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#### AN EMPIRICAL INVESTIGATION OF THE BUDDHIST CONCEPT OF "NOT-SELF"

By

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Dissertation

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Abstract

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All individuals have notions about how they would likely approach themselves under times of stress, as well as the ways which would be most helpful to them. The present study investigated four broad ways of approaching the self under stressful circumstances: self-esteem, self-control, self-compassion, and not-self. Not-self, a concept based in Buddhist philosophy, is novel to a Western population, and was the primary focus. In order to comprehensively examine the concept, data were collected from 168 undergraduates on responses to stressful circumstances: by bolstering self-esteem, engaging in self-control behaviors, engendering a sense of self-compassion, or accepting/letting go thoughts, feelings, wants, and ultimately sense of self. The study also assessed the extent to which engaging in these approaches was related to personality, psychological adjustment, and psychological symptomology variables. Results indicated that, in spite of hurdles pertaining to lack of familiarity, aspects of not-self were considered viable for approaching the self when managing difficult circumstances. Additionally—and unexpectedly—associations between psychological variables and not-self were strikingly consistent with fundamental aspects of Buddhist psychological theories of not-self.

An Empirical Investigation of the Buddhist Concept of "Not-Self"

Since its inception, Western psychology has concerned itself with understanding the self (Calkins, 1906). A textbook definition of the self is that it is "how we see or describe ourselves...[it] is made up of many self-perceptions, abilities, personality characteristics, and behaviors that are organized so as to be consistent with one another" (Plotnik & Kouyoumjian, 2010, p. 633). Not surprisingly, however, no universally agreed upon conceptualization of the self exists. In place of such consensus are a wide variety of theoretical orientations; some focus on models of the self, many focus on feelings about the self. Some of these theories include: psychodynamic (e.g., uncovering unconscious aspects of the self), humanistic (e.g., development toward self-actualization), and cognitive-behavioral (e.g., challenging negative thoughts about the self). Other theories have been explored extensively in social and personality psychology; for example, the role of self-enhancement (Paulhus, 1998), possible selves (Markus & Nurius, 1986), the empty self (Cushman, 1990), historical conceptualizations of the self (Baumeister, 1987), and many others.

The current study focused on four approaches to "the self," and, more specifically, how people respond to the self under stressful circumstances. The approaches examined in this study were self-esteem, self-control, self-compassion (informed primarily by the (Neff, 2003b) conceptualization), and "not-self" (Herwitz, 2012). Self-esteem has been enormously influential in the psychological literature and in psychotherapy. Many theories that focus on self-esteem assert that positive feelings about the self are crucial to well-being. The research on self-esteem has shown some relationship with positive mental health outcomes, although recent research has also raised questions about its role and limitations. Self-control/regulation (these terms are often used interchangeably within the literature; the term "self-control" will be used here) has also

received a great deal of attention within the literature. In particular, recent investigations have asserted that its cultivation may be more important to success and well-being than enhancement of self-esteem. Self-compassion, a stance of kindness and nonjudgment toward the self (Neff, 2003b), is a relatively new conceptualization of how approaching the self relates to well-being, although compassion itself—and related constructs—have been of interest within psychology for the past several decades. Not-self is a concept drawn from a Buddhist perspective on the self. This approach is complicated to describe in that it involves, in its basic form, experiential, spiritual and psychological aspects. In general, the development toward not-self involves letting go of reified constructs related to self, which are seen as impermanent and "delusional" from a Buddhist perspective. The current use of mindfulness-based interventions in Western psychology, which are also drawn from a Buddhist perspective, has generally ignored other aspects of the theoretical underpinnings of mindfulness practices, including their corresponding perspective on the self (Herwitz, 2012). The not-self concept is novel to Western psychology, and was therefore the focus of this study.

The present research furthered exploration of how people approach the self when faced with stressful situations. Specifically, the study explored the extent to which people are likely to engage in responses to the self that are consistent with each of the four aforementioned approaches. For example, if a person is rejected for a new job, he might approach himself in a way designed to maintain self-esteem (e.g., "I could have done that job well. Unfortunately, the interviewer must not have understood my qualifications. I'll get the next job"). Alternatively, he may focus on the importance of self-control and hard work (e.g., "I'll take classes to make myself more likely to get that kind of job in the future"). He may respond with self-compassion (e.g., "I did my best, and a lot of people are having a hard time finding work right now").

Finally, a not-self approach might involve consciously or unconsciously focusing on simply observing the feelings that arise (e.g., rejection, disappointment, anger) without clinging to them or pushing them away, and thus ultimately being able to let them go (e.g., "I put a lot of stock in getting that job, but if I don't let it go, I'll just keep being upset").

The study also examined the extent to which participants believed each of these four approaches would be helpful in response to difficult situations, regardless of their likelihood of actually utilizing that approach. For example, a person might think that extending herself more compassion would be helpful, even if this is not her usual approach to difficult situations. Finally, the study examined correlations between psychological factors and ways of approaching the self under stress. These variables will included: personality-related factors, as the self and personality are conceptually similar; psychological adjustment variables, in order to find relationships between approaches to the self and well-being; and psychological symptom variables, in order to explore relationships between approaches to the self and distress. The personality factors included measures of self-esteem, self-control, self-compassion, and measures of "letting go," as well as a measure of the Five-Factor Model (i.e., openness, conscientiousness, extraversion, agreeableness, neuroticism; Costa & McCrae, 1992). The adjustment variables included measures of mood and life satisfaction. A measure of general psychological symptomology was used, and symptoms and approaches to the self were examined. The results of the study provided insight into how people approach the self under stressful situations, and which personality and psychological factors related to the approaches to the self.

#### Four Approaches to the Self

**Self-esteem.** As a psychological construct, self-esteem has a long and varied history. This can be seen by the fact that many terms have been coined to identify related constructs, such

as "self-worth," "self-appraisal," and "self-regard." Williams James (1890) first offered a simple definitional equation that "self-esteem = success/pretensions" (p. 310). In other words, self-appraisal is dependent upon a combination of whether a task is achieved, and the personal import of that task; success or failure in tasks with little personal meaning have little effect on self-esteem, while those with significant meaning have greater effect. Formal research into this understanding of self-esteem was postponed by the subsequent decades of economic depression and world war, during which existential concerns took priority in both psychology and the mainstream (Baumeister, 1987). As the United States emerged out of war and into prosperity, interest in self-esteem reemerged.

The literature base on self-esteem has since grown massive, as illustrated by the fact that a recent PsycINFO search for the keyword "self-esteem" yielded 17,000 peer-reviewed journal articles ("PsycINFO," 2013). A natural consequence of the wide interest in understanding the construct is that its definition has varied greatly. Some early researchers maintained and expanded on James' initial formulation. For example, Dittes (1959) defined self-esteem as a "general sense of self-assurance or of adequacy, depending on...stimuli...including the approval of others, achievements, and reassuring self-verbalizations" (p. 348). Similarly, Coopersmith (1967) and others asserted that work and achievement related to the self (e.g., self-discipline, self-awareness, creativity, engagement in fulfilling activities) affect self-esteem (Maslow, 1965; Rogers, 1963). Jacobson (1964) conceptualized self-esteem as the relationship between one's perceived self-image, and one's ideal self-image. This conceptualization, adopted by a number of researchers (e.g., Silber & Tippett, 1965; Zimbardo & Formica, 1963), contended that the smaller the distance between perceived and ideal self-image, the higher one's self-esteem. Ziller, Hagey, Smith, and Long (1969) posited self-esteem as a social construct, whereby

individuals evaluate themselves in comparison to evaluation of others. Rosenberg, one of the most prominent self-esteem researchers, approached self-esteem as simply a gauge of how one feels about the self (Blascovich & Tomaka, 1991). He (1989) created a scale which remains one of the most commonly used measures of self-esteem, likely because of the more broad nature of his approach.

The body of work stimulated by these varying understandings of self-esteem is so large that the current review will focus on meta-analyses, research most relevant to the current study, and experimental studies that manipulated levels of self-esteem. Much of the work in this area focuses on what self-esteem is related to, in particular in forms of mental health, general well-being, and interpersonal outcomes. In addition, the effect that the concept of self-esteem has had on popular perception of mental well-being in our culture will be discussed.

Research on self-esteem. Although self-esteem researchers developed different conceptualizations, they agreed that high self-esteem (i.e., feeling and thinking positively about the self) is beneficial. Research has indeed found enduring associations between high self-esteem and psychological symptomatology (i.e., negative correlations) and aspects of well-being (i.e., positive correlations). For example, Cheng & Furnham (2003) tested a sample of 234 participants and found that self-esteem, in combination with strength of parental relationships, predicted high levels of happiness and lower levels of depressive symptoms. Self-esteem also mediated the relationship between extraversion and happiness, as well as between neuroticism and depressive symptoms. In other words, the higher the self-esteem, the stronger the relationship between extraversion and happiness; the lower the self-esteem, the stronger the relationship between neuroticism and depressive symptoms. Taken together, the results of this study suggest that self-esteem plays an important role in happiness and well-being.

Diener, and Diener (1995) conducted research on the relationship between self-esteem and life satisfaction. They analyzed data from a sample of 819 participants, and found that self-esteem was positively correlated with a 7-point scale rating of life satisfaction. They also found that self-esteem positively correlated with a number of other dimensions of personal satisfaction, including feelings about finances, family, and friends. These findings indicate that self-esteem is related to a number of important aspects of personal satisfaction.

Research on self-esteem has also addressed the interpersonal domain. This has been a significant focus of self-esteem research. The central hypothesis is that higher self-esteem is associated with more positive interactions and relationships. For example, research has investigated the relationship between self-esteem and behavior during group interactions.

LePine and Dyne (1998) were interested in how self-esteem is related to the degree to which individuals assert closely-held perspectives during group discussions. They collected data on 441 participants within 95 work groups, and found that self-esteem, when combined with the degree to which participants liked their group placement, accounted for significant variance in the degree to which they asserted themselves. People with higher self-esteem were more assertive in groups. This finding suggests that self-esteem is a factor in whether individuals feel comfortable "speaking up" about views with others, which is an important ability in many work and interpersonal situations.

