given problem behavior is to ask individuals a question for which possible responses correspond to each stage of change (Center for Substance Abuse Treatment, 2005; Norcross et al., 2011). We used an adapted version of this simple assessment recommended for clinical use by the Center for Substance Abuse Treatment (2005). It read as follows: *Select the statement that most closely fits your view of your self-critical thinking: (1) It is not a problem and/or I have no interest in change. (2) It might be a problem; I might consider change. (3) It is definitely a problem; I'm getting ready to change. (4) I am actively working on changing, even if slowly. (5) I have achieved stable change with my self-critical thinking, and I am trying to maintain this.* This assessment was used in Study 1 at screening and at two weeks post-intervention with the intervention sample.

Data Analysis

In Study 1, we utilized a mixed analysis design to answer several research questions. In Study 2, we used correlation analysis to answer a single research question. The research questions are presented below with the corresponding analysis for each question.

Data analysis for each research question

- (1) Is there a difference between pre- and post-intervention scores on measures of: self-criticism/self-reassurance, fear of compassion for self, stage of change, and general distress.

- 1) A repeated measure, paired-sample t-test analysis for dependent samples was done for each of the measures (FSCSR, FoC for self, SOCRATES & DASS21).
- 2) A chi-squared comparison was used to analyze the five stages of change questionnaire before and after the intervention.
- 2) Are childhood adverse experiences related to self-criticism and fear of compassion?
 - 1) In Study 2, Pearson product-moment correlation coefficients were calculated for ELES with scores on the FSCSR, and FoC scales.
- 3) Do reported childhood adverse experiences predict response to an intervention aimed at reducing self-criticism and fear of compassion?
 - 1) A hierarchical multiple regression analysis was utilized to test whether ELES scores predicted post-intervention scores on the FSCSR and FoC, after first loading in pre-test scores on the outcome measures.
- 4) Is fear of compassion related to early stages of change for self-criticism? For this question to be accurately assessed, we had to select a sample that denied self-criticism as a problem but also reported high self-criticism. This is because if a person with low self-criticism denied self-criticism as a problem, they would not be considered 'precontemplation' but rather would be providing an accurate assessment of their self-criticism. Therefore, for this question, we only looked at a sample that was above average in self-criticism.
 - 1) A Pearson product-moment correlation coefficient was calculated for the adapted SOCRATES scale with the FoC scale (for self and from others) in those of Sample 1 who scored above the mean on self-criticism.

As part of the intervention and follow-up, survey data were also collected on treatment comprehensibility and acceptability, and strengths and weaknesses of the intervention. This data was categorically examined so that themes could be identified by question.

Results

Study 1 Participants' Outcomes on Measures

Descriptive statistics for the self-criticism, fear of compassion, and stages of change measures for the screening sample (N=200) can be found in Table 5. Descriptive statistics for just the Study 1 intervention sample (N=26) can be found in Table 6. The intervention sample mean on self-criticism (M=30, SD=8.4) was close to one standard deviation above the mean of the full screening sample on ??? (M=20, SD=10.5). Similarly, the intervention sample mean for fear of compassion for self (M=27, SD=9.3) was greater than one standard deviation above the mean of the full screening sample score (M=14, SD=11.7). The screen sample mean for fear of compassion was similar to a non-clinical sample in recent research (Gilbert et al. 2012).

Table 5

Means and Standard Deviations for All Measures for Study 1, Screen Sample (N =199)

Measures	N	Mean	Standard Deviation	Range	
				Minimum	Maximum
FSCSR: Reassured self total	197	21.86	5.403	3	32
FSCSR: Inadequate self total	198	17.18	7.643	1	36
FSCSR: Hated self total	199	2.96	3.732	0	20
FSCSR: Self-Criticism total: Inadequate + hated self	198	20.15	10.475	1	56
FoC: Fear of Compassion from others total	197	15.56	10.662	0	42
FoC: Fear of Compassion for self total	197	14.08	11.753	0	50
SOCRATES: Recognition	195	19.44	6.211	7	34

SOCRATES: Ambivalence total	197	12.22	3.736	4	20
SOCRATES: Taking Steps	194	20.76	6.804	8	38

Note. FSCSR=Forms of Self Criticism and Self Reassuring Scale; FoC=Fear of Compassion Scale; SOCRATES=Stages of Change Readiness and Treatment Eagerness Scale

Intervention Sample (Sample 2) Characteristics

Table 6

Pre-intervention Means and Standard Deviations for All Measures for Study 1, Intervention

Sample (N=26)

Measures	Mean	Standard Deviation	Range	
			Minimum	Maximum
FSCSR: Reassured self total	19.42	4.925	8	27
FSCSR: Inadequate self total	24.42	5.013	15	34
FSCSR: Hated self total	5.31	4.407	0	15
FSCSR: Self-Criticism total: Inadequate + Hated self	29.73	8.417	19	49
FoC: Fear of Compassion from others total	23.15	9.212	5	40
FoC: Fear of Compassion for self total	26.96	9.357	12	47
SOCRATES: Recognition	21.38	5.558	12	33
SOCRATES: Ambivalence	13.69	3.484	8	19
SOCRATES: Taking Steps	16.81	5.185	8	29
ELES	36.83	10.831	19	58
DASS21 total	22.12	10.152	9	41

Note. FSCSR=Forms of Self Criticism and Self Reassuring Scale; FoC=Fear of Compassion Scale; SOCRATES=Stages of Change Readiness and Treatment Eagerness Scale; ELES=Early Life Events Scale; DASS21=Depression, Anxiety and Stress Scale

Pre-intervention inclusion criteria scores for all 26 participants who completed the intervention are listed in Table 7. These are included to highlight the three ‘borderline’ cases

that were close to or at the mean for either self-criticism or fear of compassion for self, or on both measures.

Table 7

Intervention Sample Participants Scores on Inclusion Criteria Variables

Participant	FSCSR: Self Criticism Total	FoC: Fear of Compassion for Self	Stage of Change
1	44	40	3
2	24	17	2
3	23	33	3
4	33	24	2
5	24	39	1
6	34	24	2
7	49	38	3
8	21	14	1
9	47	37	2
10	35	36	2
11	29	23	3
12	28	47	2
13	32	12	2
14	35	21	1
15	21	30	2
16	22	19	2
17	19	20	1
18	41	31	2
19	23	38	1
20	25	24	1
21	35	24	1
22	25	21	2
23	27	22	2
24	24	33	2
25	21	17	2
26	32	17	3

Note. Highlighted participants indicate cases close to the mean on one or more measures. The scores that are close to the screening sample means are in bold. Stages of Change 1=Precontemplation; 2=Contemplation; 3=Preparation. FSCSR=Forms of Self-Criticism and Self-Reassuring Scale; FoC=Fear of Compassion Scale.

Research Question One

The first research question addressed the efficacy of the intervention. Specifically, would a difference be found from pre- to post-intervention on measures of: self-criticism, self-reassurance, fear of compassion for self, stage of change, and general distress. The intervention was predicted to reduce scores on self-criticism and fear of compassion for self, and to raise the scores on recognition and taking steps. There was no prediction for the intervention's impact on self-reassurance, as this was not directly taught. Similarly, general distress scores were not necessarily expected to change, as they were not targeted by the intervention. Paired samples, one-tailed t-tests were carried out on all pre and post measure means. Table 8 displays the means and standard deviations for all measures pre- and post-intervention.

Table 8

Means and Standard Deviations for the Intervention Sample at Pre- and Post-Intervention on Outcome Measures

Variable	Time 1 (Pre-Intervention)		Time 2 (Post-Intervention)	
	M	SD	M	SD
FSCSR: Self Criticism Total	29.73	8.417	24.19	10.331
FSCSR: Reassured Self	19.42	4.93	18.35	5.13
FoC: Fear of Compassion for Self	26.52	9.27	21.28	11.883
SOCRATES: Recognition	21.38	5.56	22.69	6.53
SOCRATES: Ambivalence	13.69	3.48	14.19	3.42
SOCRATES: Taking Steps	16.81	5.185	22.77	6.538
DASS21	22.12	10.152	18.08	7.071

Note. FSCSR=Forms of Self Criticism and Self Reassuring Scale; FoC=Fear of Compassion Scale; SOCRATES=Stages of Change Readiness and Treatment Eagerness Scale; DASS21=Depression, Anxiety and Stress Scale

Table 9 presents the paired samples t-test results, which indicate that scores were significantly lower for the post-intervention FSCSR self-criticism total $t(25)=5.49$, $p<.001$, $d=.60$, FoC fear of compassion for self $t(24)=3.24$, $p=.003$, $d=.50$ and the general distress

measure DASS21 $t(25)=2.99$, $p=.006$, $d=.47$. Scores were significantly higher for SOCRATES Taking Steps $t(25)=-4.552$, $p<.001$, $d=-1.03$. No significant differences were found with FSCSR Reassured-self $t(25)=1.24$, $p=.228$, $d=.22$, SOCRATES Recognition $t(25)=-1.39$, $p=.178$, $d=-.22$ or SOCRATES Ambivalence $t(25)=-.71$, $p=.487$, $d=-.15$. While significant changes were seen in SOCRATES Taking Steps, post-intervention scores still fell in the low range. Additionally, the post-intervention scores on FSCSR self-criticism and FoC fear of compassion for self remained above the screening sample means.

Table 9

Study 1 Intervention Sample Pre- and Post-Intervention Paired Sample, One-Tailed T-Test

Results on All Outcome Measures.

Variable	<i>t</i>	<i>P</i>
FSCSR: Self-Criticism Total	5.485***	.000
FSCSR: Reassured Self	1.236	.226
FoC: Fear of Compassion for Self	3.243**	.003
SOCRATES: Recognition	-1.39	.178
SOCRATES: Ambivalence	-.705	.487
SOCRATES Taking Steps	-4.552***	.000
DASS21	2.989**	.006

Note. FSCSR=Forms of Self Criticism and Self Reassuring Scale; FoC=Fear of Compassion Scale; SOCRATES=Stages of Change Readiness and Treatment Eagerness Scale; DASS21=Depression, Anxiety and Stress Scale

* $p<.05$ ** $p<.01$ *** $p<.001$

In addition to the above paired samples t-tests, a Pearson Chi-Squared test was conducted on the categorical measure of the five stages of change questions to examine the change in distribution of scores following the intervention. The 5 (stages pre) x 5 (stages post) χ^2 test results were $\chi^2(2, N=26)=15.17$, $p=.056$). There was a trend toward scores post-intervention differing from pre-intervention in the direction of more openness to change. The observed frequencies for pre- and post-intervention responses to the stages of change questionnaire can be

found in Table 10. Of note is that all participants either remained in the same category as their pre-intervention response (10 participants), or moved to stages that reflected more change post-intervention (14 participants), with the exception of two participants who reported contemplation pre-intervention and precontemplation following the intervention.

Table 10

Stage of Change Level Endorsed by Intervention Sample Participants at Pre and Post

Assessment and Pearson Chi-Square Analysis of Stage of Change Discrete Variable Measure

		Total Participants in Each Stage at Time 1	Stages at Time 2				
			1	2	3	4	5
Total Participants in Each Stage at Time 2		26	5	4	5	11	1
Stages at Time 1	1	7	3	0	0	3	1
	2	14	2	4	2	6	0
	3	5	0	0	3	2	0
	4	0	0	0	0	0	0
	5	0	0	0	0	0	0
Pearson Chi-Square		Value	df	Asymp. Sig. (2-sided at 95% CI)			
N=26		15.168*	8	.056			

Note. Stages of Change 1=Precontemplation; 2=Contemplation; 3=Preparation, 4=Action, 5=Maintenance.

Research Question 2

The second research question sought to replicate previous studies, which have found that reports of early childhood difficulties correlate with self-criticism in adulthood. In addition, we examined whether childhood difficulties were related to fear of compassion for self, as would be predicted by Gilbert's theory regarding fear of compassion (Gilbert, 2014). To answer these

questions, a second sample (N=167) was recruited to complete measures of self-criticism and fear of compassion, and an early life events scale, which measures memories of feeling unvalued, submissive, and threatened. Table 11 presents descriptive statistics on all measures used in Study 2.

Table 11

Means and Standard Deviations for Study 2, on measures of Self-Criticism, Self Reassurance, Fear of Compassion and Childhood Hardship

Measures	N	Mean	Standard Deviation	Range	
				Min.	Max
FSCSR: Reassured self total	166	22.83	5.526	3	32
FSCSR: Inadequate self total	166	16.12	8.032	2	36
FSCSR: Hated self total	166	2.97	3.843	0	19
FSCSR: Self-Criticism total	165	19.16	11.082	2	55
FoC: Fear of Compassion from others total	165	13.02	10.554	0	41
FoC: Fear of Compassion for self total	166	11.23	11.007	0	50
ELES	163	30.63	12.713	10	72

Note. FSCSR=Forms of Self-Criticism and Self Reassuring Scale; FoC=Fear of Compassion Scale; SOCRATES=Stages of Change Readiness and Treatment Eagerness Scale; ELES=Early Life Events Scale.

Pearson correlations were conducted for all measures administered to Study 2 participants. The ELES Scale, which measures reports of experiences of feeling unvalued, threatened and submissive in childhood were significantly positively correlated with self-criticism $r(161) = .425, p < .001$, with fear of compassion from others $r(161) = .489, p < .001$ and fear of compassion for self $r(162) = .425, p < .001$. ELES was significantly correlated with reassured-self in a negative direction $r(162) = -.333, p < .001$ (see Table 12).

Table 12

Pearson Correlations for Measures of Self-Criticism, Self-Reassurance, and Fear of Compassion with Childhood Hardship in a Sample of 162.

Measure	Pearson correlation Sig. (2-tailed) N						
	1	2	3	4	5	6	7
1. FSCRS: Reassured-Self	1						
	166						
2. FSCRS: Inadequate-Self	-.508*	1					
	.000	87					
	87	87					
3. FSCRS: Hated-Self	-.561*	.704*	1				
	.000	.000					
	166	165	166				
4. FSCRS: Self-Criticism Total	-.563*	.969*	.857	1			
	.000	.000	.070				
	165	165	165	87			
5. FoC: Fear of Compassion from others	-.403*	.595*	.498*	.602*	1		
	.000	.000	.000	.000			
	164	164	164	163	165		
6. FoC: Fear of Compassion for self	-.486*	.668*	.612*	.694*	.745*	1	
	.000	.000	.000	.000	.000		
	165	165	165	164	164	166	
7. ELES	-.333*	.409*	.386*	.425*	.489*	.418*	1
	.000	.000	.000	.000	.000	.000	
	162	162	162	161	161	162	163

Note. FSCSR=Forms of Self-Criticism and Self-Reassuring Scale; FoC=Fear of Compassion Scale; SOCRATES=Stages of Change Readiness and Treatment Eagerness Scale; ELES=Early Life Events Scale. FSCRS: Self-Criticism Total is the sum of FSCRS: Hated-Self with FSCRS: Inadequate-Self.
*p<.001

Research Question 3

The next research question sought to determine whether reported experiences of childhood difficulty would predict response to the intervention. A hierarchical regressions

analysis was used to explore whether ELES scores would predict post-test FOC fear of compassion, after controlling for pre-test FOC fear of compassion. Similarly, a hierarchical regression was used to explore whether ELES would predict post-test FSCRS self-criticism after controlling for pre-test self-criticism score. Tables 13 and 14 display the results of the analyses and show that the ELES did not contribute additional predictive power to the models, beyond the pre-intervention measures of self-criticism and fear of compassion for self.

Table 13

Hierarchical Regression with Dependent Variable of Post-Intervention Self-Criticism Total with Predictors of Pre-intervention Self-Criticism and Childhood Hardship (ELES)

Variable	B	SE(B)	β
Step 1			
Constant	-7.51	3.829	.869***
FSCRS Self Criticism Total Pre-intervention	1.07	.124	
Step 2			
Constant	-12.01	4.59	
FSCRS Self Criticism Total Pre-intervention	1.02	.123	.833***
ELES	.158	.095	.166

Note. $R^2 = .869$ for Step 1; $\Delta R^2 = .026$ for Step 2 ($p = .112$). Dependent Variable is FoC Fear of Compassion for Self score post-intervention. FoC = Fear of Compassion Scale; ELES = Early Life Events Scale

*** $p < .001$

Table 14

Hierarchical Regression with Dependent variable of Post-Intervention Fear of Compassion for Self with Predictors of Pre-intervention Fear of Compassion for Self and Childhood Hardship ELES.

Variable	B	SE(B)	β
Step 1			
Constant	-3.70	5.083	.735***
FoC: Fear of Compassion for Self Pre-Intervention	.942	.181	

Step 2			
Constant	-5.38	6.708	
FoC: fear of Compassion for Self Pre- Intervention	.909	.203	.709***
ELES	.069	.173	.062

Note. $R^2 = .54$ for Step 1; $\Delta R^2 = .003$ for Step 2, ($p = .70$). Dependent Variable is FoC Fear of Compassion for Self score post-intervention. FoC=Fear of Compassion Scale; ELES=Early Life Events Scale.