One of the most studied areas of interpersonal functioning in relation to self-esteem is general interpersonal adjustment. For example, Kahle, Kulka, and Klingel (1980) investigated the ways in which self-esteem in adolescents affects interpersonal interactions, including self-reports on working with others, following instructions, being in groups, meeting responsibilities, and making friends. Their sample consisted of 115 high school boys. Based on cross-lagged

panel correlations (i.e., a statistical analysis used to infer causal relationships), the authors concluded that low self-esteem leads to social difficulties on all assessed domains of interpersonal problems, and that higher self-esteem leads to better interpersonal adjustment.

Researchers also examined the relationship between self-esteem and other variables important to interpersonal interactions, such as honesty. Graf (1971) found a causal connection between low self-esteem and dishonest behavior. Graf's sample included 90 undergraduates whom he exposed to a self-esteem manipulation (i.e., given positive, neutral, or negative feedback on a psychological inventory). He found that those who had lower self-esteem after the manipulation were more likely to subsequently take a dollar that a confederate "accidentally" left with them in the test room. He explained this behavior in terms of cognitive consistency theory, which asserts that individuals will behave in accordance with their beliefs; in this case, negative beliefs about the self led to negative interpersonal behaviors.

In further support of low self-esteem's relationship to interpersonal maladjustment, Gold and Mann (1972) hypothesized that low self-esteem may lead to delinquent behaviors in youths. The underlying theory behind their research was the "delinquency as defense" model, which asserts that low self-esteem leads to diminished feelings of agency, which are counteracted by perceived agency through acting out. Thus, a youth who feels bad about himself, and who feels powerless, may engage in delinquent acting out in order to feel a greater sense of control. Gold and Mann used data collected on 847 high school students who completed a self-report measure of delinquent acts, as well as a measure of self-esteem. Their analysis found a relationship between low self-esteem in boys and higher incidence of delinquent acts, including: running away from home, skipping school, consuming alcohol, and fighting. Their findings led them to suggest that improving self-esteem in children would decrease the prevalence of delinquency.

Following this early enthusiasm for the role of self-esteem, some researchers began to question some of its more sweeping assertions. For example, Baumeister (2005) and others began to speculate that high self-esteem could take on a quality similar to narcissism. They suggested that people with high self-esteem could experience themselves as superior to others, which could lead to a variety of problematic behaviors. They asserted that rather than focusing on feeling good about oneself, a more important quality is focusing on being effective, as well as being able to control one's behavior (i.e., self-control, to be reviewed in following section). They suggested that the sense of mastery derived from being able to control one's behaviors, not be impulsive, and change behaviors one desires to change was more important to well-being than simply feeling good about oneself.

Some of this research directly contradicted past research, creating a less clear picture of self-esteem and related variables. For example, Baumeister, Smart, and Boden (1996) conducted a meta-analysis to reexamine earlier findings on the relationship between self-esteem and antisocial behavior. They analyzed data on self-esteem's relationship to a wide range of antisocial behaviors, including: hostile tendencies, murder and assault, rape, domestic violence, juvenile delinquency, political terrorism (e.g., government repression, terrorism, war), and expressions of prejudice (e.g., oppression, genocide). Across these domains, they found that individuals with high self-esteem were more likely to engage in antisocial acts. They explained this finding with a model whereby those with high self-appraisal interpret "threats" (e.g., differing perspectives, restrictions on behavior) with hostility. Because these individuals believe themselves superior to others (i.e., have high self-esteem), they feel justified in and are more prone to reacting antisocially to threats. This was one of many studies which began to insert doubt into some of the more favorable views on self-esteem.

Some studies have suggested that high self-esteem is related to distorted perceptions of one's abilities, and increased unnecessary risk-taking. For instance, Baumeister, Heatherton, and Tice (1993) investigated this relationship among undergraduates, giving participants an opportunity to bet on their performance on a task, with greater task difficulty leading to greater cash reward. The researchers found that individuals with high self-esteem were more likely to set risky goals that were beyond their capabilities. This finding suggests that high self-esteem may lead to distorted over-confidence in one's capabilities, leading to a tendency to make poor decisions that involve the likelihood that one will succeed.

Recent research has also explored the potential negative effects of pursuing high self-esteem. Crocker and Park (2004), for example, conducted meta-analyses on studies of self-esteem and how it is pursued. They found that if individuals who choose to engage in activities with the ultimate intention of maintaining, protecting, or enhancing their self-esteem, are less autonomous, due to their concern that their choices may diminish their self-esteem. They learn less and thus are less competent because of the potential for negative feedback in the learning process. They attend more to their own needs than the needs of others, and therefore experience difficulties in relationships. They are less likely to see value in self-control, as it suggests that they may need to change something about themselves or their behavior. This investigation suggests that focusing on protecting or defending one's sense of self-esteem can interfere with engaging in the world and relationships in an open and non-defensive manner.

It appears that high self-esteem may have benefits in some areas, and associations with problematic behaviors in others. Despite the mixed results, the idea that achieving or maintaining high self-esteem is an important aspect of well-being appears to remain strongly

held. This is particularly evident in mainstream conceptions of psychological well-being, as is evident from popular writing on the topic.

Self-esteem and popular culture. The influence of self-esteem in popular culture likely began with the work of Carl Rogers (2012) and the humanists, who asserted that developing high self-esteem was required for self-actualization. High self-worth, therefore, was key to living "the good life." Consistent with ensuring movement toward actualization, Coopersmith (1967) contended that nurturing high self-esteem was a task essential to child-rearing. The notion that high self-esteem is a goal closely associated with happiness and self-actualization has had wideranging societal implications. Mainstream adoption of this idea helped shape two influential movements: self-help, and education reform (Seligman, 2007; Ward, 1996).

Katz and Bender (1976) outlined the history of the self-help movement. They traced its modern origins to the development of unions and community-based organizations, generalizing the principle of grassroots-developed material support to grassroots-developed mental health support. While the propagation of self-help was a prominent topic among social workers as early as the 1950s, it rapidly grew in popularity beginning in the 1970s (De Jongh, 1954; Kurtz, 1990). Seligman and Csikszentmihalyi (2000) relate this increase directly to the efforts of the Humanists and their promotion of self-actualization. Illouz's (2008) reflection on the present state of the self-help movement is that it "has grown so tightly interwoven with American society that it defies conventional sociological analysis" (p. 1848). The degree to which self-esteem interests have in turn manifested within the self-help movement is clear: a search for "self-esteem" in Amazon.com's self-help book section returns over 30,000 titles ("Amazon.com," 2013). Essentially, mainstream culture is influenced by the self-help movement's focus on the importance of high self-esteem.

Throughout the past two decades, civic institutions across the country have reformed educational goals to include boosting self-esteem in children. This was in answer to the prevalence of "societal ills" of the 1980s, which included increases in drug and alcohol use, crime and violence, teenage pregnancy, and welfare dependency. The prevailing belief among policymakers was that teaching children to value themselves more would decrease their desire to engage in destructive behavior (2007). The California education system set a national trend in 1990 when it officially began implementing recommendations from the California Task Force to Promote Self-Esteem and Personal and Social Responsibility (*Toward a State of Esteem*, 1990). The impact of these recommendations is evident in a replication of Twenge's (2006) Google search for "elementary school mission statement self-esteem," which currently yields approximately 1,690,000 results ("Google.com," 2013). Furthermore, as the first generation of Americans subject to these reforms enters college, their feelings of self-esteem are at historic highs (Twenge, Campbell, & Freeman, 2012). It can be speculated that children's self-esteem has indeed increased due to programs intended to augment it.

Baumeister, Campbell, Krueger, and Vohs (2003) assert that "North American society...has come to embrace the idea that high self-esteem is not only desirable...but also the central psychological source from which all manner of positive behaviors and outcomes spring" (p. 3). These perspectives highlight just how integral perceptions of self-esteem have become within society. Furthermore, the depth of the literature base, however at times inconsistent, underscores the scientific importance of the construct.

**Self-control.** Baumeister, one of the foremost current self-control researchers (Weir, 2012), and Alquist (2009) have described self-control as the "conscious, effortful form of...changing the self or aspects of it" (p. 116). Examples include behaving in a manner

consistent with social norms, cultural ideals, or personal goals. Changing thoughts, emotions or moods may be part of self-control, as well as engaging in impulse control or task performance.

Baumeister and Alquist distinguished between state self-control, meaning self-control in a particular context, and trait self-control, meaning the general capacity to engage in self-control across contexts.

Baumeister and Alquist's (2009) descriptions of self-control are consistent with a variety of related concepts. Derryberry and Rothbart (1988) sought to deconstruct trait self-control. They hypothesized that self-control is made up of attentional focus (i.e., capacity to maintain focus), attentional shifting (i.e., capacity to change focus from one stimulus to another), inhibitory control (i.e., capacity to suppress pleasurable impulses), and behavioral activation (i.e., capacity to perform unpleasurable behaviors). They created measures to assess these subconstructs of self-control. Factor analysis of participant scores suggested that their conceptualization of self-control was more highly associated with attentional processes (i.e., focus and shifting). In other words, their perspective was that ability to control attention is fundamental to the self-control construct.

Other researchers have sought to explain how self-control functions. Carver (1979) developed a cybernetic model theory (i.e., one which uses computer processes to explain non-computer processes) intended to explain the self-control process. He conducted meta-analyses of various studies on psychological phenomena (including learned helplessness, motivation, memory, avoidance, attention, and others), and then developed a simple model of decision-making known as a "negative feedback loop." A "loop" within this system occurs when intended behavior is perceived, and then "feedback" on the performed behavior (i.e., whether it was consistent with intended behavior) is subsequently perceived. It is "negative" because the

model describes a decrease in discrepancy between intention and performance. Carver asserted that the process that moves performed behavior in the direction of intended behavior is self-control.

Tomarken and Kirschenbaum (1982) also used cybernetics theory to explain self-control, asserting that self-control exists within a "closed-loop model." Their system proposed that "persistence" (i.e., long-term effortful engagement in an activity) is a function of self-control, as well as a factor in sustained self-control; in other words, persistence and self-control feed into each other in a "closed loop." They sought to understand how persistence can be augmented by the attentional processes of self-control. They assessed undergraduates on persistence in mathematics task sessions by how many sessions they attended, and whether they attended optional sessions. They found that persistence is decreased when attention is focused on task successes. This finding suggests that focusing attention on areas of success can diminish desire to persist in difficult tasks.