*** $p < .001$

Research Question 4

The fourth research question sought to explore the relationship of the construct of fear of compassion with the idea of early stages of change (pre-contemplation and contemplation) as it relates to self-criticism. For this comparison, we worked with the scores of those reporting self-criticism above the mean in the screen sample ($N=200$) because early stages of change endorsements would not be applicable to individuals who, indeed, do not have problematic self-criticism. Table 15 shows outcome on measures for the sample of $N=88$ who endorsed self-criticism above the mean of the screening sample.

Table 15

Means and Standard Deviations of the Sample of Participants Who Scored Above the Mean on Self-Criticism (N=88)

Measure	N	Mean	Standard Deviation	Range	
				Minimum	Maximum
FSCSR: Self Criticism Total	88	29.19	7.99	21	56
FoC: Fear of Compassion from others	87	21.48	10.09	2	42
FoC: Fear of Compassion for Self	87	21.70	11.79	0	50
SOCRATES: Recognition	87	23.01	5.69	10	34
SOCRATES: Ambivalence	88	14.36	3.05	4	20
SOCRATES: Taking Steps	82	21.01	6.82	8	38

Note. *Sample consists of 88 individuals whose score on FSCSR: Self-criticism total was above the average overall score of 20 in a sample of 200. FSCSR=Forms of Self-Criticism and Reassured Self Scale; FoC=Fear of Compassion Scale; SOCRATES=Stages of Change Readiness and Treatment Eagerness Scale.

To explore how fear of compassion relates to stages of change for self-criticism, Pearson product-moment correlations were conducted with FoC Fear of Compassion for Self and FoC Fear of Compassion from Others with the three sub-scales of the SOCRATES (adapted for self-criticism): Recognition, Ambivalence and Taking Steps. Table 16 shows Pearson Correlations. Fear of Compassion for Self was not significantly correlated with SOCRATES Recognition $r(87) = .196, p = .07$ or SOCRATES Ambivalence $r(86) = .092, p = .40$ but was significantly correlated with SOCRATES Taking Steps $r(87) = -.237, p = .03$. Interestingly, this significant correlation with SOCRATES Taking Steps is not present when individuals endorse Fear of Compassion from Others $r(87) = .057, p = .607$. Fear of Compassion from Others was also not significantly correlated with SOCRATES Ambivalence $r(87) = .197, p = .067$. Fear of Compassion from Others is, however, significantly correlated with SOCRATES Recognition $r(86) = .234, p = .030$. In the two cases of significant findings, only a small amount of variance is accounted for by the correlations.

Table 16

Pearson Correlations for Measures of Fear of Compassion with Three Dimensions of Stages of Change for Addressing Self-Criticism in the Sample of Participants who Scored above the Mean on Self-Criticism.

Measure

Pearson correlation
Sig. (2-tailed)
N

	1	2	3	4	5	6
1. FSCSR: Self–Criticism Total	1					
	88					
2. FoC: Fear of Compassion from others	.272* .011	1				
	87	87				
3. FoC: Fear of Compassion for Self	.432** .000	.481** .000	1			
	87	86	87			
4. SOCRATES: Recognition	.482** .000	.234* .030	.196 .070	1		
	87	86	86	87		
5. SOCRATES: Ambivalence	.428** .000	.197 .067	.092 .396	.781** .000	1	
	88	87	87	81	88	
6. SOCRATES: Taking Steps	-.056 .613	.057 .607	-.237* .030	.358** .001	.275* .011	1
	85	84	84	84	85	85

Note. Sample consists of 88 individuals whose score on FSCSR: Self-criticism Total was above the average overall score of 20 in sample of 200. FSCSR=Forms of Self-Criticism and Self Reassuring Scale; FoC=Fear of Compassion Scale; SOCRATES=Stages of Change Readiness and Treatment Eagerness Scale.

* $p < .05$ ** $p < .01$ *** $p < .001$

Acceptability Survey Results

In addition to the above research questions that were answered quantitatively, participants completed a questionnaire (see Appendix B) that utilized open-ended questions to inquire about reactions to the intervention. The researcher also engaged participants in brief conversations about their responses to the questionnaire after it was completed. The data from this questionnaire and the brief follow-up conversation were used to assess the acceptability and usefulness of the intervention, to further elucidate the quantitative data in light of individuals' open-ended responses.

All participants endorsed that the information presented during the intervention was clear and understandable and all but one participant (96%) endorsed that the information was useful to them. Eighty-five percent of participants endorsed thinking more about how they relate to themselves after hardship and, similarly, 88% endorsed being more interested in their mental response after hardship following the intervention. Six participants (23%) identified additional information they would have liked to know more about: two of these participants wanted more information on how to combat or change self-criticism, one wanted to know more about how to develop self-compassion, and two others wanted to know more about the physiological dimensions of self-compassion and the emotion regulation system. Lastly, one participant wanted to know how other participants viewed their own self-criticism. When asked whether they would like to be sent more information, fourteen participants (54%) said “yes”.

Table 17 displays the main themes from responses to the prompt: *Please name the most useful part(s) of the meeting*. The actual responses and their corresponding themes are presented in Appendix C. Nineteen participants (73%) indicated that new information was the most useful aspect of the meeting. In one example of this, a participant explained, “learning the mechanisms in my mind that were causing/influencing my self-criticism [was most useful]. I feel like I understand what is going on now, and it may be more maladaptive than I thought. Because I understand it more, I can look at it more logically.” Of those who appreciated the new information, six (23%) identified self-compassion as most useful, with one highlighting that they most appreciated “learning the true definition for self-compassion. Not pity for one self rather being the nurturing caregiver to yourself.” Five (19%) identified the emotion regulation systems theory, and six (23%) identified information about self-criticism as most useful. Also, among those who most appreciated new information, six (23%) noted that having the new information

paired with a discussion of their personal experience was most useful. An example of this is reflected in the following comment; [what was useful was] “Being able to work through my problems and dissect them through new understandings and talking.” Having greater self-awareness following the intervention was identified as most useful by eleven (42%) of participants. People varied in what new self-awareness they found helpful. In the majority of cases, awareness of self-criticism as an automatic response was mentioned. For example, one participant noted “Noticing self-criticism much more and thinking about it when it happens instead of it being automatic.” Others identified emotion, and opportunities for self-acceptance rather than blame as other areas of appreciated growth in self-awareness. One interestingly observed that, “ I realized that I do the self-compassion thing, I just didn’t know it.” This comment reflects an indication of greater self-awareness of self-to-self relating that could then be further cultivated, given the new awareness of its benefits.

Table 17

Themes from the Prompt: Please name the most useful part(s) of the meeting

Theme	Number of Participants informing theme	Percent
Nothing specific but general positive response	3	12
New Information: Self-compassion	6	23
New Information: The Emotion Regulation Systems Theory	5	19
New Information: Self- Criticism	6	23
New Information: General	1	4
New Information Related to Personal Information Through Discussion	6	23
New Information (Total of Above 5 Categories)	19	73
Greater Self-Awareness	11	42
Motivating	1	4
Reminder	1	4
Therapeutic self expression/ discussion about personal experience	4	15
Possible misunderstandings	2	8
Comments reflecting resistance/ no change	2	8

Of interest is that, in two cases, participants made comments reflecting a persistent attachment to self-criticism. For example, one participant noted the most useful thing he learned was “Self-criticism isn’t always bad. It may push you to change.” This may suggest that the discussion of the costs and benefits, which was part of the intervention and was intended to help people in precontemplation or contemplation shift, could in some cases strengthen an existing position.

Table 18 displays results from the prompt: *Please name the least useful part(s) of the meeting or anything you would change.* Appendix C also presents the responses organized below their respective themes. While 35% of participants identified nothing, the most commonly endorsed least useful or challenging part of the meeting was the length of the meeting or the amount of material covered. Twenty-seven percent of participants thought it was too long or too much to cover in the amount of time. Wanting handouts (12%) and not liking some aspect

of the meeting necessary for research design (15%), such as pre-post measures, were other concerns raised.

Nineteen percent of participants expressed their discomfort with some aspect of the fit of the information for them. For example, one participant explained, “I enjoyed the meeting. I thought the information was useful. However, I think I am still happy with the way I deal with things. It was just nice to know a little more about why I deal with them the way I do.”

Another participant disclosed that “ Self-compassion, I feel is something you have or you don’t . . . I don’t think its learnable, you can’t talk yourself out of how you feel.” These comments identifying a misfit of the intervention with their own view of things also included one participant who took issue, for religious reasons, with the use of ideas based in evolutionary theory. Two additional individuals did not think the material pertained to them because they believed their self-criticism was not a problem for them.

Table 18

Themes from the Prompt: Please name the least useful part(s) of the meeting or anything you would change.

Theme	Number of participants informing code	Percentage
Too long for amount of information covered. Multiple sessions	7	27
Wanted Handouts	3	12
Poor fit of information with their view of themselves/their experience	5	19
Wanted things changed that related to research design or elements	4	15
More personal application of information	1	4
Nothing recommended	9	35

Pre- and post-intervention knowledge measures were administered to inform interpretation of the intervention impact, and possibly shed light on reasons why, in some cases, the intervention worked better or less well with specific individuals. On the pre-/post-intervention knowledge comprehension and retention test, prior to the intervention, correct response mean was 1 (Range 0 to 6). For the immediate post-test administration, the mean of correct responses was 10 (Range 2 to 15) and, at two weeks follow-up, the mean of correct responses was 6. (Range 0 to 13). Participants appeared to learn information at the time of the meeting but some of this learning was lost two weeks later. This retention rate was not unexpected given that participants were not given any handouts to take home, and no instruction was provided during the meeting to learn, study or work to retain the information.

Discussion

Impact of Intervention

The current study provides support for the efficacy of a brief, stage-matched psycho-educational intervention for non-treatment-seeking participants who were in early stages of change regarding their high self-criticism, and who also endorsed relatively high fear of compassion. The pre-post design study found significant improvements, with medium effect sizes, in pre-/post-intervention reports of self-criticism, fear of compassion for self, and general distress, and large effect size for taking steps toward change. The study supports the idea that an intervention based on Gilbert's (2009) theory, and that follows the process of change principles for early stages of change, may reduce self-criticism and fear of compassion in those high in these characteristics. As prescribed by the stages of change model, the intervention focused on insight (self-re-evaluation), psycho-education (consciousness raising), emotional processing (dramatic relief), and self-efficacy (self-liberation). The findings also suggest that the brief

intervention can create new openness to changing self-criticism and openness to learning self-compassion skills in many of the participants. Research (Gilbert, 2011) indicates that some individuals experience self-compassion as stressful. Thus, promoting self-compassion requires tailored strategies, given a person's reported level of comfort or discomfort with the ideas. This study offers support for using early stage of change strategies to guide tolerable introductions of self-compassion to those with fear of this, and for the hypothesis that psycho-education based on Gilbert's theory of self-criticism provides a potentially effective foundation for this introduction.

We hypothesize that there were multiple mechanisms of change at work in this intervention. Below is a review of the components and the researchers' impressions of how these worked for participants. To see the order in which these were presented, refer to the intervention outline, guide, and checklist (Methods section and Appendix A). This review of components is also provided below in Table 19 with the corresponding processes of change.

First, the intervention provided an opportunity for participants to recognize that they have higher than average self-criticism through the feedback they were given on the measures they had filled out. After this feedback was provided, a detailed definition of self-criticism was presented, and participants were asked to comment on which parts of the definition (if any) fit for them. In the vast majority of cases, individuals identified with several parts of the definition and noted, sometimes with a sense of humor or surprise, that the definition matched their experience well. In a handful of cases, participants emphasized that self-criticism is adaptive for them, for motivation or to stay competitive.

The meeting also provided an opportunity to consider, in an organized way, the details of their self-critical thoughts, using a behavioral analysis framework. Participants identified at least three situations that trigger self-critical thoughts for them. Examples included being around a

particular person or engaging in a task in which they don't feel competent. Using a worksheet (see Appendix A) they identified the resulting thoughts, feelings, and behavioral consequences. Sharing their findings aloud provided the chance to recognize and overcome some shame. It was striking to the researcher how often participants shared candid and vulnerable information both about their struggles with self-criticism and the painful consequences of this habit, suggesting that there is some innate motivation to reveal and share these difficult experiences perhaps to experience relief. The degree of openness with which individuals were willing to engage appeared to increase the emotional intensity of the interaction. Additionally, when identifying the responses to self-criticism in their behavioral analysis worksheet, nearly all participants identified some form of self-isolation, reduced expression, and/or other threat/protect response (anger, disgust or shame). They did this prior to being given the information about how self-criticism leads to these responses. When they were subsequently given the theory about self-criticism, they were asked to go back to their behavioral analysis and notice similarities, which, in nearly all cases, they were able to identify. For example, many participants identified negative emotions of "sadness" and "anger" as emotional consequences of self-criticism and "leaving" "isolating" and "shutting down" as behavioral consequences of self-criticism. This illustrated in a personal way, the connections between self-critical coping, which engages the threat/protect emotion regulation system, as distinct from self-compassion coping that involves the safe/content system via self-soothing or reaching out to others for support.

Providing new information was an additional component of the intervention. This education included a presentation of the three emotion regulation systems, safety seeking strategies and how the imagination triggers physiological responses. It was explained that self-criticism serves as a trigger of the submissive defensive strategy, which then gets over-applied.

Also provided was the research on the correlates of self-criticism and self-compassion. After introduction of each idea, guided self-reflection was conducted. Based on survey data, all of the participants reported they found the information understandable and 96% reported that it was useful. In addition, 73% of the participants found the information part of the intervention the most useful component. Although the amount of information retained after two weeks was variable, information on the three emotion regulations system and how self-criticism and self-compassion fit with this theory was the most commonly recalled part of the intervention. Several participants communicated feeling validated or affirmed by the explanation that self-criticism is a functional behavior that has become over-generalized. Many recognized experiences from their past in which they responded submissively out of a sense of self-preservation, but also recognized how it had become over-applied.

In addition to this conceptual information, the intervention paired the new information with opportunities for experiential understanding. For example, participants were led in an exercise to experience the power of their imagination on physiology. This allowed them to better understand how self-critical thinking triggers a response similar to one that would occur after being bullied by another. Participants were also asked to generate examples from their lives of the three emotion regulation systems. In the majority of cases, individuals had no difficulty generating examples of the drive/excite system and the threat/protect system but would stall or be confused when trying to generate examples of the safe/content system. This illustrated for them the ‘under-elaborated’ nature of their safe/content system. The difficulty that participants had with identifying safe/content examples was a striking and unexpected observation. It provided compelling evidence in support of the theory that this system is underdeveloped in

those with fear of compassion and high self-criticism, and it stood out as an interesting stand-alone finding.

Compassion was defined as a skill to learn rather than a fixed attribute, correlates were explained, and self-compassion was discussed in the context of the three emotion regulation systems. Participants were asked about the most difficult step of compassion they would imagine for themselves, which gave them a chance to consider engaging in this way and, for those in preparation, to plan for potential obstacles. When there was time and a call for this, self-compassion was distinguished from self-pity, self-esteem (arrogance), and self-indulgence. Participants' comments suggested that self-compassion introduced this way was a very new idea and, in several cases, participants asked at this point about ways to practice it, suggesting they might have been experiencing a sense of a new possibility for how to behave.

Following the explanation of both self-criticism and self-compassion, a costs and benefits review was provided, as a way to address decisional balance issues. This was intended to help participants not feel defensive about the new information and to present the two strategies as choices for responding, each with particular consequences. In some cases, participants were clearly able to identify the overwhelming drawbacks of self-criticism. In other cases, this comparison allowed those attached to their self-criticism to maintain one or two benefits and use those to strengthen their attachment. This finding is consistent with early stage of change counseling work. While some strategies help some people move toward change, the same strategy may produce an expression of resistance in another. A possible way to counter this reaction would be to alter the presentation of the costs of self-criticism to be more explicit or compelling.

In summary, there were many possible mechanisms that could have contributed to change. The study does not allow us to be confident about which components were useful in promoting change. However, the impressions and survey data summarized here provide hypotheses about possible mechanisms and processes of change.

Table 19

Overview of the Mechanisms of Change in the Brief Intervention

Intervention components	Processes of Change Supported
Selection for participation due to reported self-criticism	Self-reevaluation
Self-criticism defined and guided reflection about how it applies to them	Consciousness raising, Self-reevaluation
Behavioral Analysis of self-criticism: triggering event, thoughts, feelings, behavioral consequences	Self-reevaluation
Sharing Behavioral Analysis	Dramatic relief
The three emotion regulation systems theory	Consciousness raising
Identification of personal experiences that fit in each of the three emotion regulation systems and awareness of under-elaborated Safe/Content system	Self-reevaluation Dramatic relief
The imaginary mind and the impact of self-critical thoughts on physiology	Consciousness raising Self-reevaluation
The theory of safety seeking strategies, submissive defensiveness, and the idea of over-generalization with review of behavioral analysis	Consciousness raising Self-reevaluation Dramatic relief
Self-criticism correlates and costs/benefits of self-criticism	Consciousness raising with emphasis on decisional balance analysis
Compassion definition and reflection on challenges with enacting self-compassion.	Consciousness raising Self-liberation
Self-compassion as a learnable skill	Self-liberation
Clarification of what compassion is not (pity, esteem or indulgence)	Consciousness raising Self-liberation
Self-compassion correlates and costs/benefits of self-compassion	Consciousness raising with emphasis on decisional balance analysis

Intervention Limitations

Although reductions in self-criticism and fear of compassion were seen, the mean post-intervention score was still above the mean of the general screen sample and above the means found in other studies means of non-clinical populations (Baiao, et al. 2014; Gilbert, et al., 2004). Note that no statistical comparison was made; however, the self-criticism mean at post-test for the intervention group was 24.19 (SD=10.33), and for the full sample was 20.15 (SD=10.48). The fear of compassion for self at post-test was 21.28 (SD=11.88) and for the full sample was 14.04 (SD=11.753). This suggests that while the intervention had some impact on these factors, it is likely that participants remain challenged by self-criticism and fear of compassion. This is consistent with expectations. Self-criticism is likely a challenging mental habit to overcome and similarly, developing self-compassion skills, for many, requires on-going practice, which was not provided as part of this experience. Although brief, psycho-educational interventions can have impacts (particularly short-term and at the level of insight), it is likely that more persistent and concerted effort would be required to reverse the strength of these habits. Similarly, there was no change in the self-reassurance scale. This is likely due to the fact that increasing self-compassion or self-reassurance was not the target of the intervention.