Roberts, Chernyshenko, Stark, and Goldberg (2005) investigated the structure of the Five-Factor Model trait of "conscientiousness," and found that self-control was a primary factor. They administered 36 measures of psychological variables conceptually related to conscientiousness (e.g., competence, order, achievement striving, self-discipline, self-control) to 737 participants from a community sample. Through factor analysis, they found that of the six significant convergent conscientiousness factors, three core factors emerged: industriousness (i.e., capacity to be hard-working, ambitious, confident, resourceful), order (i.e., ability to plan and organize tasks and activities), and self-control. Thus, self-control may play an important role in the personality factor of conscientiousness.

In addition to its psychological correlates, self-control is related to many important qualities and behaviors, including achievement, impulse control, emotional adjustment, and social competence. Wolfe and Johnson (1995) investigated predictors of achievement, as measured by GPA, in a sample of 201 undergraduates. They assessed personality traits, cognition, self-efficacy, self-handicapping, procrastination, and other potentially GPA-associated variables. Of all of these measures, the variables related to trait self-control were the only significant predictors of GPA. Self-control accounted for more variance than even SAT scores. This finding led the authors to recommend that self-control be assessed in college admissions decisions.

The effects of low self-control have also been studied. Tangney, Baumeister, and Boone (2004) highlighted the association between low self-control and high impulsivity. They devised a study which drew on two important elements: data which suggested that eating disorders are associated with impulsivity, and data which suggested that impulse control (i.e., the opposite of impulsivity) is an aspect of self-control. They assessed self-control and disordered eating behavior in a sample of 351 undergraduates. They found that self-control was negatively correlated with thoughts and behaviors associated with eating disorders. This suggests that self-control can play an important role in regulating impulses associated with certain symptom clusters.

Self-control has also been found to be related to overall emotional adjustment.

Gramzow, Sedikides, Panter, and Insko (2000) explored the relationship between self-control and emotional adjustment in a sample of 199 undergraduates. Self-control variables were measured and grouped into two factors: permeability (i.e., impulsivity and conformity), and elasticity (i.e., capacity to control permeability). Emotional adjustment variables included

several measures of depressive symptoms. Through structural equation modeling, the researchers found that greater permeability predicted lower emotional adjustment, and elasticity predicted greater emotional adjustment. In other words, self-control variables may play an important role in overall psychological well-being.

Research has also addressed the question of how self-control influences social competence. Having greater self-control may allow individuals to manage their behavior within relationships more effectively. For example, they may be more able to delay addressing their own wants or needs at a time when the other person needs support. Self-control may decrease the likelihood that a person would impulsively engage in hurtful behavior when upset. Some research has addressed the question of the relationship between self-control and interpersonal behavior. For example, Fabes et al. (1999) analyzed observations of the intensity (i.e., degree and valence of emotionality) of play interactions of 135 preschoolers. They also assessed effortful control (i.e., capacity to manage attention), and social competence. Results indicated that children who were high in effortful control were unlikely to experience high levels of negative emotionality in response to moderate and high intensity interactions, and that children with high effortful control were more likely to respond with social competence in high intensity interactions. Self-control, therefore, is implicated in regulating negative emotions, as well as effectiveness in interpersonal interactions.

The literature on self-control suggests that this quality is important to well-being and success in many areas of life. Baumeister, Vohs, and Tice (2007) assert that it is "an important key to success in life" (p. 351). Others have asserted that self-control is a central ethos within Western culture (Joffe & Staerklé, 2007), and that "there may be no such thing as 'too much'

self-control" (Duckworth, 2011, p. 2639). Self-control was thus identified as an important approach to the self to include in the current study.

**Self-compassion.** Current conceptualizations of self-compassion are made more accessible by first understanding compassion generally, and then related concepts. According to Neff (2008), who has spearheaded recent psychological interest in the concept, compassion occurs when "one notices and is moved by the suffering of others, so that the desire to alleviate their suffering arises" (p. 95).

Although Neff and other current researchers bring a particular perspective to compassion, there is a history of related concepts within psychology. The Humanists were pioneers in this domain, asserting "unconditional positive regard" for the psychotherapy client as an essential component of client change (Rogers, 1959). Mearns and Thorne (1988) related unconditional positive regard to "the counselor's consistent acceptance of and enduring warmth towards her client" (p. 59). The similarities between this stance and compassion can be seen in their underlying care for others, and commitment to maintaining that care.

Social psychologists have also shown interest in related concepts, such as altruism and empathy. Toi and Batson (1982) outlined the empathy-altruism hypothesis: behaviors can be considered altruistic depending on the degree to which they are motivated by empathy (i.e., mirroring another's difficult feelings). In other words, as in compassion, recognizing the pain of others leads to helping behavior.

Research explicitly on self-compassion has begun in earnest over the past decade.

According to Neff (2003b), self-compassion is specifically defined as:

being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating a desire to alleviate one's suffering and to heal oneself with kindness. Self-

compassion also involves offering nonjudgmental understanding to one's pain, inadequacies and failures, so that one's experience is seen as part of the larger human experience. (p. 87)

This definition includes Neff's three core processes of self-compassion: self-kindness (i.e., a stance of understanding directed toward oneself), common humanity (i.e., viewing one's individual experiences as consistent with the global human experience), and mindfulness (i.e., experiencing one's thoughts and feelings with dispassionate awareness).

The first core process, self-kindness, off-sets shame and self-criticism (Gilbert & Irons, 2005). This component is particularly important because self-criticism is associated with a variety of psychological symptoms, including: rumination, depression, low self-esteem, self-directed anger and contempt, and poor outcomes in psychotherapy (Gilbert & Procter, 2006). Engaging in a self-compassionate approach, for example, an individual who feels disappointed in his work performance might respond with understanding, caring, and nonjudgment toward himself, as opposed to criticism or shame. The self-kindness aspect of self-compassion may help reduce these negative feelings by decreasing self-criticism.

The second core process, understanding one's common humanity, is intended for coping with the feelings of isolation which result from painful life experiences (Neff & Germer, 2013). Feelings of isolation are symptomatic of various mental disorders including: depressive disorders, anxiety disorders, and personality disorders (*Diagnostic and Statistical Manual of Mental Disorders*, 2013). For example, an individual going through a divorce may not only feel grief, but also a sense of inadequacy and isolation. In contrast, engaging in awareness of common humanity would help her recognize that many people go through divorce—and other forms of suffering—and that she is connected to others through shared humanity in suffering.

Understanding one's common humanity expands on self-kindness by helping individuals manage the consequences (i.e., isolation) of their distressing feelings.

The third core process, mindfulness, is used within self-compassion to bring distressing feelings into awareness in a nonjudgmental way. The utility of nonjudgmental awareness of these feelings is in neutralizing negative appraisals of them. For example, an individual who feels insulted by a close friend may consciously ignore his hurt feelings. Without awareness of those feelings, he may allow them to influence how he feels about himself. By engaging in mindfulness, he can recognize his hurt feelings, and then work to lessen their effect.

Mindfulness helps to keep individuals aware of their distressing feelings in order to work toward managing them (Neff, 2008).

Research into self-compassion has revealed positive relationships with a variety of adaptive psychological variables, as well as negative relationships with psychological symptomology. Much of this research has utilized Neff's conceptualization of self-compassion. Neff, Rude, and Kirkpatrick (2007) investigated self-compassion in relation to psychological adjustment and several personality traits. They collected data from 177 undergraduates using the Self-Compassion Scale (SCS; Neff, 2003a), as well as measures of broad constructs related to well-being and functioning. The researchers found significant positive correlations between total SCS score and happiness, optimism, positive affect, reflective capacities, affective capacities, personal initiative, curiosity, extroversion, agreeableness, and conscientiousness. They also found significant negative correlations between total SCS score and negative affect and neuroticism. These findings suggest that people high in overall self-compassion are more likely to experience well-being, positive affect, and other qualities associated with psychological

health. Although one cannot assume causality based on correlational studies, self-compassion may play a role in maintaining well-being and related experiences.

Ying (2009) assessed relationships between factors of self-compassion and perceived competence and depressive symptoms in a sample of 65 graduate students in social work. In addition to total score, the SCS yields scores on the core processes of self-compassion (i.e., self-kindness, common humanity, mindfulness), as well as their respective converses: self-judgment (i.e., harshness, rather than kindness directed at the self), isolation (i.e., feeling alone, rather than connected to others), and over-identification (i.e., holding onto thoughts and feelings, rather than letting them go). Along with the SCS, she used measures of perceived competence (i.e., appraisal of one's capacity to succeed at a task), as well as depressive symptoms. Positive correlations between perceived competence and the factors of self-kindness, common humanity, and mindfulness were found; conversely, negative correlations between perceived competence and the factors of self-judgment, isolation, and over-identification were found. Negative correlations between depressive symptoms and the factors of self-kindness, common humanity, and mindfulness were also found; conversely, positive correlations between depressive symptoms and the factors of self-judgment, isolation, and over-identification were found.

Findings such as these suggest that self-compassion and its core processes may play an important role in psychological well-being. These results have led to the development of interventions designed to increase self-compassion. Neff and Germer (2013) have begun research into such an intervention, the Mindful Self-Compassion (MSC) program. Their eightweek program includes a variety of compassion- and mindfulness-based exercises, such as: replacing self-criticism with supportive language, mindfulness meditation, yoga, and mindful eating. They collected pilot data on the intervention, finding that participants made significant

gains in self-compassion, mindfulness, life satisfaction, and happiness. Additionally, significant decreases were found in depression, anxiety, and stress. These findings were in comparison to participants in a waitlist control group. This suggests that there is a potential for individuals to actively increase self-compassion, and that doing so could effectively decrease psychological symptoms and increase well-being.

**Not-self.** The concept of not-self comes directly from Buddhism. With the advent and proliferation of mindfulness-based interventions in Western psychology, greater attention is gradually being brought to other aspects of Buddhist philosophy (e.g., compassion). In addition to its well-known focus on meditative practices, Buddhist thought includes extensive exploration of the nature of the self, and how one's view of the self can lead to a decrease in suffering (Buddhadasa, 1990). The following description is based on the work of Herwitz (2012).

Although there are many sects of Buddhism, a fundamental notion in Buddhist thought is the concept of "not-self." The premise of not-self is that what human beings perceive as a permanent state of selfhood is actually the constantly changing, impermanent process of experience. The reified self that is reflected by Western beliefs is viewed by Buddhism as a "delusion." This delusion is a combined product of fundamental organismic needs (i.e., survival and reproduction), and sensory limitations (i.e., the inability of humans to experience the world in non-static ways). Organismic needs require that the individual be maintained, and it is sensory limitations which aggregate those needs into the self. The not-self approach asserts that realizing the nature of not-self leads to freedom from suffering. When experience—including the self—is accepted as impermanent, it can be viewed without judgment, and aspects of experience which might otherwise be judged as distressing can be let go.

From a Buddhist perspective, the realization that the self is a delusion is seen as occurring at a deeply experiential, nonverbal level. All Buddhist traditions assert that forms of mindfulness practice are involved in this realization. Depending on the tradition, however, not-self may be understood to occur for many people in brief moments, or for very few people as an essentially permanent stage.

The not-self perspective holds that the presumed boundary between self and other is constructed, because static "selves" and "others" are delusions. This boundary functions in accordance with the need to maintain the self by delineating between the self and that which might threaten the self. Belief in this boundary causes suffering, however, as "combat" around the boundary (i.e., defense of, or attack from the boundary) is inherently distressing. Letting go of the self and its boundary remove the capacity for experiencing this domain of suffering.

Within Buddhism, the process of letting go progresses over time and with practice. The judgments, reifications, and boundaries with which the self identifies are understood as "attachments." These attachments can be the product of delusion (i.e., lack of knowledge about experience), greed (i.e., desire to make impermanent "positive" experiences into permanent ones), or hatred (i.e., aversion to unavoidable "negative" experiences). Attachments are relinquished primarily through varieties of mindfulness practice. This process starts with letting go of attachments with which the self identifies least, and progresses to relinquishing the self entirely. When this finally occurs, not-self is realized. While the ultimate realization of not-self may take a lifetime—or may not occur at all for many individuals—substantive engagement in its pursuit is considered beneficial nonetheless.

While Buddhist philosophy ties not-self to a number of metaphysical benefits, its pragmatic implications are most relevant to the present research. The fundamental of these are

stances of equanimity and lovingkindness toward experience. Equanimity (i.e., emotional stability and resilience) is a result of the generalization of nonjudgment, often cultivated through mindfulness practice. Practices involving lovingkindness, which is defined as goodwill toward oneself and others, are engaged in intentionally throughout the process of moving toward not-self. When individuals direct lovingkindness toward themselves and others, they are less likely to experience distress from difficult life experiences.

Lovingkindness is formally extended within Buddhism to the basis for compassion, which is defined as the meeting of lovingkindness and the suffering of oneself or others. It is also considered the basis for sympathetic joy, which is defined as the meeting of lovingkindness and the happiness of others. Taken together, equanimity, lovingkindness, compassion, and sympathetic joy are essential to the process of realizing not-self, which is self-perpetuating.

There is very little formal research into not-self, or its processes of letting go of attachments, within Western psychology; however, related concepts exist. These can be found in several psychological theories and approaches to therapy. For example, Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) is a treatment modality demonstrated as useful in treating a number of difficulties, including: anxiety, depression, psychosis, substance abuse, and health issues (see Powers, Zum Vörde Sive Vörding, & Emmelkamp, 2009 for a review). It consists of six core processes, and although there are no specific studies on the individual processes, two of them appear related to the not-self approach: acceptance, and self as context. Acceptance is defined as "the active and aware embrace of [experiences] without unnecessary attempts to change their frequency or form" (Hayes, Luoma, Bond, Masuda, & Lillis, 2006, p. 7). This stance may reflect either a similar process to letting go, or a step within the process. Hayes et al. offer the example of an individual struggling with

chronic pain, wherein acceptance strategies encourage the individual to "let go" of the struggle to get rid of pain.

Self as context reflects a way of thinking about the self in terms of "one's own flow of experiences" (Hayes et al., 2006, p. 9). The approach is intended to decrease behavior which stems from the "conceptualized self." The conceptualized self is one which creates rigidity in behavior, in that conforming to it limits behavioral options. Self as context, conversely, reflects experiencing oneself as a point of view, a place from which one's own behavior and experiences are observed, rather than the content of what is observed. Self as context recognizes impermanence, in that what is observed is a continual flow, and the observer position, though constant, is not an actual "thing." The not-self conceptualization is clearly similar, in that both see the conceptualized self as a misunderstanding. Both also offer a potential framework for letting go of reified experiences as parts of the self. The difference seems related to the ultimate goals of ACT and not-self. ACT's main focus, as a psychological intervention, is on coping better with hardship, whereas not-self has an ultimate goal of relinquishing the self, which is seen as freedom from suffering.

Dialectical Behavior Therapy (DBT; Linehan, 1993) is another example of an approach with concepts similar to those of the not-self approach. DBT is demonstrated as useful for the treatment of Borderline Personality Disorder (Panos, Jackson, Hasan, & Panos, 2013). It is also effective in treating a number of difficulties, including: substance use (Dimeff & Linehan, 2008), disordered eating behavior (Bankoff, Karpel, Forbes, & Pantalone, 2012), depressive symptoms (Berking, Ebert, Cuijpers, & Hofmann, 2013), and bipolar symptoms (Van Dijk, Jeffrey, & Katz, 2012). DBT includes "radical acceptance" as an important behavior clients can benefit from developing. Radical acceptance is explained as a stance of accepting reality at a deep level,

including experiences of pain and distress. Acceptance from this perspective does not equal approval. Instead, it is suggested as a means for living with greater ease and grace in the presence of painful situations in life which cannot be changed. It can be thought of as letting go of fighting reality. This skill is taught through a number of practices, including simple psychoeducation, mindfulness exercises such as awareness of one's connection to the universe (e.g., visualizing one's connection to successively wider surroundings), half-smiling (e.g., a practice in which a "half-smile" is utilized to relax the face), and turning the mind (e.g., acknowledging painful situations without fighting them).

Finally, Gilbert and Irons (2005) describe a form of relating to the self which appears similar to the Buddhist notion that the self creates a boundary from which one reacts defensively to perceived threats. They ascribe this kind of behavior to a form of what they term "self-to-self relating." They suggest that there are aspects of the self which exert an evaluative role over other aspects. For example, one aspect of a person's self may have a desire to share his feelings with another person; however, another aspect of that person's self may criticize that desire as naïve. This process may be a Western psychological example of how the self, according to Buddhism, works to reinforce delineations between self and other.

The ACT and DBT concepts appear to overlap with a not-self perspective, as do their practices to some extent, which are utilized to realize not-self (i.e., mindfulness practices, though with different goals). Acceptance within ACT and DBT focuses on areas of psychological suffering, and is used to reduce that suffering. The not-self approach, however, seeks broad level change in orientation toward the self, with the ultimate intention of letting go of the self entirely. Self-to-self relating may describe a relationship to the self similar to that which Buddhism seeks to relinquish. Because of clear overlap in some goals and methods, ACT, DBT, and self-to-self

relating may be useful starting points in conceptualizing not-self within a Western psychological frame.

Similarities and differences across approaches to the self. This study will compare the four systems of thought concerning the self just described: self-esteem, self-control, selfcompassion, and not-self. While distinct in many ways, these conceptual approaches also have overlap that complicates making comparisons. Two approaches, self-esteem and selfcompassion, are particularly similar, in that they both involve the generation of thoughts or feelings toward the self. The key distinction between these two approaches is that while selfesteem involves generating an overall positive evaluation of the self, self-compassion does not involve evaluation of the self at all (Neff, 2003b). In some cases, an individual may both judge the self positively and direct kindness to the self. For example, if an individual were to engage in an exercise from Neff and Germer's (2013) MSC program, such as repeating self-compassionate phrases to herself throughout the day, she would feel greater kindness toward herself. These feelings of self-kindness may also make her evaluate herself more positively. In other cases, however, self-esteem and self-compassion may have very little overlap. For example, an individual may judge himself negatively in comparison to others (i.e., have low self-esteem). In spite of this, he can still direct compassion toward himself—perhaps even as a result of his negative self-judgments.

In contrast to both self-esteem and self-compassion, a self-control approach would not involve working on generating feelings, but would instead be about generating the capacity for change and goal-directed behaviors (Baumeister & Alquist, 2009). Thus self-control is not centrally about how one feels about the self, but about being able to control one's actions in a manner that is consistent with one's goals and ideals.

The processes of moving toward realizing not-self includes generating compassion for the self and others, similar to a self-compassion approach; however, compassion in not-self is in the service of dropping attachments. The steps of moving toward not-self do involve self-control (Herwitz, 2012). For example, the not-self process is understood to involve engagement in rigorous meditative practices; however, utilizing self-control to engage in these activities is not the ultimate goal of the not-self perspective, but a means to an end. Additionally, self-control within the present study focuses on its aspect of determining and working toward specific solutions, rather than on discipline per se.

#### The Self Under Stressful Conditions

People make contact with how they perceive themselves, what qualities they feel themselves to have, what strengths and weaknesses they have, and who they are as people in all contexts of life. One very salient type of situation that may activate feelings about and responses to the self is the experience of failure. In fact, much of the research on how individuals experience the self in difficult situations utilizes failure paradigms. The typical experiment involves participants' engagement in tasks on which they are subsequently given feedback that they have done poorly. Hattie and Timperley (2007) conducted an exhaustive review of literature and research on "feedback," from which they developed a general model of feedback and its effects. The most relevant finding was the effect of feedback on the self, as demonstrated in studies where failure is contrived. Their contention was that negative feedback has a potent effect on how individuals perceive the self, citing evidence that it leads to greater self-focus, as well as decreased self-esteem. In other words, negative feedback about performance evokes self-directed thought and can evoke negative attention aimed at the self.