Self-reported recognition (via SOCRATES) of self-criticism as a problem did not change. This is somewhat surprising as it *was* a target of the intervention and we would have expected this to change, given both the changes in self-criticism scores and the information provided in the intervention. It is possible that self-criticism is different than other health behaviors that the stage of change model often is used to address (e.g., exercise, healthy diet, not smoking, etc.), in that there is not a popular cultural awareness of its negative effects. Particularly in the United States of America, being “tough on oneself” may even be an attractive cultural value,

synonymous with strength, perseverance, and competitiveness. The literature also suggests that self-criticism possibly serves as motivation and is possibly adaptive in socially unsafe situations within which some participants may live. Because there is less widely disseminated information about the possible harms of self-criticism, and because it is functional in some contexts, recognition of it as a ‘problem’ may be met with skepticism, despite the information presented. As an illustration, two of the individuals who were most resistant to the information discussed family members (fathers in both cases) who were highly successful in very competitive careers. In these cases, the individuals attributed their own self-critical style to their fathers’ influence on them. One could hypothesize that they had seen a style of self-to-self relating work well for a role model, and therefore, the information countered compelling experiential learning. Thus, the intervention was not well received. It would be interesting to look at very competitive sub-cultures in which a self-critical style of relating may be more normative (e.g., professional or semi-professional athletes, trial lawyers, police officers, or military personnel) and explore whether the same negative correlates for self-criticism apply.

Also related and interesting, all five of the participants who reported precontemplation after the intervention (via the single question stage of change assessment) still experienced a reduction in their self-criticism scores. This could reflect a demand characteristic phenomenon; these participants may have been attempting to comply or please the researcher by reporting less self-criticism. Alternatively, the intervention may actually have produced reductions in self-criticism, even in those who did not recognize it as a problem. There was no consistency in these five participants in terms of pre-intervention and post-intervention change in their fear of compassion scores (either from others or for self).

The impact of the intervention on stage of change shows that the participants' endorsement of taking steps increased significantly; however, the mean still remained in the 'low' range of the scale. Even though change was seen, it may not be sufficient to what is needed for individuals to initiate major change on their own. Again, there are limitations to how much change can be expected from a two-hour intervention. Having more time and opportunity for practice might have produced larger changes.

The single question that assessed stage of change was only approaching a significant difference (14 of 26 individuals changed their response in a direction that indicated more openness to change). In addition to the points already discussed, another potential influence on this finding may be that the information was presented in a non-challenging manner, with both costs and benefits of self-criticism discussed. As a result, participants may remain less convinced of its harmful impacts. These moderate impacts on stage of change could also be attributed to the limited nature of the brief meeting and that this was, in all but two cases, the first time individuals had considered this behavior as a potential problem. This result was also influenced by the participants who were strongly attached to their self-criticism and appeared closed to change, regardless of what was presented.

Lastly, many participants had very confused views of compassion, for example, considering it the same as arrogance or self-indulgence. This finding was consistent with the struggle that many of them exhibited to identify safe/content examples from their lives. Both findings are consistent with Gilbert's (2014) theory that the social processing of those with fear of compassion and self-criticism is likely underdeveloped. Given that many of them did not have good mental working models of a "nurturing stance" that supported humble and perseverant action toward goals, arrogance and self-indulgence would be probable misunderstandings. A

thorough exploration and correction of these assumptions was only partially possible given the time constraints of the meeting. Not having sufficient time for these explanations likely negatively affected the outcome and served as a limitation of the intervention. As research accrues on the benefits of compassion for well-being, distinctions are being made about the types of compassionate motivation and expression that are skillful (or genuine) and others that are not (e.g., Catarino, Gilbert, McEwan, & Baiao, 2014). Much of this important elaboration about compassion was not possible to cover given the limited structure of the intervention. Several meetings would have been a better approach for this material and would have allowed for more review and retention of material as well as needed time for exploration of compassion generally and self-compassion in particular. Similarly, like many CBT interventions, the informational emphasis of this intervention does suggest it would be less effective with individuals with cognitive or attention challenges. It is possible that these challenges, seen for just a few of the intervention participants, could have been better addressed by a less challenging pace.

Additional Research Questions

In addition to the intervention, the study also included exploration of the relationship between early childhood hardship experiences and self-criticism or fear of compassion in adulthood. Robust correlations between self-criticism and childhood memories of feeling unvalued, submissive, and threatened were found, as were equally strong correlations of these childhood experiences with fear of compassion. These findings are consistent with other research (Gilbert et al., 2003) and also in line with expectations of Gilbert et al.'s theory (2012) of fear of compassion. They suggest that extensive childhood experiences of feeling submissive, threatened, and unvalued may interfere with the emotion regulation system that allows individuals to manage stress and hardship through self-soothing and support seeking strategies.

This disruption of access to critical coping strategies is likely to contribute to the cascade effects of adult psychopathology and to undermine resilience (Gilbert et al., 2003; Germer & Neff, 2013).

The study also examined whether the extent of childhood hardship would predict response to the intervention. The purpose was to explore whether people with histories of more intense childhood hardship might respond differently to the intervention than those with less hardship. For example, greater childhood hardship experiences might affect the nature of one's self-critical thinking, one's ability to trust others, or other factors that could affect response to the intervention. If so, the type of intervention being developed here could be tailored based on childhood history. However, reports of childhood hardship did not predict the outcome of the intervention. This finding is somewhat difficult to interpret. The sample size, and thus statistical power, may have been insufficient to address this question. Additionally, the very brief nature of the intervention that did not challenge individuals with actual self-compassion practice could have also affected this finding. It may be that the extent of childhood hardship is not related to response to intervention, but further research is needed to address this question.

Although there were no findings to shed light on predictors of response to the intervention, the researcher made a number of related observations. Participants were asked to discuss their views on the origins of their self-criticism. In many cases, participants had not considered the impact of their childhood experiences on their style of self-relating or, if they had considered these factors, their insights about their up-bringing often appeared unresolved and underdeveloped. This unresolved quality appeared as either no substantive comments about childhood (despite high ratings on the ELES), or defensiveness or blaming of parents in either/or terms. This might be expected given the participants' age and the possible early stage of

thinking in a psychologically-minded manner. For example, the one participant who was much older than the others responded very differently, with complex observations about the benefits and drawbacks of her experience with sometimes-neglectful parents, and the impact of her upbringing on her self-to-self style of relating.

Finally, the study also sought to better understand the construct of fear of compassion and its possible overlap with the constructs of precontemplation and contemplation for changing self-criticism. The two significant findings suggested that (1) as fear of compassion for self increased, a person was less likely to take steps to change self-criticism, and (2) higher fear of compassion from others correlated with greater recognition of self-criticism as a problem. Although these two findings were significant, the correlations did not account for a large amount of the variance. One way to understand these findings is that while fears of compassion are a part of not wanting to change self-criticism, they do not explain all of that reluctance or unwillingness, and that other factors also contribute to not changing self-criticism. For example, an additional factor in reluctance to change could be ignorance about the skills of self-compassion and thus not knowing that responding differently after hardship is an option. Another obstacle could be disbelief that these skills are learnable, as one participant stated. Lastly, not yet fully experiencing the distress that results from self-criticism (due to young age) or not seeing the direct link of distress to self-criticism could be another factor. Lack of knowledge, low self-efficacy, and low insight are all factors of early stage of change, and these factors all were seen in this sample in regards to changing self-criticism. These were observations that were *in addition* to a general fear and distrust of compassion. Assessment of all these factors that interfere with compassion is likely to be beneficial, so responses can be tailored to address them. The findings of the impact of the intervention suggest that overcoming

reluctance and unwillingness to change self-criticism and overcoming fear of compassion may change by some of the same mechanisms. Namely, working at a preparatory level first with self-reevaluation and consciousness raising, may help individuals gain the necessary insight, knowledge, and motivation to address self-criticism and overcome fear of compassion so that those individuals can then proceed to develop compassion.

Overall Study Limitations

There are several limitations to note with both the design and generalizability of the study, which should be considered when interpreting the results. The study sample was homogenous, with Caucasian college students constituting 100% of participants and all but one participant being in their early twenties. Given that this sample was a particular cohort with particular developmental characteristics, it may be that the intervention components would be received differently by adults at other stages of life and recruited from other contexts.

The intervention study was conducted with a single researcher at all stages, including all intervention sessions, and follow-up and post-intervention measure administrations. Thus, the study is more vulnerable to the influence of demand characteristics, which are the implicit impacts on study participants to perform according to the researcher's expectations. It is possible that participants could have been influenced to provide responses to measures and survey questions in a manner that would please the researcher. This design is also less effective at capturing intervention qualities, distinct from any one particular person's delivery of these components. It is therefore unclear whether the results are transportable to other clinicians. No coding for therapist style of interaction, such as the use of motivational interviewing or other techniques relevant for early stages of change, was done. In addition, while the intervention followed an outline and an attempt was made to present components in a uniform fashion, this

was also done in an intentionally idiographic manner in order to be responsive to the unique characteristics of each participant. Also, the study used a pre-post design without a control group, and so we cannot be certain that changes were causally-related to the intervention. Changes from pre- to post-intervention could have been due to a variety of factors other than the intervention, such as maturation, events occurring between pre- and post-intervention meetings, or other aspects of the researcher's delivery (e.g., motivational interviewing, empathic responding) that could have impacted the variables under study.

Finally, the study was originally designed to include only individuals in the precontemplation and contemplation stages, but due to challenges with recruitment, five participants in the preparation stage were included as well. Although the sample was expanded in terms of stages of change, these five participants also reported high self-criticism and high fear of compassion. In order to accommodate the needs of these participants, the intervention was adapted for them to emphasize different components of the presentation that were more about supporting future action such as providing distinctions between self-compassion and self-pity or self-indulgence, and providing more detailed discussion of the definition and steps of self-compassion. Based on clinical observation, these participants appeared to equally benefit from the information on self-criticism. While they may have been more open to the fact that self-criticism was a problem, the intervention supported this pre-existing belief with more factual support and helped them understand how the habit may have developed. However, it would be helpful for future research to examine more closely whether more distinct types of interventions are needed across the three stages of change included in this study.

Implications for Clinical Practice

This intervention was a very dense, two-hour, individual session with no handout materials or follow-up sessions to process new insights or further develop new learning. Despite its very limited nature, the intervention still may have produced change at two weeks on self-criticism, fear of compassion, and willingness to take steps to change self-criticism. Despite variable retention of the factual information presented, most participants noted that the meeting made them more aware of their self-critical response to hardship. This suggests that the intervention is likely to have components that could be useful in a variety of contexts.

We hypothesize that this intervention includes useful additive components for clinical assessment, treatments aimed at other clinical diagnostic targets (such as PTSD or depression) that do not specifically address self-criticism, and also treatments aimed specifically at increasing self-compassion. In this research sample, once it was found that individuals met the inclusion criteria of high self-criticism, high fear of compassion, and early stage of change, there were no further rule-outs for participation and so clinically significant mental health challenges were not assessed or controlled for. Although no mental health conditions were formally screened for, one student reported ADHD, two endorsed a history of self-harm, one endorsed methamphetamine drug abuse, three endorsed a history of depression, and two others reported significant challenges in social functioning. These were voluntary disclosures and thus do not represent a full review of the challenges faced by all participants. These disclosures revealed that several participants had psychosocial characteristics that made the sample similar, in some ways, to a clinical population. These characteristics would be expected, given what we know about the trans-diagnostic nature of self-criticism and its strong correlations with mental health challenges. These findings suggest that, the sample and their response to the intervention may represent what would be expected from a clinical population with high self-criticism. Regardless

of the complexity of each individual's challenges, many participants still found the intervention useful.

Assessment

The findings imply that it may be worthwhile to integrate assessment of fear of compassion, self-criticism, and stage of change for self-criticism in clinical settings with treatment-seeking clients. Given that these variables are highly correlated with disrupted childhood experiences of safety and closeness with care providers, they may be efficient assessments for identifying problematic attachment styles and subsequently, assessing a client's capacity to self-soothe and receive soothing from others, including a therapist. Research has demonstrated that self-criticism impacts the effectiveness of cognitive behavioral treatments (Rector et al., 2000). The drop-out rate following early psychotherapy visits is a widely known but poorly understood challenge in the field of mental health. Estimates of early (1 to 3 sessions) attrition range from 35 to 57% (Barrett et al., 2008) and research suggests that most who go to ER or medical settings for suicidal or self-harm behavior never follow-up with referrals for treatment (Stanely & Brown, 2012). One possible contribution of these data (although unstudied) is that some of those who do not follow-through with treatment or who withdraw early may feel uncomfortable accepting the attention, warmth, and support that therapists may be trained to deliver. Knowing that someone has this fear could inform a therapist's style and initial approach. Another benefit of early assessment is calibrating self-care instruction and homework. This research suggests that patients who are encouraged to "take care of (themselves)" after difficult sessions may not have good reference points for how to do so. This is critical information for a therapist to know. If the safe/content system is under-elaborated, then

dedicating time to developing it in therapy would become an important treatment target (Gilbert, 2014).

Treatment

We hypothesize that this intervention includes useful additive components for treatments aimed at other clinical targets that do not specifically address self-criticism. While it appears to have been useful as a stand-alone meeting, it may be better understood as a collection of treatment tools to be integrated into more comprehensive treatments, when fear of compassion and self-criticism are prominent dimensions of an individual's presentation. For example, a person might present for treatment wanting to work on relationship difficulties, but the therapist may subsequently observe that the client is also highly self-critical or resistant to experiences of kindness and warmth. Helping individuals already enrolled in treatment overcome fear of compassion may be crucial in supporting them in developing their abilities to experience positive affect, engage with social support and be resilient after hardship. While clinical psychology interventions have developed many strategies to help people overcome negative emotions, the field has only just begun to develop technologies tailored for encouraging contact with positive emotional experiences such as self-compassion or compassion from others in those for whom this is frightening and challenging (Gilbert, 2011; Gilbert et al., 2014; Jazaieri et al., 2013). This is an important area of growth in clinical research and practice. The current intervention shows promise in supporting these goals.

In addition to the specific target of increasing capacity to experience positive affect, identifying and addressing fear of compassion is also important for those who are receiving challenging treatments for disorders such as PTSD, specific anxieties, or depression. This is, in part, because, in the course of treating these disorders, the empirically supported technologies

(e.g., behavioral activation and exposure) can involve an initial increase in hardship and stress. Without self-soothe and emotion-regulation skills, interventions such as prolonged exposure or behavioral activation, which initially increase stress, may be less tolerable and thus less effective (Rector et al., 2000). For example, shame (an emotional experience highly linked to self-criticism) has been identified in many with trauma histories or PTSD, and it can complicate and interfere with treatment in a host of ways (Herman, 2007; Paunovic, 1998; Wilson, Droždek, & Turkovic, 2006). Among empirically supported treatments, the dropout rate is often high, with estimates to be as much as 40-60% (Prochaska et al., 1992). A developed sense of self-compassion and the ability to receive compassion from others may allow an individual in psychotherapy treatment to better cope with the accompanying painful aspects of the treatment by down-regulating stress activating biological mechanisms. In support of this idea, Kelly, Carter, and Borairi (2014) found that patients who developed self-compassion early in eating disorder treatment had better outcomes over 12 weeks than those who did not. The current intervention provides several tools for similar future clinical tests of addressing self-criticism and fear of compassion as treatment targets prior to engaging in treatment of other symptoms. Targeting self-criticism and fear of compassion may be best conceptualized as preliminary or preparatory interventions for those who need this, which can then serve to support work on subsequent treatment targets.

Additionally, as clinicians become increasingly interested in introducing self-compassion training into their practices and empirically supported manuals are introduced to aid in this integration (e.g., Germer & Neff, 2013), attention to fear of compassion is critical so that those who may most need these practices are not lost early in the process due to not addressing fears and early stage of change stances skillfully (Gilbert et al., 2014). Moving into action

(compassion practices) prior to addressing fears or building motivation, insight, knowledge, and self-efficacy may work for some, but is likely to drive many others away before they can experience the benefit of compassion practices. This mismatch of delivering action interventions prior to attending to early stage of change needs is similar to what has been identified in many other empirically supported treatments (Norcross et al., 2011). In addition to directly addressing fear of compassion, compassion practices may be more effective if altered to be more tolerable for those with fear of compassion (Salzberg, 2015).