The effects of negative feedback, and, according to Hattie and Timperley's (2007) work, thus of negative self-attention, can be further seen in a variety of studies. Fladung, Baron, Gunst, and Kiefer (2010) found that negative feedback during a prolonged achievement task led depressed participants to make more mistakes than controls as the task continued. Krenn, Wurth, and Hergovich (2013) found that participants who received negative feedback on successive tasks of varying difficulties did not choose subsequent tasks of greater difficulty. Peterson and Behfar (2003) found that negative feedback to participants engaging in group tasks led to increased group conflict. Daniels and Larson (2001) found that graduate students in helping professions (i.e., counseling, clinical psychology) who were given negative feedback on a counseling session experienced increased anxiety. These few examples illustrate the difficulties which individuals can experience following failure feedback. Coupled with the work of Hattie and Timperley (2007), it can be speculated that attention drawn to the self in these circumstances plays a role in negative outcomes. This highlights the importance of understanding approaches to the self in difficult situations.

The four approaches to the self within the present study suggest different ways of managing stressful events in terms of self-relating. Rosenberg's (1989) model of self-esteem describes self-esteem as appraisal of the self. Applying this to failure situations, people who are focused on maintaining their self-esteem may respond to failure by attempting to focus on things such as their likeable qualities, past positive behaviors, and past successes, thereby generating positive feelings about the self.

A self-control approach, as outlined by Baumeister and Alquist's (2009) broad definition, emphasizes the ability to change and/or control aspects of one's behavior. In the context of failure, a focus on self-control might involve changing the self, or aspects of the self, in response

to a stressful event. This would first involve the individual understanding what his goals are within the situation. Depending on the kinds of goals, he would then resolve to find ways to achieve them, for example through finding more information, problem-solving, developing additional skills, or more effective strategies. He may then take steps to initiate the solution or new behavior.

Neff and Germer's (2013) protocol for cultivating self-compassion (i.e., MSC program) is an appropriate guide for understanding a self-compassion approach to oneself following failure experiences. The self-compassion approach would therefore involve the core processes of self-kindness, common humanity, and mindfulness. In response to the difficult situation, the individual would first work toward a stance of caring and support toward himself. The next element would be for the individual to remind himself of the fact that everyone goes through similarly difficult situations. Finally, the person would work toward experiencing his feelings in a nonjudgmental manner.

The not-self approach to a stressful situation, based on Herwitz (2012), would be to let go of the root causes of stress in the situation. The underlying cause would ultimately be attachment to a particular outcome which was not achieved. Letting go would involve realizing that holding on to the desire for the preferred outcome only causes greater stress. The individual would then work to recognize the temporary nature of his feelings in the moment, allowing him to more easily let go of the urge to ruminate on the negative experience. Letting go of that urge would thus reduce his negative feelings. This process of letting go would occur within a broader context of understanding that attachments, such as desires, expectations, and feelings, are conflated with the existence of a self. Recognition of how belief in the self leads to defense of

these attachments, and therefore further distress, frees the individual from experiencing that distress.

These four approaches present different applications of relating to the self under difficult situations. The current study examined two considerations: a) how people are likely to approach themselves in times of stress, and b) how they believe it would be most helpful to approach themselves. Underlying these questions is the assumption that understanding ways in which people prefer to approach themselves in times of stress would be clinically useful. For example, a client who feels it would be most helpful to focus on working toward goals in times of stress is likely entering therapy in a very different way than a client who believes that he would benefit from learning how to respond to himself with greater compassion and kindness. The therapist may choose to match the intervention to the client's preference, or may feel that the client could benefit from an inconsistent approach (e.g., increase self-compassion even if against the client's initial wishes). In the latter case, the therapist would have to introduce the ideas in a manner respectful of the client's own version of what is needed.

Additionally, it is useful to understand the psychological factors which are related to the process of choosing a particular approach. For instance, if clients who endorse depressive symptoms would find an approach consistent with focus on working toward goals most helpful, then self-control approaches may be indicated for depression. If clients high in neuroticism believe that they are best served by cultivating kindness toward themselves, then self-compassion approaches may be indicated for individuals high in this personality factor. In general, it may also be useful to simply understand the degree to which clients are open to certain approaches. For example, if a client is simply uninterested in the notion of letting go of their stress, then the not-self approach would not garner that client's buy-in. These kinds of inquiries

assume that people generate ideas and theories about what they are likely to do under periods of stress, and what would be most helpful for them to do during those periods. There is some research related to this, including ideas about how clients' beliefs about what causes their stress influences treatment choice, as well as the effects of matching treatment to client preferences.

**Attributions for problems, and treatment preferences.** A client's understanding of how he approaches himself currently, and what would likely be a helpful way to approach himself, has implications for how a therapist approaches treatments with that client. Available research on illness attributions and client treatment preferences is therefore relevant. Illness attributions are the explanations that clients offer for their distress or mental disorder (Addis, Truax, & Jacobson, 1995). Consistent with the prevailing literature on illness attribution, Schweizer et al. (2010) investigated depression attribution and treatment choice. They gave a measure of depression attribution to a clinical sample of 221 individuals with depression, and subsequently based treatment (i.e., cognitive-behavioral therapy, interpersonal therapy, psychopharmacological treatment) assignment on preferences expressed by participants. Results indicated that individuals who attributed their depression to intraindividual factors (i.e., characterological, achievement, existential, physical) were more likely to choose cognitivebehavioral therapy; individuals who attributed their depression to biological factors (e.g., inherited or genetic traits, being "wired" a particular way) were more likely to choose psychopharmacological treatment. These results suggest that individuals' understanding of their distress can guide treatment decisions. Studies like this support the relevance of the current study in terms of its focus on how people understand both how they respond to stress in terms of its impact on the self, as well as what they would believe would be the most helpful way to respond to themselves.

A related line of research looks at whether client preferences for treatment modalities affect how clients approach psychotherapy. Gelhorn, Sexton, and Classi (2011) conducted a meta-analysis of 15 articles which examined the effects of client preferences on variables such as depression severity, treatment initiation, persistence and adherence, treatment engagement, the development of the therapeutic alliance, and health-related quality of life. Although they found that preference had minimal effect on treatment outcomes, it did have a significant effect on treatment initiation, and development of the therapeutic alliance. The authors were careful to add, however, that the literature on client preference is generally limited to secondary analyses, without many explicit examinations of effects.

In spite of the limited nature of the illness attribution and client preference literature, they offer insight into the current investigation. First, although the present study did not strictly use an illness attribution approach, it assumed that the general frame of illness attribution can be utilized to further understand participant preferences. The study compared a range of psychological factors to understand which of those were associated with preferences. A participant's endorsement of a particular approach to the self as likely to be helpful may be related to personality characteristics, and/or psychological symptomology. The study allowed for examination of these relationships. Second, because the concepts of self-compassion and not-self are relatively new, any future work toward applying them would benefit from understanding feelings about these approaches and their potential buy-in. The work of Gelhorn, Sexton, and Classi (2011) suggests that client preference helps with this process.

**Pilot data.** In preparation for the present study, pilot data were collected to address two specific questions related to feasibility. The first question concerned the workability of measuring people's responses to the four stances toward the self. This included whether

participants could comprehend descriptions of the four approaches to the self to the degree that they could provide ratings for how likely they would be to use them, as well as for their helpfulness. The second question concerned whether there would be adequate variability in responses.

Pilot data were collected on participants' likelihood of responding to difficult situations from each of the four approaches to self, as well as the extent to which they believe each approach would be helpful. Participants were 66 undergraduate students enrolled in psychology summer courses. Participants were first asked to:

Please take a moment to bring to mind a problem that made you feel bad in some way (for example, a difficult relationship, not achieving something you wanted, struggling to cope with painful feelings, etc.). This could either be a current problem, or a past problem. Please write a brief description of your problem in the space below without using names of specific people or places.

They were then presented with brief descriptions of each of the four approaches to the self:

There are many ways to think about problems, and about ourselves, in order to manage the difficult feelings problems cause. Below are four different ways you can think about yourself when a life problem occurs.

The self-esteem approach was:

Consider the good things about yourself. Think about your strengths. You are a good person, even if you sometimes feel bad about yourself. This problem does not change the good person who you are.

### The self-control approach:

Consider your values (the things in life that are most important to you). Focus on how your problem is small relative to your values, and how you still have goals that are important for you to achieve, in spite of your problem.

## The self-compassion approach:

Consider approaching yourself with some compassion. Think about how all people make mistakes and struggle, and try to be kinder towards yourself. Focus on feeling kindness for yourself, rather than focusing on your difficult feelings.

## The not-self approach:

Consider letting go of your difficult feelings. These feelings will change, and holding onto them will only cause you to feel more upset. Remember that everything in life is temporary, and that you do not need to get overly attached to how your problem might turn out.

Participants were asked to rate on a scale from 0-4 ("0" being "not at all," "4" being "extremely"): 1) their perceptions of the helpfulness of the approach, and 2) the likelihood of their using the approach. Additionally, participants were asked to rank-order the descriptions from 1 to 4 first on helpfulness, and then on likelihood of use.

The final analysis included 48 participants (female n = 27) who had fully and correctly completed the surveys. Eighteen participants either neglected to fill in all rankings and ratings, or filled the ranking sections with inapplicable responses (i.e., rating approaches, rather than ranking them). The instructions were apparently not sufficiently clear during a first round of data collection, and were therefore modified to be clearer for subsequent rounds.

Means and standard deviations for the two separate ratings of the four approaches to the self are presented in *Table 1*. As can be seen by the results, there was substantial variation in ratings on helpfulness. In other words, the participants were not all rating only one or two approaches as useful, but all four were rated as potentially viable, on average. On the likelihood of use dimension, participants rated the approaches somewhat lower than their ratings of helpfulness; however, they did not reject any particular approach as not viable. They did rate the likelihood of responding with self-compassion somewhat lower than other approaches, with the highest rating given for the self-control approach.