Prevention

In addition to applications for treatment seeking populations, this research has implications for prevention efforts as well. This is especially important given that many people who may benefit are not likely to seek treatment in the first place, given their fear of compassion, and this intervention was tested with some success on a non-treatment seeking population. Prevention can be thought of as primary, with an unscreened general population and secondary, with individuals who are screened and identified to have particular characteristics to be targeted. Regarding primary prevention, the material in this intervention is not aimed at a particular diagnostic presentation, nor is it heavily focused on mental illness. Therefore, with or without screening of high self-criticism, coverage of the information as a primary prevention strategy may be useful for general populations. Obviously, adaptation of the information for a range of stages of change would be important, but the basic content of the intervention is likely broadly useful, just as information about the importance of exercising is still useful to people who are active and fit. It is likely that communicating about self-criticism as a risk factor for distress, and, alternately, self-compassion as a health behavior or a behavior that supports resilience and wellbeing would be broadly useful.

Elements of the intervention may also be seen as useful as a secondary prevention tool in non-clinical populations once self-criticism is identified, or for populations with which self-criticism may be considered likely. Other researchers have echoed the need for prevention. For example, Kelly et al. (2014) found that low self-compassion predicted eating disordered pathology in college female students, and they thus suggested that teaching self-compassion as a prevention measure would be beneficial in this non-treatment seeking population. In a similar vein, Cox et al. (2004) have advocated for addressing (via prevention efforts) easily identifiable psychosocial determinants of mental illness (PTSD in their study). Self-criticism is one such determinant, and working with it prior to the manifestation of severe psychological distress could be both realistic and likely beneficial. This research suggests that the approach used in this study has some promise for being a useful prevention tool and is likely acceptable and understandable to an average intelligence population in a college setting.

Implications for Research

Identifying fundamental, trans-diagnostic processes contributing to psychopathology has been identified as an important research goal (eg. <http://www.nimh.nih.gov/research-priorities/rdoc/index.shtml>). Given that self-criticism demonstrates strong association with a wide range of diagnoses, and likely prevents engagement in treatment, understanding how best to address it is an important research objective that goes beyond investigation of a single diagnosis. Self-compassion which supports recovery after hardship and has been identified as a dimension of resilience and adaptive functioning, needs additional research (Germer & Neff, 2013). Self-criticism and under-developed self-compassion have been identified as key factors that disrupt the process of recovery after hardship. One possible research direction could include treatment

efficacy trials with clinical populations in which reduction of self-criticism is addressed as an adjunctive goal to treatments as usual for specific disorders.

It would also be important to continue testing the theory of stage-matched interventions by comparing a stage-matched approach like the current study to one that directly teaches self-compassion without first attending to insight, knowledge, self-efficacy, and motivation. Randomized trials that have gone directly to cultivating compassion have done so successfully but have started out with general population samples that have significantly less challenge with compassion than the population represented by the sample used in this study (e.g., Germer & Neff, 2013; Jazaieri et. al. 2012). In addition to comparisons of stage-matched versus non-stage-matched, it would be useful to explore whether this material could be effectively presented in a group setting.

Conclusion

This study tested an intervention with several components that showed promise for addressing the difficult treatment targets of fear of compassion and self-criticism. Specifically, people in early stages of change regarding self-criticism might benefit from education about the research on self-criticism and self-compassion. They may benefit from increased insight into their own unique version of self-criticism. They may also benefit from the chance to experience, in a therapeutic context, the shame, urges for isolation, and sorrow that accompany self-criticism, so they can better understand the physiological impact of this way of relating to themselves. Finally, they may benefit from non-action-oriented introductions to self-compassion and the chance to explore their fears of compassion directly. Consciousness raising, self re-evaluation, dramatic relief, self-efficacy, and fears may all be important to attend to when introducing compassion to individuals who are high in self-criticism and fear change.

The intervention also addressed change in a manner consistent with third wave therapies. That is, rather than identifying self-criticism as a set of distorted or irrational cognitions to target with cognitive restructuring, individuals were supported in recognizing the potential functional nature of the thoughts from a contextual view (i.e., self-criticism triggers a submissive defensive stance which then serves as an important survival strategy). This allows for very important self-acceptance and validation, which gives the person the chance to begin developing awareness of and compassion for their own situation (Gilbert, 2009). Once this insight is achieved, and individuals' experience of over-generalized self-criticism is normalized, they are then supported to consider developing an alternative strategy of self-compassion: one that is learnable, that has different outcomes, and that can, with practice, gain a retrieval advantage over self-criticism. This approach offers significant advances in cognitive behavioral strategies, by providing a validating contextual view, integrating acceptance and values decisions, and offering concrete practice of an alternative behavior that could increase access to core positive affective experiences and thus support psychological wellbeing.

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Appendix A

Guidelines for Intervention and Handouts

Begin by reiterating confidentiality and voluntary participation. Explain that at any time they are free to ask to skip questions or not answer. Offer and explain outline. Talk briefly about how they specifically reported above the mean on the self-criticism measure.

Handout 1:

Outline for Today's Meeting

1. Define self-criticism
2. Explore how it is personally for you
3. Learn about the three emotion regulation processes
4. Learn how self-criticism works as a 'safety seeking' strategy
5. Learn about the costs/benefits of this strategy.
6. Break
7. Define self-compassion
8. Explore your current stance toward this approach
9. Learn how it fits with the emotion regulation processes
10. Learn about the costs/benefits of this strategy

Define self-criticism and cover each point below:

I want to start by defining self-criticism:

- *A way of verbally thinking about oneself that notices faults, blames, judges and, sometimes, insults oneself.*
- *These thoughts usually arise during or after difficulty. The hardship triggers them.*
- *People can engage in this thinking because they feel mad at themselves, unworthy or hopeless about a situation*
- *It has emotions that go with it and these vary from person to person but can include shame or just feeling down*
- *Self-criticism is sometimes unconscious and sometimes willful*

- *Sometimes it is used for some purpose, like to motivate ourselves or because we believe we deserve the criticism*
- *We can also assume it's the only appropriate way to respond, especially if its after we have made a mistake or after some fault or flaw of ours is made visible*
- *It can become a habit, so that it's completely automatic in nature, particularly after hardship. In this way it takes on what is called a retrieval advantage: a hardship happens and our minds go to criticism automatically, whether it makes sense or not.*
- *It can become over-generalized so that we respond to all types of hardship in this way.*

Does this description make sense?

What questions do you have any questions about its parts?

What parts of this definition can you relate to? Which ones aren't true for you?

Introduce Behavioral Analysis for Self-criticism

Now I am going to ask you to work to understand and then communicate with me about how these thoughts work for you. This exercise is just to give you a chance to think about this subject: one you may not have considered before. Its not to collect data, its to let you develop insight about how this is for you because it is unique for each person.

To help you think through how self-criticism works for you, I want you to take some time with this worksheet. The first page has many different types of situations that can trigger self-criticism. At the bottom it has just a few examples of typical self-critical thoughts. Use these examples to help you think about your own experience. After you look through these situations to help you get your thinking going, write instances that

relate for you, but in more detail, and then write down some of the thoughts, emotions and behaviors that happen for you. If it's a recent memory, that's best. Here in this grid are a few examples . . .

Read through examples and answer questions

. . Now take some time to fill in a few yourself.

Handout 2:

Behavioral Analysis on Self-criticism

Situations that can bring on self-criticism

When alone
 In big groups
 When engaged in social media
 At work
 In school settings
 With family (or certain family members)
 Around potential employers
 With romantic partner(s)
 When you don't have a romantic partner

When made aware of your body image
 In the company of the same sex
 In the company of the opposite sex
 After mistakes or failures
 After overindulging in some substance or activity
 After embarrassing experiences
 After losing at competitive efforts

Events or contexts that bring on self criticism	Type of thoughts you have	Emotional responses	Behavioral consequences
Home alone on a night when you wanted to be out with friends.	I suck at making friends. People don't want to be with me because there must be something wrong with me. I'm a total loser	Rejection, depression	Isolate myself
Woke up late and have to either miss class or go late to class	I'm so lazy I can't get my act together I'm not a real student	Embarrassment, inadequacy	Go but not be able to really hear lecture for the first 30 minutes. Have an 'off' day.

Common examples of self-critical statements

I am such a disappointment.
 I can't do things right
 I can't stand myself
 I have done such a bad job

I am pretty much unacceptable
 I don't know why others bother with me
 I deserve to lose (be alone, be rejected, be in pain)
 No one is as bad as I am

Events or contexts that bring on self criticism	Type of thoughts you have	Emotional responses	Behavioral consequences

After the BA chart is filled out, have them discuss what they wrote using reflective listening and questions to help them really connect with these experiences. Next explore these questions if they don't already come up in the conversation about their worksheet responses.

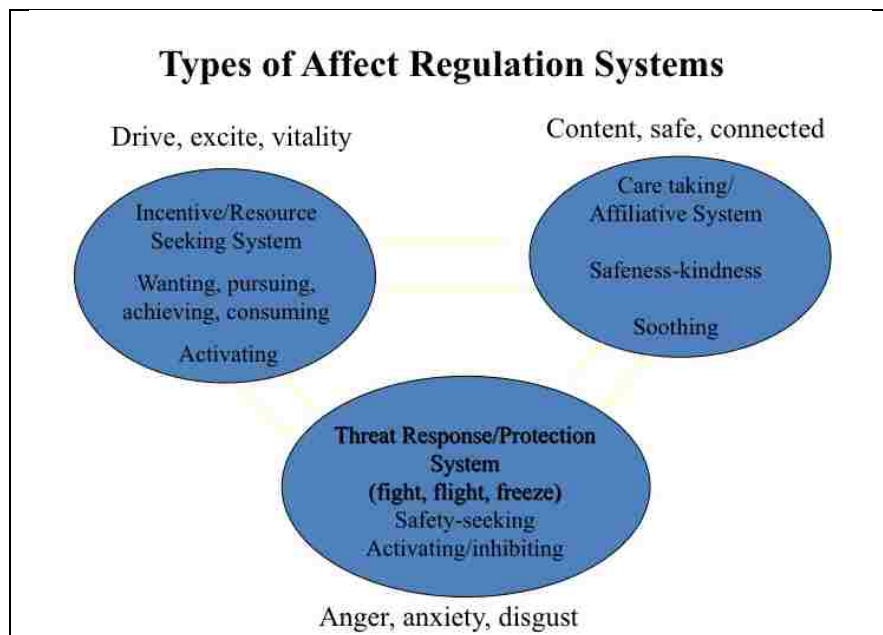
What sources do you think contribute to your self-critical mental habit?

Can you talk about a time in your life when you were not self-critical and what that was like?

Introduce Three Emotion Regulation Systems

Ok, thanks for taking time to look at this with me. Now I want to introduce some newer research in the form of a theory. This work mixes several disciplines including, neurophysiology, attachment research, clinical and experimental psychology, and, evolutionary theory. At first it will seem unrelated but near the end I will connect it to the topic of self-criticism.

Handout 3:



This diagram is a representation of what scientists believe may be the way we organize our emotional reactions to life. These reactions are physiological in nature: that is, they each have a unique signature in the body or physical impact. More specifically, they each activate unique parts of the brain and involve unique neurotransmitters and hormones, or chemicals that affect how we feel, how we perceive the world and how we behave. The theory proposes that we have three main classes of reactions. They interact but also are fairly discrete.

Incentive seeking

The first, entitled 'Incentive/resource focused' is a group of responses that organizes our actions toward desired outcomes. It is where we get the energy to learn, engage socially, earn money, work for what we value, start relationships. When we feel excited or amped up about an activity or when we persist on something even when it is hard, this is the system we are experiencing. It is where ambition comes from and is associated with seeking and striving and can lead us to feel excited, curious, competitive or engaged in a pursuit.

Give examples from something they have already shared as a value, like sports, academics or a relationship.

Threat response

The next, is the threat-focused system. This is the set of reactions associated with protecting ourselves from dangerous or unwanted experiences. When we detect threat of all kinds and all levels of intensity, we are likely to have a reaction in this class, where we seek protection by either trying to escape or avoid the situation, trying to go unnoticed or communicate a submissive, passive stance so the potential danger just goes

past us, or we fight, become angry and try to assert our will to control the situation.

Have you heard about the term 'fight, flight or freeze response'? (explain if not) well this is a series of automatic physical responses that we experience that are intended to facilitate our safety during high danger and they fit into this system. We experience all levels of intensity when we face threat and they are not always as intense as situations that would trigger fight, flight, freeze reactions but these basic ways to react still apply as explanations of how we behave even when the threat is less intense.

Because we are social animals much of our threat perception is organized around other human beings. We perceive all kinds of 'symbolic' threat in our highly social worlds and because of how complex our minds are, even though these situations are not literally life or death situations, we are triggering this reaction to occur with the same intensity as if it were life or death. We can perceive threat when we fail an endeavor or if we have a disappointing social interaction like speaking in public when we aren't well prepared or breaking-up with someone or being excluded. (Discuss examples here: speaking in class, being pulled over by a policeman, failing tests, asking someone out and being rejected). The physical sensations that go with this reaction can be anxiety, anger, fear, disgust, narrow focus, the desire to escape, and scanning for more danger or error in our own behavior.

During the largely unconscious decision-making of how to react, we have to assess which strategy or strategies is the one most likely to allow us protection. We choose fight (or versions like it) when we think we can win and when the social cost of fighting will not be detrimental. In other words in some cases we may realize we are physically stronger but socially we have much less social power so fighting becomes a

bad option (give example). We choose avoidance or escape behaviors when these are possible (give example). But there are many situations where we can neither fight or escape (give example). In these cases we have to get through the threat without increasing harm to ourselves and so we opt for freeze type responses (ask for how this might look).

Affiliative

The affiliative system is a third class of reactions. It is neither about seeking something nor avoiding something as the other two systems are. Also, while the other two systems can be activating or get our stress levels up, this system, when working well, 'down regulates' our bodies and soothes stress. This system is associated with the attachment neurophysiology we all have from having been children who were cared for by other human beings. We all relied in childhood on being able to evoke caring responses and on receiving these caring responses from others. Our biology supports these interactions and has a host of physiological reactions that go with this type of soothing and care. It's actually quite a complex set of responses we have built around engaging in relationships that activate this system. When we experience moments of contentment, closeness and safety, or satisfy belonging, this system is at play. It activates creative, exploratory and expressive parts of our brain, it attracts interaction from others, and acts as a time when the body 'rebuilds' from the wear and tear of more active stressful times. This system doesn't have to involve other people. Many people relate to the feelings and experiences of this system in all kinds of contexts, but the point is that they feel very calm and safe and it allows us to rebuild, and recover from stress.

I want to take a minute and have you name memories of recent experiences that would be classified into each of these groups?


Can you remember and comment on the distinctly different way that these experiences felt in your body and how they motivated you differently?

Introduce safety-seeking strategies: Bring out turtle image

Now I want to explain just a bit more about this idea of how we are prepared to seek and experience safety.

Handout 4:

Safety Seeking Strategy #1



In some species, at birth individuals must be able to “go it alone” be mobile and disperse

**Self-Protection =
Disperse & Avoid Others**

This is a picture of a sea turtle. Sea turtles are one of the species that are hatched and do not receive any maternal care or protection after they come into the world. As a result many more eggs are laid as each egg requires no further parental investment.

Interestingly, the infant turtles, like many other species, instinctively know how to avoid danger as soon as they hatch by dispersing and hiding. They have scarce contact with

others and their priority is to stay safe. Despite their inborn knowledge, many do not make it to adulthood and in fact only about 1-2% make it to reproductive age.

Bring out image of koala here

Handout 5:

Safety Seeking Strategy #2



In species with attachment as part of development, seeking closeness for self protection is learned rather than dispersion.

**Self-Protection =
Exchange Care, Protect
& Comfort**

Contrast this with species where the young receive and rely on maternal or parental care as part of their development after birth. In these animals, after birth, they learn, sometimes for months and sometimes for many years, how to seek closeness for protection, food, shelter and wellbeing. Rather than dispersing, they learn to create connection to stay safe. As they develop more independence, they explore the world and then return to the safe contact with their caring providers. This sense of safety allows them to learn and feel open and flexible in response to their environment and it draws out positive and affiliative emotions from them and others. When this goes well, this back and forth process creates in them both the development of independent living skills and also the skills to relate with others to promote calm, nurturing situations that then allow

for important physical, emotional and mental development. However, this is all learned behavior and therefore can vary from one individual to the next. Less are born due to the investment but more offspring survive.

Bring out image of all three here

Handout 6:



What is interesting about us humans, and other species too is that, in fact, we have both responses built into our brains. We have a part of us that knows seeking dispersal and invisibility can promote safety and this is a very instinctual reaction that we see in the threat response system in both freeze and flight responses. And, in most cases we also learn that relationships with others can promote our safety and wellbeing.

Bring out instinct versus learning image

Handout 7:

**Protect and Comfort is a less 'instinctive'
brain as it is post birth learning**



However, the relational safety strategies are learned behavior, so less instinctual and if something goes amiss in our learning about exchanging care and protection from others, then we will not always rely on this strategy when we face hardship and need care but we will hide. When I say "something goes amiss", I mean that we can get the message that its not safe to seek safety with others, not just at the level of interaction with parents but also with peers, siblings or because of cultural messages. (give examples: unsafe or unpredictable home environment, peer bullying, cultural messages like body image that lead people to believe parts of themselves make them unacceptable)

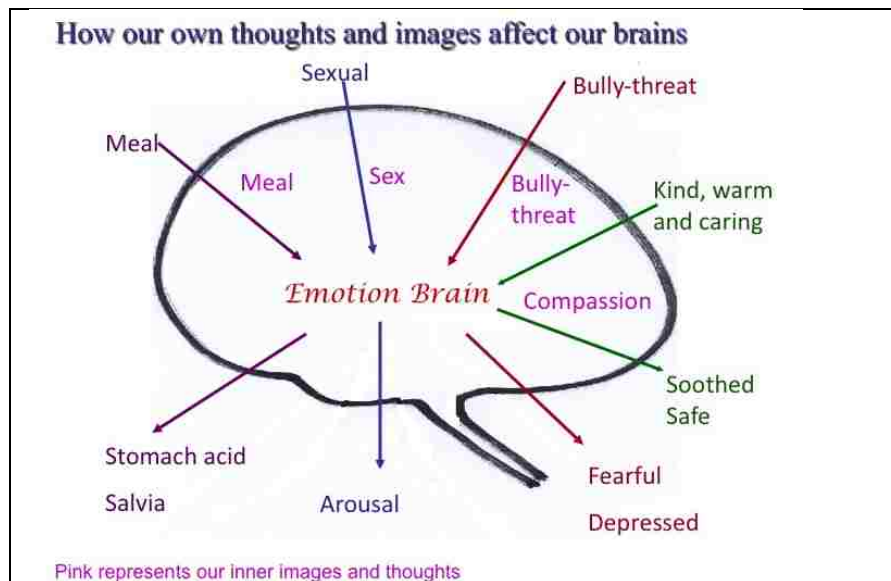
Now what questions do you have so far about these ideas?

You may be wondering now how this relates to self-criticism. I promise I will get to that but I want to introduce one more piece of research and then you will see how this all connects. A different body of research has shown that we have very powerful imaginations. To illustrate this, let me ask you to do something. (say this part a bit slower so they have the chance to have the physical reaction) I have a lemon here in my bag. I am going to take it out, I'm going to slice the lemon into quarters and I'm going to ask

you to eat a quarter of it. I am hoping you will eat the juice of the lemon, and the pulp. Ok, I'm not really going to do that. But I want you to notice your reaction to what I said. Did you have any physical reactions? (Most will identify saliva response, throat reactions, etc.) Now think about this for a second. Nothing in the environment changed. All that happened was that I put a few syllables together that allowed you to create a picture in your mind. That picture not only produced a saliva reaction or a disgust reaction but likely began to change the environment in your stomach to prepare for the lemon. Our minds can produce very vivid experiences and, in some of the very basic experiences, our physiology can respond to as if it is a real experience.

Introduce image of brain and imagined stimuli

Handout 8:



This image of the brain illustrates several types of imagined stimuli that our body perceives as real and that then actually responds as if it were present in the outside world. (Talk about food and sex examples and include self-critical thoughts as the internal experience that produces a response as if one were being bullied). Now one

might wonder, why would anyone intentionally produce a mental image and activity that resembles the feeling of being bullied? Why would a person be self-critical if it made us feel bad like that?

As I covered before, we have this need to feel safe, and several options built in to achieve it (bring out image of the two ways to seek safety), and we have this vivid imagination. Theorists are proposing that it's possible that, in difficult situations, we may have self-critical thoughts specifically to trigger the submissive defensive aspect of the threat response system. We may perceive the hardship as a threat and simply engage in an instinctual strategy to stay safe. People report that self-criticism makes them quiet, self-isolate, withdraw socially, feel shame, which is the same as the urge to hide, feel depressed or emotionally numb or mentally dull or blank. These are all experiences that are consistent with a reaction of the threat-response system.

Lets take a look at your behavioral analysis worksheet and see if any of these reactions showed up there. Interestingly, this way of responding to hardship can become over-learned. They call it having a 'retrieval advantage' so that it becomes a completely automatic reaction without any thought or effort. It becomes a habit, even when it doesn't make sense to respond this way. This is neither all good nor all bad but it is important to look at the consequences, particularly of this strategy when it gets over applied.

Tying all these parts together is complicated so make sure all the pieces make sense to them. In almost all cases people will have questions. Answer questions and give ample examples, preferably that come from their BA. Use the example of surviving a class with an unpredictably critical teacher, or surviving in a peer setting with dominant others. Notice with them how remaining invisible could be a wise strategy but that instigating this at the physical

level would be hard if one felt safe and expressive. Also, if appropriate, show how self-criticism, even when meant as a motivational strategy comes with some of the threat/protect ‘side effects’ like anger, stress or disgust.

Present Handout of Self-Criticism pros and cons.

Read through each column and discuss related research so that it makes sense to them.

Ok before I give you a break lets review the research findings about self-criticism. Just like all behaviors, there are costs and benefits.

Handout 9:

Costs and Benefits of Self-Criticism	
Costs	Benefits
<ul style="list-style-type: none"> • Generalizes and becomes over-learned and/or over-applied • Less cognitive resources for problem solving • Reduced risk taking • Reduced perseverance • Slower recovery after hardship • High stress (fatigue) • Higher threat perception • Can be a risk factor for: Mental & emotional distress Physical illness Poorer functioning 	<ul style="list-style-type: none"> • May be familiar • Helps one keep a ‘low profile’ • Helps one stay vigilant to threat • May be motivating • May provide a simple explanation to complex and painful situations

Ask about any questions before taking break, let them know that after the break we are going to switch gears and discuss a different strategy

Compassion Discussion

Begin self-compassion section by discussing common challenges with it

Now for the last bit of time, I want to review the idea of compassion, which is related to the conversation about self-criticism. Before I begin I want to ask you about your own

thoughts about self-compassion. Many people indicate that it doesn't occur to them to try to respond to themselves with compassion after hardship. Others endorse not knowing what this means or thinking that doing this would cause them to make more mistakes or become weak. What is your feeling about this strategy? (other possible questions) Do you think you know what compassion is? When do you use it? When don't you use it? What are your discomforts with compassion? What are your doubts about being self-compassionate?

I'd like to spend some time defining how it is talked about in the research literature and then show you how it fits with the rest of what we have been talking about today.

Review definition and components (talk through each point and give examples)

Handout 10:

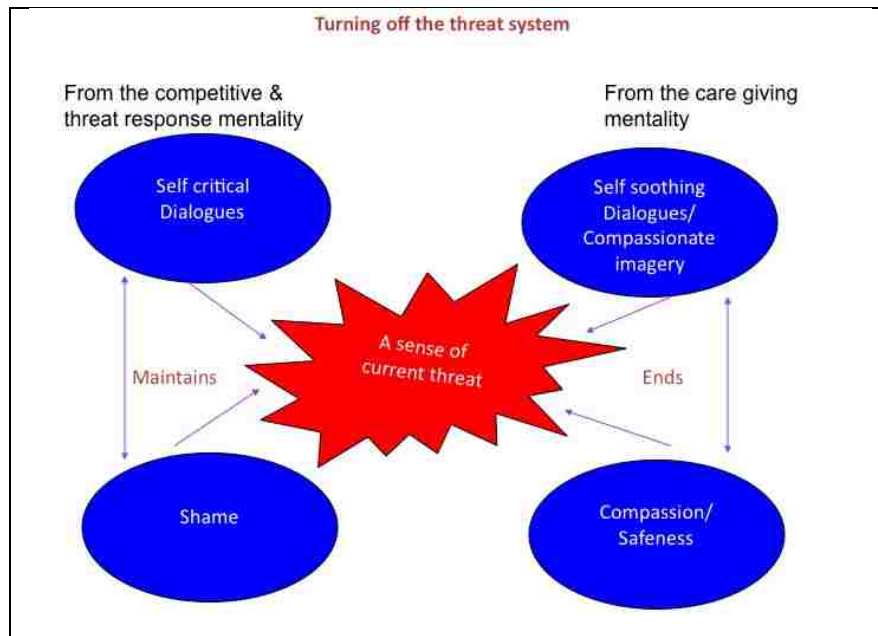
Compassion Defined	
Components or Steps of Being Compassionate	
1.	Notice suffering or distress Broaden our sensitivity to hardship experiences instead of blocking awareness.
2.	Mindfully observe the experience Without judgment Without reactions or avoidance
3.	Empathize and wish relief Mentally extend situation specific 'remedy'
Self-Compassion	
Extending compassion to the self after hardships or for one's failings, inadequacies and experiences of suffering, recognizing that all people suffer in similar ways	

Highlight how it engages the safe/content affiliative system (*use two previously used handouts 3 and 8*)

If we return to the idea of the three emotion regulation systems, you can see that this description of self-compassion fits very well with how we talked about the safe/content

and connected system. Think too about how our mind can trigger certain experiences, just by thinking about them. When we engage with self compassion, we experience feelings as if we were receiving that kindness from the outside environment. When we do this after hardship, this has the same soothing effect as if we sought comfort from another. Lets think of an example together. If you imagine a small child, maybe five or six, playing at the playground. If that child falls and bangs up his knee, he is going to experience emotional upset and pain. If he goes to a care provider and that provider criticizes him for being clumsy or for ruining his clothes, how would you expect he would then feel? Alternately if he goes to a care provider and that person comforts him, cares for his injury and helps him understand what happened in a gentle way, what will happen for that child? The point here is that how we are cared for by others affects how much stress and upset we experience after hardship, and more importantly, how we respond to and care for ourselves has this same impact. (offer Handout 11). If we see here, when we experience some sense of threat and we respond with self-criticism, we essentially keep that threat alive. When we respond with self-compassion we reduce the stress and return to a baseline of feeling safe more rapidly.

Handout 11:



There are a few more points I want to make about self-compassion.

Explain self-compassion as a distinct (not opposite) mental process that can occur at the same time as self-criticism.

Self-compassion is thought of as a practice, very similar to exercise. It is not the same as telling oneself not to be critical. Instead it is its own skill with the three steps described above. Used over and over again, we begin to develop this way of thinking more automatically, just as we would develop a muscle and it would gain strength.

Explain how self compassion can be under-elaborated or underactive and how threat-focused system becomes overactive. Explain that we may have to practice with this response style: The idea of 'retrieval advantage.'

Similar to the muscle analogy, if a person hasn't been doing this much in their lives, or this isn't a natural or learned way to be, it can be very difficult at first. It can be hard to conjure up the image (like we did of the lemon) that produces those caring and soothing feelings. At the same time, if we mostly rely on the threat/protect system, this one is very developed. It is

like a very automatic and strong habit that can be hard to break. It can even feel scary to not respond with self-criticism because we feel we may be risking danger if we aren't critical.

Can you relate to this? If they have already let you know about an overactive threat/protect system, talk here about their fears about not scanning for threat, not being vigilant to their own errors etc.

Explain how, for self-compassion to work, it needs to be a felt experience and not just words.

That this takes practice for many people because there is a thought/feeling gap when the soothing system is underdeveloped. Give examples and explain why imagery would be useful. Give more concrete details for those who want this.

Self-compassion is much like the food example, we need very vivid imaginary experiences of safety, caring and kindness in our bodies. When people practice this in the beginning, they will work with memories they have of places, animals, or people who they felt cared for by or unconditional love from or just deep contentment with. They will try to remember those moments and hold them in mind, extending the same felt sense of support to themselves in the present. People sometimes can use religious or cultural figures for this too, if there isn't much from their memory. It's not uncommon, at first to have the frustrating experience of not feeling anything or feeling sad or empty. This is just because you are working with a muscle that you haven't exercised much. It will change with practice. In closing, I want to review why one would want to do this. We can look together at the costs and benefits.

Review the costs and benefits of self-compassion and discuss the related research. In the same way as with self-criticism, discuss the research and rationale of these conclusions.

Handout 12:

Costs and Benefits of Self-Compassion	
Costs	Benefits
<ul style="list-style-type: none"> • May be unfamiliar and may have to be practiced • May not feel safe to try or may be difficult to access the feelings • May cause us to see that some hardships come when there is no clear explanation or no one to blame • May feel like 'indulging' and that we are risking losing motivation 	<ul style="list-style-type: none"> • Immune system improvements & lower perceived symptoms of illness • Better stress response and recovery from stress • Frontal cortex activity indicating complex/ creative thought • Increase in positive affect • More intrinsic motivation • Feelings of purpose • Increased ability to function • Reduced symptoms of shame

If necessary, and if time allows, provide the following distinctions between self-esteem and self-pity and talk through each point.

Handouts 13:

Contrast self-compassion to self-pity	
Self-Pity	Self-Compassion
<ul style="list-style-type: none"> • Identifies closely or 'joins' with the suffering one is experiencing • Rejects reality • Can lead to self-centeredness and self-indulgence • Despairing results • Causes more distress 	<ul style="list-style-type: none"> • Observes the suffering: neither pushing it away nor joining or fusing with it completely. • Accepts reality while not ruling out action. • Supports setting healthy boundaries and habits. • Supports emotional balance • Causes less distress

Handout 14:

Contrast self-compassion to self-esteem	
Self-Esteem	Self-Compassion
Access when things are going well	Access when things are not going well
Individuality/difference	Common humanity
Achievement/doing/drive	Acceptance/being/content
Competitive mentality	Caring mentality

Participant Handouts Only

Outline for Today's Meeting

1. Define self-criticism
2. Explore how it is personally for you
3. Learn about the three emotion regulation processes
4. Learn how self-criticism works as a 'safety seeking' strategy
5. Learn about the costs/benefits of this strategy.
6. Break
7. Define self-compassion
8. Explore your current stance toward this approach
9. Learn how it fits with the emotion regulation processes
10. Learn about the costs/benefits of this strategy

Behavioral Analysis on Self-criticism

Situations that can bring on self-criticism

<p>When alone In big groups When engaged in social media At work In school settings With family (or certain family members) Around potential employers With romantic partner(s) When you don't have a romantic partner</p>	<p>When made aware of your body image In the company of the same sex In the company of the opposite sex After mistakes or failures After overindulging in some substance or activity After embarrassing experiences After losing at competitive efforts</p>
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Events or contexts that bring on self criticism	Type of thoughts you have	Emotional responses	Behavioral consequences
Home alone on a night when you wanted to be out with friends.	I suck at making friends. People don't want to be with me because there must be something wrong with me. I'm a total loser	Rejection, depression	Isolate myself
Woke up late and have to either miss class or go late to class	I'm so lazy I can't get my act together I'm not a real student	Embarrassment, inadequacy	Go but not be able to really hear lecture for the first 30 minutes. Have an 'off' day.

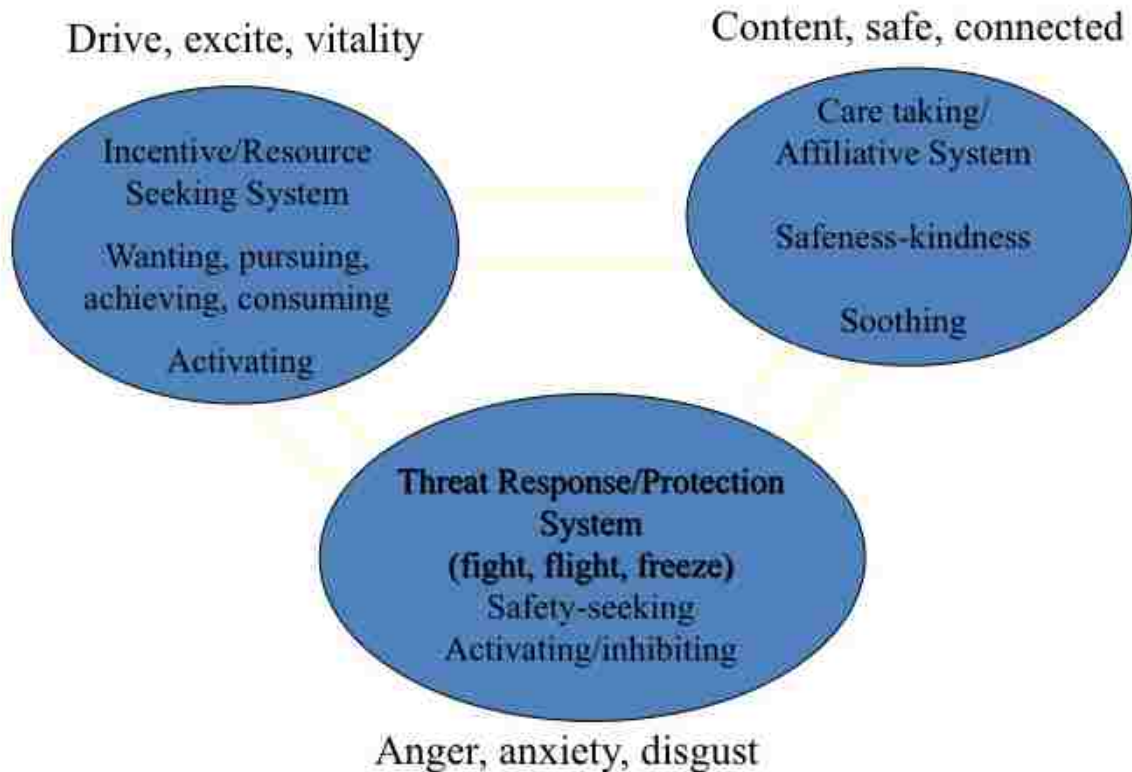
Common examples of self-critical statements

I am such a disappointment.
 I can't do things right
 I can't stand myself
 I have done such a bad job
 I am pretty much unacceptable

I don't know why others bother with me
 I deserve to loose (be alone, be rejected, be in pain)
 No one is as bad as I am

Events or contexts that bring on self criticism	Type of thoughts you have	Emotional responses	Behavioral consequences

Types of Affect Regulation Systems



(Adapted from Gilbert, McEwan, Gale, & Gilbert 2010)

Safety Seeking Strategy #1



In some species, at birth individuals must be able to “go it alone” be mobile and disperse

**Self-Protection =
Disperse & Avoid Others**

(Adapted from Gilbert et al. 2010)

Safety Seeking Strategy #2



In species with attachment as part of development, seeking closeness for self protection is learned rather than dispersion.