Table 1

Means and Standard Deviations of Helpfulness and Likelihood Ratings

Rating Type	М	SD
Self-Esteem Helpfulness	2.56	.987
Self-Control Helpfulness	2.52	1.091
Self-Compassion Helpfulness	2.21	1.184
Not-Self Helpfulness	2.60	1.162
Self-Esteem Likelihood	1.96	1.031
Self-Control Likelihood	2.25	1.246
Self-Compassion Likelihood	1.63	1.024
Not-Self Likelihood	2.17	1.326

First-place rankings for the two separate dimensions of the four approaches to the self are presented in *Figure 1*. When participants were forced to choose between which approaches would be most helpful, there was substantial variation in responding, with no one approach being chosen much more frequently than any other; percentages ranged from 16% to 34% for self-compassion and self-esteem respectively, with self-control and not-self both ranked first by 30% of participants. When forced to choose between which approaches participants would be most likely to use, participants again were widely distributed across the approaches in which they

identified as ranking first; however, in this case, substantially fewer said they were likely to use self-compassion (9%), whereas the largest proportion reported most likely using self-control (43%). Thirty-four percent ranked not-self first, and 23%, self-esteem. These data suggested that all four approaches were seen as viable by some proportion of the sample, the smallest being 9%, suggesting that participants were able to make distinctions between the approaches, and that there was sufficient variability in responses to proceed.

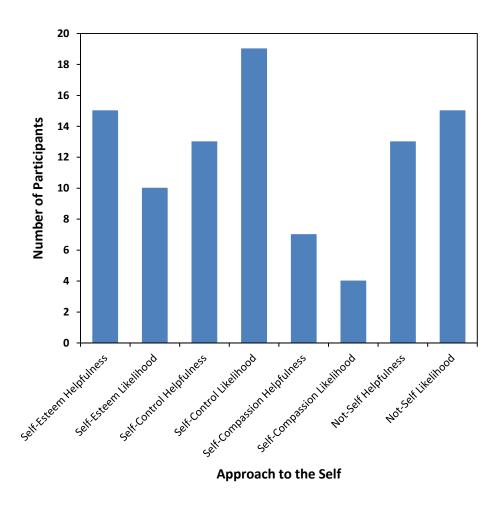


Figure 1. First Choice Rankings on Each Approach to the Self for Helpfulness and Likelihood.

### **Present Research**

The present study compared the four aforementioned ways of approaching the self (i.e., self-esteem, self-control, self-compassion, not-self). Participants were asked to rate expert-

informed descriptions of each approach to the self on the same dimensions used in the pilot study (i.e., likelihood of use, and perceived helpfulness). As in the pilot study, they were asked to rank these descriptions on both dimensions. Unlike the pilot study, participants rated and ranked the descriptions in terms of general ways of approaching the self during times of stress (i.e., "trait" responses), as well as relative to a specific problem (i.e., "state" responses). In the latter case, participants were also asked to rate the difficulty or intensity of the problem, to choose how recently the problem occurred and whether it was ongoing, and to choose its category (e.g., "problem at work," "romantic relationship problem"). These changes were intended to bring greater clarity and depth to the participants' responses. Additionally, because of the complexity and relative novelty of not-self, it was represented by two descriptions: the process of not-self (i.e., not-self "experiences"), and the fundamental concept of not-self (i.e., not-self "core"). Notself experiences was similar to the description used in the pilot study; while this description reflects the process of not-self as described by Herwitz (2012), it does not explicitly include letting go of the self. Not-self core was added to highlight this aspect. With this addition, the four approaches to the self were reflected by five descriptions.

Data on personality traits, symptomology, and psychological adjustment were also collected. The first goal of this research was to explore which approaches to self were most likely to be used, and which were seen as most helpful. This replicated the spirit of the pilot study while utilizing a larger sample. Statistical comparisons were made to determine whether any particular approach or approaches were more likely used and/or seen as more helpful than any other. The second goal of this research was to determine whether there were relationships between participant ratings for the approaches to the self, and personality factors, levels of

psychological symptomatology, and levels of psychological adjustment. The specific research questions were the following.

Which approach to the self do participants rate and rank most highly? This basic question was assessed through analyses of participant ratings and rankings of the state and trait likelihood and helpfulness aspects on the descriptions measure. The present research assumed that individuals tend to have ideas and theories for how they are likely to respond to difficult situations, as well as for what would be most helpful for them in responding to those situations. The prompts for measuring these concepts relative to the descriptions were adapted from the measure used in the pilot study (see *Appendix A*), with revisions made to the descriptions based on consultation with experts on each.

Do measures of self-esteem, self-control, self-compassion, and not-self correlate with the respective descriptions of approaches to the self? Levels of reported self-esteem, self-control, and self-compassion may relate to ratings of the approaches. For example, a person who reports high self-compassion on a self-compassion measure may also rate this as a likely response to stress, and may also rate it highly as a helpful approach. Self-esteem was assessed using the Rosenberg Self-Esteem Scale (Rosenberg, 1989), one of the most commonly used measures of this construct. Self-control was assessed using the Brief Self-Control Scale (Tangney et al., 2004), which is based on Baumeister's conceptualization of self-control. Self-compassion was assessed using the Self-Compassion Scale, which is based on Neff's (2003a) conceptualization of self-compassion. Because there is not currently a measure for not-self, two potentially relevant measures were used instead. Not-self was assessed both with a measure of acceptance, the Acceptance & Action Questionnaire – II (Bond et al., 2011), and a measure of

the Buddhist concept of nonattachment (i.e., a stance of letting go), the Non-Attachment Scale (Sahdra, Shaver, & Brown, 2010).

Do personality traits relate to ratings of approaches to the self? The self and personality traits are related—and often considered identical—constructs (John, Robinson, & Pervin, 2010). Therefore, different ways of approaching the self under stress may be related to personality factors. The Five-Factor Model of personality is one of the most widely studied conceptualizations of personality (Poropat, 2009), and contains the following factors (John & Srivastava, 1999): openness (i.e., imaginative, artistic, curious, excitable, unconventional), conscientiousness (i.e., efficient, organized, careful, thorough, motivated, deliberate), extraversion (i.e., sociable, assertive, energetic, adventurous, enthusiastic, outgoing), agreeableness (i.e., trusting, undemanding, warm, flexible, modest, sympathetic), and neuroticism (i.e., tense, irritable, discontent, shy, moody, insecure). These factors were measured with the Big Five Inventory (Soto & John, 2009).

Are current affect, quality of life, or psychological symptoms related to ratings on approaches to the self? Presence of psychological symptomology may relate to ratings on approaches to the self. For example, a person in high distress (e.g., depression) may have difficulty generating positive feelings about herself, or may have trouble generating the motivation to engage in activities related to self-control. Psychological symptomology was assessed via the Outcome Questionnaire – 45.2 (Lambert et al., 1996), which provides a general assessment of psychopathology. Psychological adjustment variables may also relate to preferences for approaches. A general rating of mood was measured using the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988), and quality of life was assessed with the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). The

relationship between all of these variables and ratings on the descriptions measure were examined.

#### Method

## **Participants**

Two hundred twenty-five English-proficient participants were recruited from the undergraduate Introduction to Psychology research pool and summer session psychology courses at The University of Montana. One hundred seventy-three participants completed the full battery of measures; of these, one participant's data were removed due to being below the minimum participation age of 18 years old, and data from four others were removed for not completing all ratings in the descriptions of approaches to the self measure, leaving a total of 168. The remaining 52 participants were recruited for a one-week test-retest reliability check, for which they completed only the descriptions measure at both time points; of these, five participants were removed from analysis for either not completing all ratings, or for not being present at both time points, leaving a total of 47. See *Tables 2* and *3* for demographics information of all included participants. All participants were compensated with required research credit, or with extra credit.

Table 2

Demographics for Full Data Collection Pool

Demographics	n	%	М	SD
Age <sup>b</sup>	166	98.8	20.87	4.94
Gender <sup>a</sup>				
Female	112	66.7		
Male	54	32.1		
Other	1	.6		
Relationship Status <sup>c</sup>				
Single/Never Been Married	136	81.0		
Civil Union/Partnership	16	9.5		
Married	11	6.5		
Divorced	2	1.2		
Sexual Orientation <sup>a</sup>				
Heterosexual	153	91.1		
Homosexual	3	1.8		
Bisexual	11	6.5		
Race/Ethnicity <sup>d</sup>				
American Indian or Alaska Native	9	5.4		
Asian or Asian-American	5	3.0		
Black or African-American	2	1.2		
Hawaiian or Other Pacific Islander	2	1.2		
Hispanic or Latino	9	5.4		
Non-Hispanic White	137	81.5		_

<sup>&</sup>lt;sup>a</sup>1 missing value. <sup>b</sup>2 missing values. <sup>c</sup>3 missing values.

d4 missing values.

Table 3

Demographics for Test-Retest Reliability Pool

Demographics	n	%	М	SD
Age <sup>a</sup>	46	98.8	23.80	5.123
Gender				
Female	33	70.2		
Male	14	29.8		
Other	0	0		
Relationship Status <sup>c</sup>				
Single/Never Been Married	36	76.7		
Civil Union/Partnership	5	10.6		
Married	6	12.8		
Divorced	0	0		
Sexual Orientation				
Heterosexual	45	95.7		
Homosexual	0	0		
Bisexual	2	4.3		
Race/Ethnicity <sup>a</sup>				
American Indian or Alaska Native	1	2.1		
Asian or Asian-American	0	0		
Black or African-American	1	2.1		
Hawaiian or Other Pacific Islander	0	0		
Hispanic or Latino	2	4.3		
Non-Hispanic White	42	89.4		

<sup>&</sup>lt;sup>a</sup>1 missing value.

## Measures

**Demographics.** A short demographics form was included at the beginning of each packet asking about gender, age, sexual orientation, marital status, and race/ethnicity (*Appendix B*).