**Self-Protection =
Exchange Care, Protect
& Comfort**

(Adapted from Gilbert, et al. 2010)



Human's are
influenced by both
forms of safety
seeking



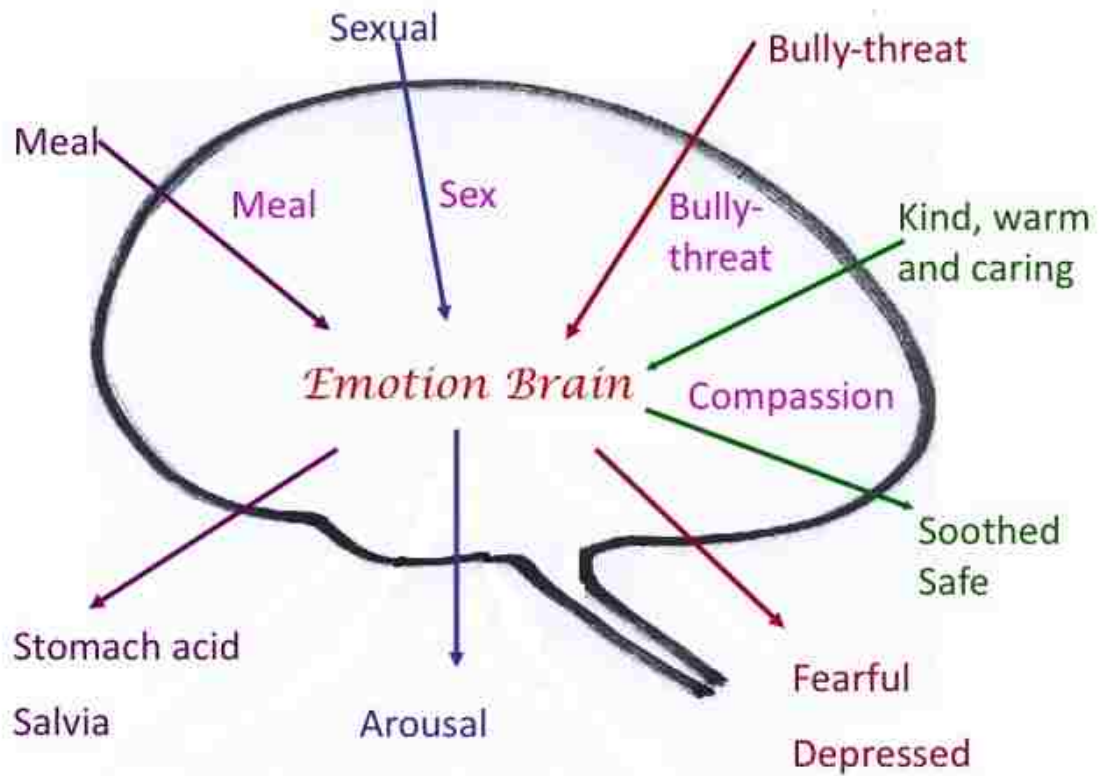
(Adapted from Gilbert, et al. 2010)

**Protect and Comfort is a less 'instinctive'
brain as it is post birth learning**



(Adapted from Gilbert, et al. 2010)

How our own thoughts and images affect our brains



Pink represents our inner images and thoughts

(Gilbert et al., 2010)

Costs and Benefits of Self-Criticism

Costs	Benefits
<ul style="list-style-type: none">• Generalizes and becomes over-learned and/or over-applied• Less cognitive resources for problem solving• Reduced risk taking• Reduced perseverance• Slower recovery after hardship• High stress (fatigue)• Higher threat perception• Can be a risk factor for:<ul style="list-style-type: none">Mental & emotional distressPhysical illnessPoorer functioning	<ul style="list-style-type: none">• May be familiar• Helps one keep a 'low profile'• Helps one stay vigilant to threat• May be motivating• May provide a simple explanation to complex and painful situations

Compassion Defined

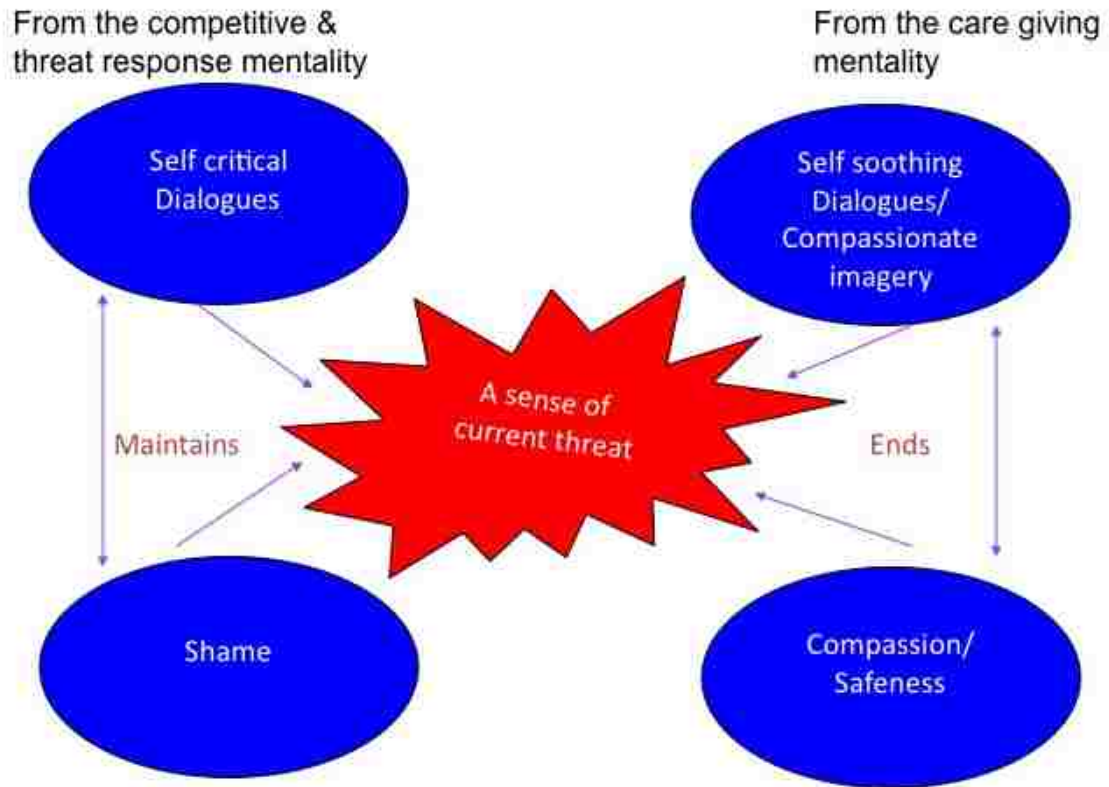
Components or Steps of Being Compassionate

1. Notice suffering or distress
Broaden our sensitivity to hardship experiences instead of blocking awareness.
2. Mindfully observe the experience
Without judgment
Without reactions or avoidance
3. Empathize and wish relief
Mentally extend situation specific 'remedy'

Self-Compassion

Extending compassion to the self after hardships or for one's failings, inadequacies and experiences of suffering, recognizing that all people suffer in similar ways

Turning off the threat system



(Lee, 2006)

Costs and Benefits of Self-Compassion

Costs	Benefits
<ul style="list-style-type: none">• May be unfamiliar and may have to be practiced• May not feel safe to try or may be difficult to access the feelings• May cause us to see that some hardships come when there is no clear explanation or no one to blame• May feel like ‘indulging’ and that we are risking losing motivation	<ul style="list-style-type: none">• Immune system improvements & lower perceived symptoms of illness• Better stress response and recovery from stress• Frontal cortex activity indicating complex/ creative thought• Increase in positive affect• More intrinsic motivation• Feelings of purpose• Increased ability to function• Reduced symptoms of shame

Contrast self-compassion to self-pity

Self-Pity	Self-Compassion
<ul style="list-style-type: none">• Identifies closely or 'joins' with the suffering one is experiencing• Rejects reality• Can lead to self-centeredness and self-indulgence• Despairing results• Causes more distress	<ul style="list-style-type: none">• Observes the suffering: neither pushing it away nor joining or fusing with it completely.• Accepts reality while not ruling out action.• Supports setting healthy boundaries and habits.• Supports emotional balance• Causes less distress

(Lee, 2006; Neff, 2011)

Contrast self-compassion to self-esteem

Self-Esteem	Self-Compassion
Access when things are going well	Access when things are not going well
Individuality/difference	Common humanity
Achievement/doing/drive	Acceptance/being/content
Competitive mentality	Caring mentality

(Lee, 2006; Neff, 2011)

Appendix B

Informed Consents, Measures and Intervention Supporting Documents

Screen Sample for Study 1

SUBJECT INFORMATION AND INFORMED CONSENT

Study Title: Self-Criticism and Processes of Change

Investigator(s): Meghan Gill, MA. Clinical Psychology Graduate Student. (406) 243-4521

Purpose:

You are being asked to take part in a research study to better understand self-critical and self-reassuring thought behavior. You have been invited to participate because you are a member of the Psychology 100 subject pool. The purpose of this research study is to learn more about individual's self reported self-criticism and to identify individuals for recruitment for a second stage of research.

Procedures:

If you agree to take part in this research study, you will be given several questionnaires. You will be asked to answer them honestly to the best of your ability. It will take about 10 minutes to complete the surveys. You will also be asked to provide your name and contact information so that researchers can contact you in the event that you meet eligibility criteria for our next stage of research.

Credit for Participation:

You will gain 2 research credit points for Psychology 100 or other appropriate Psychology courses for participating during screening/testing day.

Risks/Discomforts:

Answering the survey questions may cause you to think about feelings that make you sad or upset. If you are adversely affected by completing the surveys, we ask that you inform the Project Director and they will work to help you with your discomfort.

Benefits:

There is no promise that you will receive any benefit from taking part in this study. Although you may not benefit from taking part in this study, your participation may help researchers develop a better understanding of how to promote resilience in others.

Confidentiality:

Your records will be kept confidential and will not be released without your consent except as required by law. Your identity will be kept private and your contact information is only being collected to follow-up with you regarding the next stage of research. The survey data will be stored in a locked file cabinet. Your signed consent form along with your identifying and contact information will be stored in a cabinet separate from the data. If it is determined that you are not eligible or interested for the next phase of the study your contact information will be discarded but the results of your

measures in a de-identified manner will be retained. If the results of this study are written in a scientific journal or presented at a scientific meeting, your name will not be used.

Voluntary Participation/Withdrawal:

Your decision to take part in this research study is entirely voluntary. You may refuse to take part in or you may withdraw from the study at any time without penalty or loss of benefits to which you are normally entitled.

You may be asked to leave the study for any of the following reasons:

1. Failure to follow the Project Director's instructions;
2. A serious adverse reaction;
3. The Project Director thinks it is in the best interest of your health and welfare; or
4. The study is terminated.

Questions:

If you have any questions about the research now or during the study contact Meghan Gill at (406) 243-4521.

If you have any questions regarding your rights as a research subject, you may contact the UM Institutional Review Board (IRB) at (406) 243-6672.

Statement of Your Consent:

I have read the above description of this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will also be answered by a member of the research team. I voluntarily agree to take part in this study. I understand I will receive a copy of this consent form.

Printed Name of Subject

Subject's Signature

Date

Intervention Sample for Study 1
SUBJECT INFORMATION AND INFORMED CONSENT

Study Title: Self-Criticism and Processes of Change

Investigator(s):

Meghan Gill, MA. Clinical Psychology Graduate Student, Meghan.gill@umontana.edu
Advisor Jennifer Waltz, PhD. Skaggs Building room 143, (406) 243-4521.

Special Instructions:

This consent form may contain words that are new to you. If you read any words that are not clear to you, please ask the person who gave you this form to explain them to you.

Purpose:

You are being asked to take part in a research study that seeks to improve understanding of self-critical and self-reassuring thought behavior and processes of change. You have been invited to participate because you filled out measures during screening day and the results of these measures indicate that you experience some self-critical thinking habits at times. The purpose of this research study is to learn more about people's self reported self-criticism and to explore how psycho-education may or may not impact these habits.

Procedures:

If you agree to take part in this research study, you will be given three additional measures to complete and then will meet for about an hour and a half to two hours (including breaks and refreshments). You will be asked several questions about your experiences of self-criticism and relationships with others. You will also be asked to listen to a talk about research and an explanatory model about self-criticism coming from very recent research about the subject. Three weeks after you have met with the primary investigator, you will be contacted to complete a final round of measures. Completing these will take between 30 and 45 minutes.

The meeting will be audio recorded. This recording will be kept confidential, as will be all other parts of this research. The audio recording is being used to ensure that the same information is communicated in each meeting. The recording will not be transcribed and it will be destroyed following the compliance check. No identifying information will be retained.

Your initials _____ indicate your permission to audio record the interview.

Payment for Participation:

As an incentive for participating you will receive either research credit or extra credit for your psychology course. If you are a Psychology 100 student, it is anticipated that you will receive 6 credits for participating in this project.

Risks/Discomforts:

Mild discomfort may result from discussing a topic that is personal (how you relate to yourself after hardship). Also this type of conversation may be novel or unfamiliar to discuss. Answering the questions may cause you to think about feelings or memories that make you sad or upset. The interview will be held in person, and in a private and confidential setting. The primary researcher conducting these meetings has training and practice in managing difficult or emotional disclosures and can manage the conversation in a way that reduces your distress. The primary investigator will also be available after the meeting for any follow up questions or concerns that may arise as a result of our meeting.

Benefits:

There is no promise that you will receive any benefit from taking part in this study. Your participation in this study may help you in the future after hardship, if the content of the meeting is useful to you but this is not guaranteed. Although you personally may not benefit from taking part in this study, it will help further our understanding of resilience and how to reduce distress for others.

Confidentiality:

Your records will be kept confidential and will not be released without your consent except as required by law. Your identity will be kept private. If the results of this study are written in a scientific journal or presented at a scientific meeting, your name will not be used.

The data will be stored in a locked file cabinet and de-identified while your identifying documents (such as this signed consent form) will be stored in a locked cabinet separate from the data.

The audio recording of our meeting will be stored on a network that is not connected to the internet and that is protected in several ways. The audio file will be in a folder that is password protected, on a computer that is also password protected in a clinic that is locked and/or monitored for visitors at all times. The audio recording will be erased shortly after our meeting and is used for the purposes of ensuring every participant receives all of the important information. The recording will not be transcribed.

Limits of Confidentiality:

There are conditions under which confidentiality may be breached. If you indicate wanting to harm yourself or someone else, the experimenter may need to break confidentiality to ensure your safety and the safety of others.

In addition, if you communicate about abuse to children, elders or adults with disabilities either that is occurring currently or has occurred in the past, it may be necessary to waive confidentiality.

The primary investigator may contact you and this informed consent may also be given to a member of the clinical faculty who may contact you. Because of this, we require that you provide your name and phone number.

Voluntary Participation/Withdrawal:

Your decision to take part in this research study is entirely voluntary. You may refuse to take part in or you may withdraw from the study at any time without penalty or loss of benefits to which you are normally entitled.

Questions:

If you have any questions about the research now or during the study contact: Meghan Gill at (406) 243-4521. If you have any questions regarding your rights as a research subject, you may contact the UM Institutional Review Board (IRB) at (406) 243-6672.

Statement of Your Consent:

I have read the above description of this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will also be answered by a member of the research team. I voluntarily agree to take part in this study. I understand I will receive a copy of this consent form.

Printed Name of Subject

Phone Number

Subject's Signature

Date

Study 2
SUBJECT INFORMATION AND INFORMED CONSENT

Study Title: Investigation of Self-Criticism and Self-Compassion

Investigator(s): Meghan Gill, MA. Clinical Psychology Graduate Student. (406) 243-4521

Purpose:

You are being asked to take part in a research study to better understand self-critical and self-reassuring thought behavior. You have been invited to participate because you are a member of the Psychology 100 subject pool. The purpose of this research study is to learn more about individual's self-reported self-criticism and attitudes about compassion.

Procedures:

If you agree to take part in this research study, you will be given three questionnaires. You will be asked to answer them honestly to the best of your ability. It will take about 10 minutes to complete the surveys.

Credit for Participation:

You will gain 2 research credit points for Psychology 100 or other appropriate Psychology courses for participating during screening/testing day.

Risks/Discomforts:

Answering the survey questions may cause you to think about events or feelings that make you sad or upset. If you are adversely affected by completing the surveys, we ask that you inform the Project Director and they will work to help you with your discomfort.

Benefits:

There is no promise that you will receive any benefit from taking part in this study. Although you may not benefit from taking part in this study, your participation may help researchers develop a better understanding of how to promote resilience in others.

Confidentiality:

Your records will be kept confidential and will not be released without your consent except as required by law. Your identity will be kept private and this consent form with your signature will be separated from the results of your questionnaires at the end of screening. The de-identified survey data will be stored in a locked file cabinet. Your signed consent form will be stored in a cabinet separate from the data. If the results of this study are written in a scientific journal or presented at a scientific meeting, your name will not be used.

Voluntary Participation/Withdrawal:

Your decision to take part in this research study is entirely voluntary. You may refuse to take part in or you may withdraw from the study at any time without penalty or loss of benefits to which you are normally entitled.

You may be asked to leave the study for any of the following reasons:

1. Failure to follow the Project Director's instructions;
2. A serious adverse reaction;
3. The Project Director thinks it is in the best interest of your health and welfare; or
4. The study is terminated.

Questions:

If you have any questions about the research now or during the study contact Priya Loess at (406) 243-4521.

If you have any questions regarding your rights as a research subject, you may contact the UM Institutional Review Board (IRB) at (406) 243-6672.

Statement of Your Consent:

I have read the above description of this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will also be answered by a member of the research team. I voluntarily agree to take part in this study. I understand I will receive a copy of this consent form.

Printed Name of Subject

Subject's Signature

Date

Measures

**THE FORMS OF SELF-CRITICISING/ATTACKING &
SELF-REASSURING SCALE (FSCRS)**

When things go wrong in our lives or don't work out as we hoped, and we feel we could have done better, we sometimes have *negative and self-critical thoughts and feelings*. These may take the form of feeling worthless, useless or inferior etc. However, people can also try to be supportive of them selves. Below are a series of thoughts and feelings that people sometimes have. Read each statement carefully and circle the number that best describes how much each statement is true for you.

Please use the scale below.

Not at all like me	A little bit like me	Moderately like me	Quite a bit like me	Extremely like me
0	1	2	3	4

When things go wrong for me:

- | | | | | | | |
|-----|--|---|---|---|---|---|
| 1. | I am easily disappointed with myself. | 0 | 1 | 2 | 3 | 4 |
| 2. | There is a part of me that puts me down. | 0 | 1 | 2 | 3 | 4 |
| 3. | I am able to remind myself of positive things about myself. | 0 | 1 | 2 | 3 | 4 |
| 4. | I find it difficult to control my anger and frustration at myself. | 0 | 1 | 2 | 3 | 4 |
| 5. | I find it easy to forgive myself. | 0 | 1 | 2 | 3 | 4 |
| 6. | There is a part of me that feels I am not good enough. | 0 | 1 | 2 | 3 | 4 |
| 7. | I feel beaten down by my own self-critical thoughts. | 0 | 1 | 2 | 3 | 4 |
| 8. | I still like being me. | 0 | 1 | 2 | 3 | 4 |
| 9. | I have become so angry with myself that I want to hurt or injure myself. | 0 | 1 | 2 | 3 | 4 |
| 10. | I have a sense of disgust with myself. | 0 | 1 | 2 | 3 | 4 |
| 11. | I can still feel lovable and acceptable. | 0 | 1 | 2 | 3 | 4 |
| 12. | I stop caring about myself. | 0 | 1 | 2 | 3 | 4 |
| 13. | I find it easy to like myself. | 0 | 1 | 2 | 3 | 4 |
| 14. | I remember and dwell on my failings. | 0 | 1 | 2 | 3 | 4 |
| 15. | I call myself names. | 0 | 1 | 2 | 3 | 4 |
| 16. | I am gentle and supportive with myself. | 0 | 1 | 2 | 3 | 4 |
| 17. | I can't accept failures and setbacks without feeling inadequate. | 0 | 1 | 2 | 3 | 4 |
| 18. | I think I deserve my self-criticism. | 0 | 1 | 2 | 3 | 4 |

19.	I am able to care and look after myself.	0	1	2	3	4
20.	There is a part of me that wants to get rid of the bits I don't like.	0	1	2	3	4
21.	I encourage myself for the future.	0	1	2	3	4
22.	I do not like being me.	0	1	2	3	4

**THE FORMS OF SELF-CRITICISING/ATTACKING &
SELF-REASSURING SCALE (FSCRS)**

SCORING:

1. is	I am easily disappointed with myself.	0	1	2	3	4
2. is	There is a part of me that puts me down.	0	1	2	3	4
3. rs	I am able to remind myself of positive things about myself.	0	1	2	3	4
4. is	I find it difficult to control my anger and frustration at myself.	0	1	2	3	4
5. rs	I find it easy to forgive myself.	0	1	2	3	4
6. is	There is a part of me that feels I am not good enough.	0	1	2	3	4
7. is	I feel beaten down by my own self-critical thoughts.	0	1	2	3	4
8. rs	I still like being me.	0	1	2	3	4
9. hs	I have become so angry with myself that I want to hurt or injure myself.	0	1	2	3	4
10. hs	I have a sense of disgust with myself.	0	1	2	3	4
11. rs	I can still feel lovable and acceptable.	0	1	2	3	4
12. hs	I stop caring about myself.	0	1	2	3	4
13. rs	I find it easy to like myself.	0	1	2	3	4
14. is	I remember and dwell on my failings.	0	1	2	3	4
15. hs	I call myself names.	0	1	2	3	4
16. rs	I am gentle and supportive with myself.	0	1	2	3	4
17. is	I can't accept failures and setbacks without feeling inadequate.	0	1	2	3	4
18. is	I think I deserve my self-criticism.	0	1	2	3	4
19. rs	I am able to care and look after myself.	0	1	2	3	4
20. is	There is a part of me that wants to get rid of the bits I don't like.	0	1	2	3	4
21. rs	I encourage myself for the future.	0	1	2	3	4
22. hs	I do not like being me.	0	1	2	3	4

KEY FOR SUBSCALES:

is=inadequate self,

rs=reassure self,

hs=hated self

SCALE DESCRIPTION

This scale was developed by Gilbert, Clarke, Hempel, Miles and Irons (2004). It was developed to measure self-criticism and the ability to self-reassure. It is a 22-item scale, which measures different ways people think and feel about themselves when things go wrong for them. The items make up three components, there are two forms of self-criticalness; inadequate self, which focuses on a sense of personal inadequacy (I am easily disappointed with myself), and hated self, this measures the desire to hurt or persecute the self (I have become so angry with myself that I want to hurt or injury myself), and one form to self-reassure, reassure self (I am able to remind myself of positive things about myself). The responses are given on a 5-point Likert scale (ranging from 0 = not at all like me, to 4 = extremely like me). Cronbach alphas were 0.90 for inadequate self and 0.86 for hated self and reassured self respectively.

REFERENCE

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

It has been used in a number of other studies



DASS 21 NAME _____ DATE _____

Please read each statement and circle a number 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.

The rating scale is as follows:

- 0 Did not apply to me at all - NEVER
- 1 Applied to me to some degree, or some of the time - SOMETIMES
- 2 Applied to me to a considerable degree, or a good part of time - OFTEN
- 3 Applied to me very much, or most of the time - ALMOST ALWAYS

		FOR OFFICE USE						
		N	S	O	AA	D	A	S
1	I found it hard to wind down	0	1	2	3			
2	I was aware of dryness of my mouth	0	1	2	3			
3	I couldn't seem to experience any positive feeling at all	0	1	2	3			
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3			
5	I found it difficult to work up the initiative to do things	0	1	2	3			
6	I tended to over-react to situations	0	1	2	3			
7	I experienced trembling (eg, in the hands)	0	1	2	3			
8	I felt that I was using a lot of nervous energy	0	1	2	3			
9	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3			
10	I felt that I had nothing to look forward to	0	1	2	3			
11	I found myself getting agitated	0	1	2	3			
12	I found it difficult to relax	0	1	2	3			
13	I felt down-hearted and blue	0	1	2	3			
14	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3			
15	I felt I was close to panic	0	1	2	3			
16	I was unable to become enthusiastic about anything	0	1	2	3			
17	I felt I wasn't worth much as a person	0	1	2	3			
18	I felt that I was rather touchy	0	1	2	3			
19	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)	0	1	2	3			
20	I felt scared without any good reason	0	1	2	3			
21	I felt that life was meaningless	0	1	2	3			
		TOTALS						

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DASS Severity Ratings

The DASS is a **quantitative** measure of distress along the 3 axes of depression, anxiety¹ and stress². It is not a categorical measure of clinical diagnoses.

Emotional syndromes like depression and anxiety are intrinsically dimensional - they vary along a continuum of severity (independent of the specific diagnosis). Hence the selection of a single cut-off score to represent clinical severity is necessarily arbitrary. A scale such as the DASS can lead to a useful assessment of **disturbance**, for example individuals who may fall short of a clinical cut-off for a specific diagnosis can be correctly recognised as experiencing considerable symptoms and as being at high risk of further problems.

However for clinical purposes it can be helpful to have 'labels' to characterise degree of severity relative to the population. Thus the following cut-off scores have been developed for defining mild/moderate/severe/extremely severe scores for each DASS scale.

Note: the severity labels are used to describe the full range of scores in the population, so 'mild' for example means that the person is above the population mean but probably still way below the typical severity of someone seeking help (ie it does not mean a mild level of disorder).

The individual DASS scores do not define appropriate interventions. They should be used in conjunction with all clinical information available to you in determining appropriate treatment for any individual.

¹Symptoms of psychological arousal

²The more cognitive, subjective symptoms of anxiety

DASS 21 SCORE

DEPRESSION SCORE	ANXIETY SCORE	STRESS SCORE

	Depression	Anxiety	Stress
Normal	0 - 4	0 - 3	0 - 7
Mild	5 - 6	4 - 5	8 - 9
Moderate	7 - 10	6 - 7	10 - 12
Severe	11 - 13	8 - 9	13 - 16
Extremely Severe	14 +	10 +	17 +

EARLY LIFE EVENTS SCALE

This scale is designed to explore your memories of your childhood. Research suggests that early experiences play a role in later psychological difficulties. Below are a set of questions that tap various aspects of early life. Read each question carefully and rate how true each statement is for you. To do this, circle a number under each statement.

Completely untrue	Very occasionally true	Sometimes true	Fairly true	Very true
1	2	3	4	5

1. I often had to give in to others at home
1 2 3 4 5
2. I felt on edge because I was unsure if my parents might get angry with me
1 2 3 4 5
3. I rarely felt my opinions mattered much
1 2 3 4 5
4. There was little I could do to control my parents' anger once they became angry
1 2 3 4 5
5. If I didn't do what others wanted I felt I would be rejected
1 2 3 4 5
6. I felt able to assert myself in my family
1 2 3 4 5
7. I felt very comfortable and relaxed around my parents
1 2 3 4 5
8. My parents could hurt me if I did not behave in the way they wanted
1 2 3 4 5
9. I felt an equal member of my family
1 2 3 4 5
10. I often felt subordinate in my family
1 2 3 4 5
11. My parents exerted control by threats and punishments
1 2 3 4 5

12 I often had to go along with others even when I did not want to

1 2 3 4 5.

13 In order to avoid getting hurt I used to try to avoid my parents

1 2 3 4 5

14 The atmosphere at home could suddenly become threatening for no obvious reason

1 2 3 4 5

15 I experienced my parents as powerful and overwhelming

1 2 3 4 5

EARLY LIFE EVENTS SCALE

DESCRIPTION

Early Life Experiences Scale (ELES)

This scale was developed by Gilbert et al., (2003) to measure emotional memories in one's family, linked to recall of feeling devalued, frightened and having to behave in a subordinate way. Whereas many recall of early life ask about recalling specific experiences or how one parent acted towards one this scale asks about memories of personal feelings.

This 15-item scale asks participants to rate on a five-point measure (ranging from 1 = Completely untrue, to 5 = Very true) how frequently each statement was true for them. The scale can be used as a single construct or as three separate subscales: recall of feelings of *threat* (e.g. "I experienced my parents as powerful and overwhelming"); feeling *(un)valued* (e.g. "I felt very comfortable and relaxed around my parents"); and *submissiveness* (e.g. "I often had to give in to others at home"). Gilbert et al., (2003) found Cronbach's alphas of .89 for threat, .85 for submissiveness, .71 for (un)valued and .92 for the total score.

SCORING

Reverse score the following items

eles6 eles eles9

then sum the items into 3 subscales as follows:

Unvalued = eles6r + eles7r + eles9r .

Submissiveness = eles1 + eles2 + eles3 + eles5 + eles10 + eles12 .

Threatened = eles4 + eles8 + eles11 + eles13 + eles14 + eles15 .

REFERENCE

Gilbert, P., Cheung, M.S.P., Grandfield, T., Campey, F. & Irons, C. (2003). Recall of threat and submissiveness in childhood: Development of a new scale and its relationship with depression, social comparison and shame. *Clinical Psychology and Psychotherapy*, 10, 108-115

DESCRIPTION:***The Early Life Experiences Scale (ELES)***

This scale was designed to measure recall of perceived threat and subordination in childhood. We decided to keep the scale short in the first instance with the possibility of increasing items in light of research findings. The scale thus consists of 15 items (see Table 1) focusing on recall of perceived threat (six items) and feeling subordinate and acting in a submissive way (nine items). Items were generated in consultation with clinical psychologists from typical statements and experiences reported by patients in psychotherapy. The response measure consisted of a Likert scale with participants required to rate how frequently and how true each statement was for them in their childhood (1 D completely untrue, 2 D very occasionally true, 3 D sometimes true, 4 D fairly true, 5 D very true. Three items were reversed in order to minimize any response bias.

FEARS OF COMPASSION SCALES

Different people have different views of compassion and kindness. While some people believe that it is important to show compassion and kindness in all situations and contexts, others believe we should be more cautious and can worry about showing it too much to ourselves and to others. We are interested in your thoughts and beliefs in regard to kindness and compassion in three areas of your life:

1. Expressing compassion for others
2. Responding to compassion from others
3. Expressing kindness and compassion towards yourself

Below are a series of statements that we would like you to think carefully about and then circle the number that best describes how each statement fits you.

SCALE

Please use this scale to rate the extent that you agree with each statement

Don't agree at all	0	1	2	3	4	Completely agree
			Somewhat agree			

Scale 2: Responding to the expression of compassion from others

- | | | | | | | |
|-----|--|---|---|---|---|---|
| 1. | Wanting others to be kind to oneself is a weakness | 0 | 1 | 2 | 3 | 4 |
| 2. | I fear that when I need people to be kind and understanding they wont be | 0 | 1 | 2 | 3 | 4 |
| 3. | I'm fearful of becoming dependent on the care from others because they might not always be available or willing to give it | 0 | 1 | 2 | 3 | 4 |
| 4. | I often wonder whether displays of warmth and kindness from others are genuine | 0 | 1 | 2 | 3 | 4 |
| 5. | Feelings of kindness from others are somehow frightening | 0 | 1 | 2 | 3 | 4 |
| 6. | When people are kind and compassionate towards me I feel anxious or embarrassed | 0 | 1 | 2 | 3 | 4 |
| 7. | If people are friendly and kind I worry they will find out something bad about me that will change their mind | 0 | 1 | 2 | 3 | 4 |
| 8. | I worry that people are only kind and compassionate if they want something from me | 0 | 1 | 2 | 3 | 4 |
| 9. | When people are kind and compassionate towards me I feel empty and sad | 0 | 1 | 2 | 3 | 4 |
| 10. | If people are kind I feel they are getting too close | 0 | 1 | 2 | 3 | 4 |
| 11. | Even though other people are kind to me, I have rarely felt warmth from my relationships with others | 0 | 1 | 2 | 3 | 4 |
| 12. | I try to keep my distance from others even if I know they are kind | 0 | 1 | 2 | 3 | 4 |
| 13. | If I think someone is being kind and caring towards me, I 'put up a barrier' | 0 | 1 | 2 | 3 | 4 |

Scale 3: Expressing kindness and compassion towards yourself

- | | | | | | | |
|-----|--|---|---|---|---|---|
| 1. | I feel that I don't deserve to be kind and forgiving to myself | 0 | 1 | 2 | 3 | 4 |
| 2. | If I really think about being kind and gentle with myself it makes me sad | 0 | 1 | 2 | 3 | 4 |
| 3. | Getting on in life is about being tough rather than compassionate | 0 | 1 | 2 | 3 | 4 |
| 4. | I would rather not know what being "kind and compassionate to myself" feels like | 0 | 1 | 2 | 3 | 4 |
| 5. | When I try and feel kind and warm to myself I just feel kind of empty | 0 | 1 | 2 | 3 | 4 |
| 6. | I fear that if I start to feel compassion and warmth for myself, I will feel overcome with a sense of loss/grief | 0 | 1 | 2 | 3 | 4 |
| 7. | I fear that if I become kinder and less self-critical to myself then my standards will drop | 0 | 1 | 2 | 3 | 4 |
| 8. | I fear that if I am more self compassionate I will become a weak person | 0 | 1 | 2 | 3 | 4 |
| 9. | I have never felt compassion for myself, so I would not know where to begin to develop these feelings | 0 | 1 | 2 | 3 | 4 |
| 10. | I worry that if I start to develop compassion for myself I will become dependent on it | 0 | 1 | 2 | 3 | 4 |
| 11. | I fear that if I become too compassionate to myself I will lose my self-criticism and my flaws will show | 0 | 1 | 2 | 3 | 4 |
| 12. | I fear that if I develop compassion for myself, I will become someone I do not want to be | 0 | 1 | 2 | 3 | 4 |
| 13. | I fear that if I become too compassionate to myself others will reject me | 0 | 1 | 2 | 3 | 4 |
| 14. | I find it easier to be critical towards myself rather than compassionate | 0 | 1 | 2 | 3 | 4 |
| 15. | I fear that if I am too compassionate towards myself, bad things will happen | 0 | 1 | 2 | 3 | 4 |

SCORING

Simply sum the items for each of the 3 scales

DESCRIPTION*Fears of Compassion Scales*

We developed three scales for this study, measuring *Fear of compassion for self* (compassion we have for ourselves when we make mistakes or things go wrong in our lives), *Fear of compassion from others* (the compassion that we experience from others and flowing into the self) and *Fear of compassion for others* (the compassion we feel for others, related to our sensitivity to other peoples thoughts and feelings). We generated a series of items based on various fears of compassion for each of these scales. Many of these items were inspired by PGs discussions with patients, ideas generated in the psychotherapy literature (e.g. Arieti & Bemporad, 1980) and in the attachment literature (Bowlby, 1969, 1973, 1980).