**Descriptions measure.** Two surveys developed by the investigator (*Appendix C*)—one state, one trait—were used to measure ratings and rankings on approaches to the self. The state

measure contained the following: 1a) a prompt asking participants to recall and briefly describe—without identifying information, such as names of people or places—"a problem that made you feel bad in some way (for example, a difficult relationship, not achieving something you wanted, struggling to cope with painful feelings, etc.)"; 1b) four questions which asked participants to: rate the difficulty/intensity of the problem on a five-point Likert scale (i.e., from "not at all" to "extremely"), choose how recently the problem occurred (i.e., "past week," "past two weeks," "past month," "past two months," "longer than two months"), confirm whether or not the problem was ongoing, and choose a categorization which most accurately described the problem (i.e., "not succeeding at something," "problem at work," "problem at school," "romantic relationship problem," "problem with a friend," "problem with a family member", "other" which was accompanied by a write-in space for further explanation); 2) a prompt which introduced the five descriptions of approaching the self as different ways "to think about problems, and about ourselves, in order to manage the difficult feelings problems cause"; 3) descriptions of each way of thinking about the self while in a difficult situation; 4) five-point Likert scales which asked participants to rate each description on two domains: the likelihood of using each way of approaching the self, and the perceived helpfulness of each way of approaching the self; 5) a fill-in-the-blank section which asked participants to rank-order each description on likelihood and helpfulness from 1 to 5, with "1" being highest likelihood/most helpful, and "5" being lowest likelihood/least helpful. The trait survey followed the same format, except that the first prompt (and its subsequent problem characteristics) were substituted with one that asked participants to consider the descriptions "in general (in other words, not in response to a specific problem)."

Following the initial pilot research, the descriptions of each way of approaching the self were refined with assistance from an expert on each concept. "Expert" is defined as an individual either actively engaged in research on the concept, and/or someone who has published extensive reviews on the concept. Jennifer Crocker, Ph.D. was the expert on self-esteem. Her article, *The Costly Pursuit of Self-Esteem* (Crocker & Park, 2004) provides a detailed review of self-esteem research and theory, and has been cited 650 times ("Google Scholar," 2013). Her response to the draft description of a self-esteem approach (i.e., the one used in the pilot study) was the following: "I don't think 'good' is the term to use. If it were me, I would reword to, 'you have worth and value." As a result, the self-esteem description was revised to the following:

Consider that you are a person of worth and value. Think about your strengths. You have many positive qualities, even if you sometimes feel bad about yourself. This problem does not change your basic worth as a person.

The pilot study self-control description was developed with assistance from Robert A. Carels, Ph.D., who developed a self-control intervention for weight loss based on the research of Roy Baumeister, Ph.D. (Carels, Darby, Cacciapaglia, & Douglass, 2004). Baumeister, as previously noted, is a prominent researcher on self-control. He was consulted for revision of the pilot description, to which he replied that he did not believe it reflected a self-control approach. Jessica Alquist, Ph.D., who has worked with Baumeister and whose articles have been cited dozens of times ("Google Scholar," 2013), was then consulted and gave the following feedback:

Self-control tends to encompass both goal-pursuit and impulse control. For that reason, you may want to consider adding something about avoiding distractions or other things that may hinder your progress. You could also consider breaking those apart into two

different responses that represent a prevention (avoid temptations/mistakes) and promotion (pursue goals) focus.

As a result, the self-control description was revised to the following:

Consider your goals in the situation and focus on what you need to do in order to move closer to those goals. Avoid distractions that might interfere with working toward your goals. Think about the next steps you need to take, and stay focused on completing those steps.

The self-compassion description was developed with assistance from Kristen Neff, Ph.D. Although other researchers have conceptualized the underlying theory of self-compassion in different ways (e.g., most notably, Gilbert & Irons, 2005), Neff (2003b) was the first to formally investigate the approach. She suggested that the last sentence of the self-compassion description be changed from the pilot version's "focus on feeling kindness for yourself, rather than focusing on your difficult feelings" to "focus on feeling kindness for yourself, because you are experiencing difficult feelings." This change was adopted for the present research.

The two not-self descriptions were based on Herwitz (2012), as there is very little other formal research within Western psychology on not-self. Not-self experiences (i.e., the process of not-self) resembled the description from the pilot study, revised to the following:

Consider that your difficult feelings are temporary, and that this problem will not last forever. The situation is not how you wanted things to be, but holding on to what you wanted is only causing your painful feelings to stick around. Focus on letting go of the way you wish things were.

Not-self core was intended to directly reflect not-self concepts:

Consider how ideas you have about who you are and how you should be may be at the root of your pain. Think about the fact that your feelings are not essential to who you are. It is possible to let go of your belief in a particular sense of yourself. Focus on letting go of that sense of yourself.

#### Related construct measures.

Rosenberg Self-Esteem Scale (RSE). The RSE (Rosenberg, 1989; Appendix D) is a 10item, single-factor measure which asks participants to rate on a 4-point scale to what degree they
agree with statements reflecting global self-worth. Studies have reported good internal
consistency for university samples at .88, and a test-retest reliability over a one-week period of
.82 (Gray-Little, Williams, & Hancock, 1997).

Brief Self-Control Scale (BSCS). The BSCS (Tangney et al., 2004; Appendix E) is a 13item, single-factor measure which asks participants to rate on a 5-point scale the degree to which statements reflecting self-control behaviors and cognitions are consistent with their own behaviors. The BSCS has an internal consistency ranging from .83 to .85, and a test-retest reliability over a three-week period of .87.

Self-Compassion Scale (SCS). The SCS (Neff, 2003a; Appendix F) is a 26-item measure which asks participants to rate on a 5-point scale the frequency with which they behave in ways reflective of or opposite to self-compassion. As previously noted, the measure yields a total score, as well as scores on the three factors of self-compassion (i.e., self-kindness, common humanity, mindfulness), and their converses (i.e., self-judgment, isolation, over-identification). The internal consistency alphas for each subscale were acceptable or better: .92 for the total self-compassion, .77 for the self-kindness, .80 for the common humanity, .81 for the mindfulness, .77

for the self-judgment, .79 for the isolation, and .81 for the over-identification. Test-retest reliability over three weeks for SCS scores were: .93 for total self-compassion, .88 for self-kindness, .80 for common humanity, .85 for mindfulness, .88 for self-judgment, .85 for isolation, and .88 for over-identification.

Acceptance & Action Questionnaire – II (AAQ). The AAQ (Bond et al., 2011;

Appendix G) is a 7-item, single-factor measure which asks participants to rate on a 7-point scale the degree to which they agree with statements reflecting psychological inflexibility.

Psychological inflexibility is the opposite of the ACT conceptualization of acceptance; therefore, lower scores on the AAQ reflect greater levels of an accepting stance. The AAQ has an internal consistency ranging from .78 to .88, and its 3-month test-retest reliability is .81.

**Non-Attachment Scale** (NAS). The NAS (Sahdra et al., 2010; Appendix H) is a 30-item, single-factor measure which asks participants to rate on a 6-point scale the degree to which they agree with statements reflecting the absence of fixation on ideas, images, and sensory objects, as well as internal pressure to get, hold, avoid, or change circumstances or experiences. The NAS has an internal consistency of .94, and a one-month test-retest reliability of .87.

# Personality factors.

Big Five Inventory (BFI). The BFI (Soto & John, 2009; Appendix I) is a 44-item measure which asks participants to rate on a 5-point scale the degree to which they agree or disagree with statements reflecting the five personality factors. The BFI has an internal consistency mean of .70, a test-retest reliability mean of .80 among university students. Also among university students, it has a convergent reliability mean of .93 with the Revised NEO Personality Inventory (Costa & McCrae, 1992), a widely used measure of the Five-Factor Model of personality.

## Psychological adjustment and symptoms variables.

Positive and Negative Affect Schedule (PANAS). The PANAS (Watson et al., 1988; Appendix J) is a 20-item measure which asks participants to rate on a 5-point scale the degree to which words reflective of positive or negative affect represent their present or recent mood states. For the present study, participants were asked to rate their mood over the past week. The PANAS yields a measure of positive affect, and a measure of negative affect. The internal consistency of the positive affect scale ranges from .86 to .90, and from .84 to .87 for negative affect. The test-retest reliability over eight weeks is .68.

Satisfaction with Life Scale (SWLS). The SWLS (Diener et al., 1985; Appendix K) is a 5-item, single-factor measure which asks participants to rate on a 7-point scale the degree to which they agree with statements reflecting general aspects of well-being. The SWLS has an internal consistency of .80, and a two-week test-retest reliability of .89 (Pavot & Diener, 1993).

Outcome Questionnaire – 45.2 (OQ). The OQ (Lambert et al., 1996; Appendix L) is a 45-item measure which asks participants to rate on a 5-point scale the frequency with which they experience statements reflecting general symptomology. The OQ yields a total score of general distress, as well as scores on three subscales: symptom distress (i.e., distress from symptoms of anxiety, mood disorders, adjustment disorders, and stress), interpersonal relations (i.e., difficulties with others), and social role performance (i.e., tasks related to daily obligations). Among university students, the internal consistency of the total score is .93, .92 for symptom distress, .74 for interpersonal relations, and .70 for social role performance; the test-retest reliability these scores is .84, .78, .80, and .82, respectively.

**Additional measures.** Although beyond the scope of the present study, data was collected on a number of additional variables. These variables will be used for related research

questions in the future. The following are additional measures which were completed by participants; the order of measures reflects the order in which they were given to participants. These measures were given to participants after the measures pertaining to the present study's research questions.

*Beck Anxiety Inventory (BAI)*. The BAI (Beck, Epstein, Brown, & Steer, 1988; *Appendix M*) is a 21-item, single-factor measure which asks participants to rate on a 4-point scale the degree to which they experience symptoms reflecting anxiety. The BAI has an internal consistency of .92, and a one-week test-retest reliability of .75.

*Beck Depression Inventory – II (BDI)*. The BDI (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961; *Appendix N*) is a 21-item, single-factor measure which asks participants to rate on a 4-point scale the degree to which they experience symptoms reflecting depression. It has an internal consistency of .87, and a test-retest reliability of which exceeds .60 across multiple studies (Beck, Steer, & Carbin, 1988).

DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure – Adult. The DSM-5

Level 1 (American Psychiatric Association, Diagnostic and Statistical Manual of Mental

Disorders, 2013; Appendix O) is a 23-item measure which asks participants to rate on a 5-point scale the frequency with which they experience symptoms reflective of a range of DSM-5 mental disorders, including: depression, anger, mania, anxiety, somatic symptoms, suicidal ideation, psychosis, sleep problems, memory difficulties, repetitive thoughts and behaviors, dissociation, personality functioning, and substance. It has demonstrated good test-retest reliability in the DSM-5 Field Trials.