We generated twenty items for each domain and then asked the research team to rank the items according to face validity and selected the items which were rated to be the most valid. Those items for which there was general agreement that they had low face validity or were difficult to understand were rejected. The final subscales consisted of: *Compassion for Self* comprised 15 items (e.g. "I worry that if I start to develop compassion for myself I will become dependent on it"); *compassion from others* comprised 13 items (e.g. "I try to keep my distance from others even if I know they are kind"); *compassion for Others* comprised 10 items (e.g. "Being too compassionate makes people soft and easy to take advantage of"). The items were rated on a five-point Likert scale (0 = Don't agree at all, 4 = Completely agree). The Cronbach's alphas in students for this scale are 0.92 for fear of compassion for self; 0.85 for fear of compassion from others and 0.84 for fear of compassion for others. The Cronbach's alphas for therapists for this scale are 0.86 for fear of compassion for self; 0.85 for fear of compassion from others and 0.76 for fear of compassion for others.

REFERENCE

Gilbert, P., McEwan, K., Matos, M. & Rivis, A. (Submitted). Fear of compassion: Development of a self-report measure. *Psychology and Psychotherapy*.

Personal Self-Criticism Questionnaire*

INSTRUCTIONS: Please read the following statements carefully. Each one describes a way that you might (or might not) feel about your self-criticism. For each statement, circle one number from 1 to 5, to indicate how much you agree or disagree with it right now. Please circle one and only one number for every statement.					
	NO! Strongly Disagree	No Disagree	? Undecided or Unsure	Yes Agree	YES! Strongly Agree
1. I really want to make changes in my self-critical thinking.	1	2	3	4	5
2. Sometimes I wonder if I am too self-critical.	1	2	3	4	5
3. If I don't change my self-critical thinking soon, my problems are going to get worse.	1	2	3	4	5
4. I have already started making some changes in my self-critical thinking.	1	2	3	4	5
5. I was being too self-critical at one time, but I've managed to change that.	1	2	3	4	5
6. Sometimes I wonder if my self-criticism is hurting my relationships.	1	2	3	4	5
7. I have a self-critical thinking problem.	1	2	3	4	5
8. I'm not just thinking about changing my self-criticism, I'm already doing something about it.	1	2	3	4	5
9. I have already changed my self-criticism, and I am looking for ways to keep from slipping back to my old pattern.	1	2	3	4	5
10. I have serious problems with being hard on myself.	1	2	3	4	5
11. Sometimes I wonder if I am in control of my critical thoughts.	1	2	3	4	5
12. My self-criticism is causing a lot of harm.	1	2	3	4	5
13. I am actively doing things now to cut down or stop my self-criticism.	1	2	3	4	5
14. I want help to keep from going back to the self-critical problems that I had before.	1	2	3	4	5
15. I know that I have a problem with being too critical of myself.	1	2	3	4	5
16. There are times when I wonder if I am hard on myself too much.	1	2	3	4	5
17. I am a self-critical person.	1	2	3	4	5
18. I am working hard to change my self-criticism.	1	2	3	4	5
19. I have made some changes in my self-criticism, and	1	2	3	4	5

I want some help to keep from going back to the way I used to be before.					
--	--	--	--	--	--

*Adapted from the SOCRATES8D

Guidelines for Interpretation of SOCRATES-8 Scores

Using the SOCRATES Profile Sheet, circle the client's raw score within each of the three scale columns. This provides information as to whether the client's scores are low, average, or high *relative to people already seeking treatment for alcohol problems*. The following are provided as general guidelines for interpretation of scores, but it is wise in an individual case also to examine individual item responses for additional information.

RECOGNITION

HIGH scorers directly acknowledge that they are having problems related to their drinking, tending to express a desire for change and to perceive that harm will continue if they do not change.

LOW scorers deny that alcohol is causing them serious problems, reject diagnostic labels such as "problem drinker" and "alcoholic," and do not express a desire for change.

AMBIVALENCE

HIGH scorers say that they sometimes *wonder* if they are in control of their drinking, are drinking too much, are hurting other people, and/or are alcoholic. Thus a high score reflects ambivalence or uncertainty. A high score here reflects some openness to reflection, as might be particularly expected in the contemplation stage of change.

LOW scorers say that they *do not wonder* whether they drink too much, are in control, are hurting others, or are alcoholic. Note that a person may score low on ambivalence *either* because they "know" their drinking is causing problems (high Recognition), or because they "know" that they do not have drinking problems (low Recognition). Thus a low Ambivalence score should be interpreted in relation to the Recognition score.

TAKING STEPS

HIGH scorers report that they are already doing things to make a positive change in their drinking, and may have experienced some success in this regard. Change is underway, and they may want help to persist or to prevent backsliding. A high score on this scale has been found to be predictive of successful change.

LOW scorers report that they are not currently doing things to change their drinking, and have not made such changes recently.

Stage of Change Single Question Assessment

Select the statement that most closely fits your view of your self-critical thinking:

- (1) *It is not a problem and/or I have no interest in change.*
- (2) *It might be a problem; I might consider change.*
- (3) *It is definitely a problem; I'm getting ready to change.*
- (4) *I am actively working on changing, even if slowly.*
- (5) *I have achieved stable change with my self-critical thinking, and I am trying to maintain this.*

Treatment Acceptability Survey

Please answer the following questions. You can elaborate after any question you wish to say more about.

True	False	Question
		The information about self-criticism and self-compassion presented during the meeting was clear and understandable.
		The information presented during the meeting was useful to me.
		Since the meeting, I have thought more about how I relate to myself after hardship.
		I would have liked to learn more about some part of the presentation. <i>If true please specify:</i>
		I am more interested in my mental responses after hardship than I was before the meeting.

Please name the most useful part(s) of the meeting.

Please name the least useful part(s) of the meeting or anything you would change.

Would you like to be sent material on how to develop self-reassuring or self-compassionate mental habits?

The following short answer questions are intended to assess your knowledge of information relevant to this research. If you do not know the answer please leave the space blank rather than guess.

1. *There are three emotion-regulation systems theorized to help organize human responses. These are:
(1) Seeking/Drive/Excite System.
(2) Threat response/Protection System
(3) Affiliative/Care System
When we are self-critical which system (from Question 1) is theorized to be activated?*
2. *When we are self-reassuring after hardship which system is theorized to be activated?*
3. *Describe the two safety seeking strategies that humans have: one is instinctual and the other is learned behavior.*
4. *There are certain experiences we can imagine that can cause physical reactions as if the experience were presented externally. Name as many of these as you can remember.*
5. *Name one physiological (or bodily) reaction that is correlated with self-criticism.*
6. *Self-criticism is associated with specific behavior outcomes. Please name one of these.*
7. *There are three steps to being self-compassionate. Name as many of the steps as you can.*
8. *What is one way that people practice to develop a self-compassionate style?*
9. *Self-reassurance has also been found to be associated with functioning or behavioral outcomes. Please name one of these.*
10. *Describe one reason why self-compassion may have to be practiced.*

Participant # _____
 Intervention Checklist

	Intervention Component
	Complete Pre-intervention packet
	Offer outline of meeting
	Re-iterate confidentiality
	Give permission to not participate in any part
	Explain criteria and why they were included
	Defined Self Criticism/Discussed
	Explained Behavioral Analysis
	Completed Behavioral Analysis
	Behavioral Analysis discussed
	Discuss Origin
	Discuss time without it
	Teach the three emotion regulation systems
	Discuss personal experiences of these
	Teach the two safety seeking strategies
	Teach about social modeling and internalizing
	Teach about the power of imagination to trigger physiology
	Explain how self-criticism works as a trigger of the threat/protect system
	Ensure this makes sense/discuss
	Teach the costs/benefits of Self-criticism
	Explore attitude about self-compassion
	Define compassion
	Break down (self) compassion into three components
	Explain how it engages the safe/content system
	Explain how it is a different but not opposite mental process
	Discuss under-elaboration in light of an over-active threat focus and why it needs practice (retrieval advantage)
	Discuss the need for it to be felt to work: imaginal, memory, imagery strategies
	Review the costs/benefits of self-compassion
	OPTIONAL: Go over misconceptions (self-pity and self-esteem)
	Give practice test again

Appendix C
Survey Responses

Table C1

Coded comments from the prompt: *Please name the most useful part(s) of the meeting*

Part. #	Comment	Coding notes
Nothing specific but general positive response (3)		
02	Honestly, basically all of it	
179	. . . very interesting approach.	
178	The info was presented in a well-organized manner.	
New information: Self-compassion		
83	The three steps to being self compassionate	
84	Talking about eastern ways of thinking.	
137	Talking about how to be more compassionate.	
143	Learning the true definition for self-compassion. Not pity for one self rather being the nurturing caregiver to yourself.	
158	Learning the difference between self-esteem and self-compassion	
166	The steps to strengthen your self-compassion and reassurance	
New information related to personal information through discussion		
93	Comparing myself and my way of handling situations and how my behavior matches with the information given. <i>Research about isolation matched up with his/her experience and it felt normalizing</i>	
105	Being able to work through my problems and dissect them through new understandings and talking.	
134	The one-on-one discussions, especially when we related the behavior to the nervous system was most helpful for me.	Plus self-expression
155	The physical effects of self-criticism and how they relate to me.	Plus self criticism
172	Learning the mechanisms in my mind that were causing/influencing my self-criticism. I feel like I understand what is going on now, and it may be more maladaptive than I thought. Because I understand it more, I can look at it more logically.	Plus self-criticism
210	Speaking with Meghan and learning how I've attached words to feelings and compounding those emotions to something more than they are. Learning the cycle of self-criticism and why/how it happened	Plus self-criticism and self-expression
New information: The emotion regulation systems theory		
127	Going over the different emotion regulation systems	
129	Showing how everything connects. <i>In conversation: Specifically, the emotion regulation systems and how self-criticism fits with this.</i>	Plus Self criticism
183	I enjoyed learning how the body responds biologically to stress that we put on ourselves and how our mind deals with these things.	Plus Self-criticism
199	The parts that stuck out the most were the visual three- emotion regulation section.	
202	The slides of the triangle (<i>three emotion regulation systems</i>).	
New information: self-criticism (6 including 5 from above)		

177	Learning how people are self-critical of themselves and how they try to hide certain things of their life	Self-criticism (defended response)
New information general		
179	I'd never really thought about the ideas before	
Motivating		
105	<i>I want to work harder to change</i>	
Reminder		
78	Reminding me to not be hard on myself. <i>Meeting served as a reminder in a new place where I hadn't received that message here yet.</i>	
Therapeutic self-expression/ discussion about personal experience (4 including two from above)		
85	Talking about myself and my family. I very rarely do that and it felt good. Like I got something off my chest.	
105	Being able to work through my problems and dissect them through new understandings and talking.	
Comments reflecting no change in understanding		
116	The most useful part to me was learning that what I was doing was a completely normal thing to do	Reflects that we succeeded in making SC a normalized response. Not sure what it reflects about change.
119	Self-criticism isn't always bad. It may push you to change	Same as above. Shows expression of resistance but that I accommodated this, possibly too far?
Possible misunderstandings		
176	I thought it was very good to know that if you are constantly in fight or flight and never safe, you cannot grow and develop and struggle with language.	Overgeneralization of information presented
202	The part about how to "reward" oneself.	Don't know what this references as 'rewarding' wasn't language that was used.
Greater self-awareness		
78	<i>Also the process of observing my emotions was useful.</i>	Observing emotion
84	Stepped out of the situation and saying this is the way it is rather than blaming yourself	Self acceptance rather than blame reaction
85	<i>Noticing self-criticism much more and thinking about it when it happens instead of it being automatic</i>	Observing self crit.: less automatic
93	<i>Noticed herself watching out for self criticism</i>	
105	<i>more aware</i>	
129	<i>More self conscious about my self-criticism. I have more self-</i>	

137	<i>awareness and I analyze it.</i> <i>I realized that I do the self-compassion thing, I just didn't know.</i>	Of pre-existing self-compassion
143	<i>Noticing self-criticism when it happens</i>	
155	<i>Increased self-awareness</i>	
172	Because I understand it more, I can look at it more logically.	
199	<i>Found that just noticing SC with an observing quality reduced it.</i>	

Note: All words in italics were comments made in discussion. Regular font comments were written on the treatment acceptability survey.

Table 2C

Coded and selected comments from the prompt: *Please name the least useful part(s) of the meeting or anything you would change*

Length of meeting and amount of information covered in one long session (7)

02	The only thing and it would be hard to change, was that it was so much information in such a short amount of time
105	<i>in conversation mentioned it was too short of a meeting for all the material</i>
143	Just length. Maybe break it up into two different sessions
155	A lot of information to absorb in one sitting. Break it up?
166	The length of the meeting was quite long
179	Maybe shorter meeting times, but more than one. It was just a lot of information to absorb in just one sitting
137	<i>length and wanting more sessions, repeat contacts with the ideas instead of just one long meeting.</i>

Handouts (3)

116	I would have offered some worksheets or information pages (<i>like a summary sheet</i>) on how to get away from a self-critical lifestyle and into a more compassionate and self-reassuring one.
134	If there were more handouts of steps to achieve self-compassion then it would have been easier for me to help attain that goal.
199	<i>None but forgot lots and would have liked to have an outline or something to review</i>

Poor fit of information with their view of themselves/their experience (5)

78	[I didn't like the] science part of it. <i>Daughter of Fundamental Christian preacher and didn't believe in evolution.</i>
84	I enjoyed the meeting. I thought the information was useful. However, I think I am still happy with the way I deal with things. It was just nice to know a little more about why I deal with them the way I do.
119	Self-compassion I feel is something you have or you don't. <i>He explained, "I don't think its learnable, you can't talk yourself out of how you feel."</i>
176	I don't think my self-criticism is a bad thing so I didn't really qualify because I wasn't as negative in my thinking process.
183	<i>Didn't feel it pertained entirely to him: didn't feel self-criticism was bad for him. Reported having ADHD, and no Ritalin on the day of the meeting but rather managing with marijuana and was high for meeting</i>

Wanted things changed that related to research design or elements (4)

105	The sheet of questions in italics. It was hard for me to answer/remember specific details (<i>referring to pre/post tests</i>)
127	I think if the meetings were closer it would be easier to remember all the steps.
137	Some of the paperwork. <i>In conversation: the tests and measures.</i>
210	<i>In conversation: Wanted meeting to be more about tricks, tools, ways to practice</i>

More personal application of information (1)

177	It was good and I learned a lot, I would change it though where it is on a more personal level so its easier to understand better and remember. <i>In conversation: didn't remember or get part about compassion.</i>
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Nothing recommended (9)

83	All good information
84	Can't think of any thing. It was very interesting
93	I wouldn't change anything
129	Can't remember anything bad.
183	Nothing I would like to change but found everything very interesting.
202	None
158	I don't know what I would change. I thought the whole thing was well done, informative and helpful.
172	Nothing really, I thought it was very informative and a good introduction without being too intensive.
178	None

Note: All words in italics were comments made in discussion. Regular font comments were written on the treatment acceptability survey.