*Emotion Control Questionnaire* -2 (*ECQ*). The ECQ2 (Roger & Najarian, 1989; *Appendix P*) is a 56-item measure which asks participants to choose whether statements

reflecting how they manage emotions are true or false. The ECQ2 yields score on four factors of emotion control: rehearsal (i.e., rumination over emotionally upsetting events), emotional inhibition (i.e., tendency to inhibit experienced emotion), benign control (i.e., inhibition of impulsiveness), and aggression control (i.e., inhibition of hostility). The ECQ2 scales have the following internal consistency: .86 for rehearsal, .77 for emotional inhibition, .79 for benign control, and .81 for aggression control. The scales have the following test-retest reliability: .80 for rehearsal, .79 for emotional inhibition, .92 for benign control, and .73 for aggression control.

Kentucky Inventory of Mindfulness Skills (KIMS). The KIMS (Baer, Smith, & Allen, 2004; Appendix Q) is a 39-item measure which asks participants to rate on a 5-point scale the degree to which statements reflecting mindfulness skills are true. The measure yields scores on four different mindfulness factors: observing (i.e., ability to notice internal and external phenomena), describing (i.e., ability to nonjudgmentally describe observed phenomena), acting with awareness (i.e., ability to be attentive to the moment), and accepting without judgment (i.e., ability to accept reality without avoidance). The scales have the following internal consistency: .91 for observing, .84 for describing, .83 for acting with awareness, and .87 for accepting without judgment. The test-rest reliability for approximately two weeks was as follows: .65 for observing, .81 for describing, .86 for acting with awareness, and .83 for accepting without judgment.

PTSD Checklist – Civilian Version (PCL-C). The PCL-C (Weathers, Litz, Herman, Huska, & Keane, 1993; Appendix R) is a 17-item measure which asks participants to rate on a 5-point scale the degree to which they experience symptoms reflective of DSM-IV PTSD criteria. It yields a total posttraumatic stress severity score, as well as scores reflective of criteria B through D (i.e., re-experiencing, avoidance, hyperarousal). The internal consistency of these

scores is: .94 for total score, .85 for re-experiencing, .85 for avoidance, and .87 for hyperarousal; the one-week test-retest availability for the total score is .88 (Ruggiero, Del Ben, Scotti, & Rabalais, 2003).

Valued Living Questionnaire (VLQ). The VLQ (Wilson & Murrell, 2004; Appendix S) is a 20-item measure which asks participants to rate on a 10-point scale the degree to which 10 valued domains of living are important and consistent with their behavior. Internal consistency for the composite of the domains is .74; test-retest reliability ranged from .43 to .61 (Wilson, Sandoz, Kitchens, & Roberts, 2011).

### **Procedure**

All measures were administered in a single packet to groups of approximately 30. The groups were conducted in a classroom setting. The order of the measures remained in the order listed in the above section, with the exception that the trait version of the descriptions measure followed the SWLS. Identifying information beyond demographics was not collected; instead, a unique ID was assigned to each packet of measures. Participants only rarely exceeded 45 minutes—and no participant took longer than 75 minutes—to complete the full for 448 items; therefore, it is not believed that any participant experienced undue fatigue. Participants were given 1 research credit per half-hour. The data was then inputted into an SPSS spreadsheet by trained research assistants.

For the separate one-week test-retest reliability check, all participants completed the demographics questionnaire, then approximately half completed the state followed by the trait formats of the descriptions measure, while the others completed the trait followed by the state formats. This order remained for both time points.

### **Results**

## **Test-Retest Reliability**

Data were collected from 47 participants for a test-retest reliability check. Pearson correlations were calculated between state likelihood ratings at time 1 and time 2, trait likelihood ratings at time 1 and time 2, state helpfulness ratings at time 1 and time 2, and trait helpfulness ratings at time 1 and time 2. Of the resulting coefficients, all were significant and positive, but only three were within the acceptable range (i.e., greater than .60): self-esteem trait likelihood, r = .613, n = 47, p < .001, not-self experiences trait helpfulness, r = .601, n = 47, p < .001, and not-self core trait helpfulness, r = .638, n = 47, p < .001. The remaining coefficients varied between .324, and .537. The results are in *Table 4*.

Table 4

Pearson Correlations for Ratings of Likelihood and

Helpfulness on the Five Descriptions of Approaches to the

Self Under State and Trait Conditions at Time 1 by Time 2

	Time 1 by Time 2			
Description	Likelihood	Helpfulness		
State Self-Esteem	.447**	.476**		
State Self-Control	.383**	.384**		
State Self-Compassion	.324*	.462**		
State Not-Self Experiences	.332*	.487**		
State Not-Self Core	.398**	.422**		
Trait Self-Esteem	.613***	.328*		
Trait Self-Control	.356*	.504***		
Trait Self-Compassion	.513***	.492***		
Trait Not-Self Experiences	.439**	.601***		
Trait Not-Self Core	.537***	.638***		

<sup>\*\*\*</sup>p < .001, \*\*p < .01, \*p < .05 (two-tailed).

It is not surprising that the state ratings were only moderately correlated over time, because participants were specifically asked to respond to a single event. Participants were not

instructed to use the same event at both time points. Trait ratings, however, asked about "when life problems occur, in general," so it is concerning that some of the items were not that highly correlated—particularly self-control trait likelihood, and self-esteem trait helpfulness. Results of the remainder of the analyses for the present study must be interpreted while keeping in mind that reliability for this measure was in some cases somewhat low.

The data analyses were divided first into those focused on participants' ratings of their likelihood of utilizing each of the descriptions of the approaches to the self, followed in the next section by participants' ratings on the helpfulness of each approach.

## **Likelihood Ratings**

Which approaches to the self do participants rate as likely to use? This question was addressed first with descriptive statistics on the ratings of state and trait likelihood. The results of these analyses are presented in *Table 5*, and, *Figure 2*. Additionally, two, one-way, within subjects ANOVAs were conducted to compare ratings on likelihood for the five descriptions: one for state likelihood, the second for trait likelihood. The results are in *Table 6*.

Table 5

Means and standard deviations (SD) for Ratings of
Likelihood on the Five Descriptions of Approaches
to the Self Under State and Trait Conditions

Description	Mean	SD
State Self-Esteem	3.35	1.084
State Self-Control	3.57	.994
State Self-Compassion	3.26	1.045
State Not-Self Experiences	3.30	1.082
State Not-Self Core	2.82	.989
Trait Self-Esteem	3.49	1.116
Trait Self-Control	3.70	.982
Trait Self-Compassion	3.17	1.067
Trait Not-Self Experiences	3.65	1.044
Trait Not-Self Core	2.93	1.108

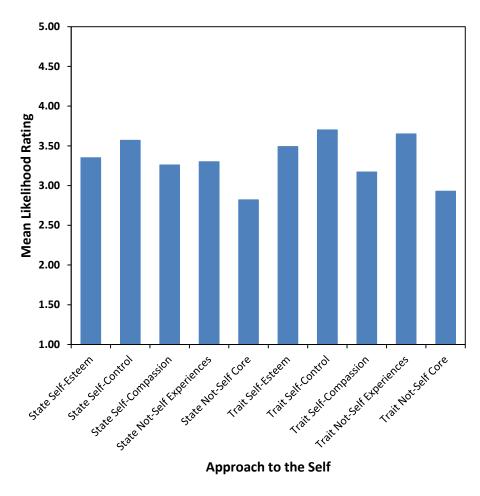


Figure 2. Mean Ratings of State and Trait Likelihood on the Five Approaches to the Self.

Table 6

Two, One-Way, Within Subjects ANOVAs Comparing Ratings

Between State Likelihood, and Ratings Between Trait Likelihood
on the Five Descriptions of Approaches to the Self

Ratings	df	SS	MS	F
State Likelihood	4	51.207	12.802	16.690***
Error	668	512.393	.767	
Trait Likelihood†	3.768	73.698	19.558	22.512***
Error	629.277	546.702	.869	

<sup>\*\*\*</sup>p < .001. †Huynh-Feldt sphericity correction.

There was a significant difference on ratings of state likelihood [F(4, 668) = 16.690, p < .001]. Post-hoc comparisons using paired samples t-tests for equality of means indicated that the mean rating for not-self core (M = 2.82, SD = .989) was significantly lower than self-esteem (M = 3.35, SD = 1.084); t(167) = -5.384, p < .001, self-control (M = 3.57, SD = .994); t(167) = -7.608, p < .001, self-compassion (M = 3.26, SD = 1.045); t(167) = -4.572, p < .001, and not-self experiences (M = 3.30, SD = 1.082); t(167) = -5.463, p < .001. The mean rating for self-esteem was significantly lower than self-control; t(167) = -2.367, p = .019. The mean rating for self-control was significantly higher than self-compassion; t(167) = 3.293, p = .001, and not-self experiences; t(167) = 2.746, p = .007.

There was a significant difference on ratings of trait likelihood [F(3.768, 629.277) = 22.512, p < .001]. Post-hoc comparisons using paired samples t-tests for equality of means indicated that the mean rating for self-compassion (M = 3.17, SD = 1.067) was significantly lower than self-esteem (M = 3.49, SD = 1.116); t(167) = -3.879, p < .001, self-control (M = 3.70, SD = .982); t(167) = -5.362, p < .001, and not-self experiences (M = 3.65, SD = 1.044); t(167) = -5.303, p < .001; self-compassion's mean rating was, however, significantly higher than not-self core (M = 2.93, SD = 1.108); t(167) = 2.341, p = .020. The mean rating for not-self core was

significantly lower than self-esteem; t(167) = -5.068, p < .011, self-control; t(167) = -7.275, p < .001, and not-self experiences; t(167) = -7.611, p < .001. The mean rating for self-esteem was significantly lower than self-control; t(167) = -2.182, p = .030.

Methodological problems arose on the aspect of the descriptions measure in which participants were asked to rank-order the approaches to self. A large number of participants did not use the scale accurately. Many incorrectly responded to the rankings section, in some cases placing numbers where they should have placed letters, in some cases placing the same letters in multiple ranking spots, and in other cases a combination of the two. Others left some or all of the rankings blank. Therefore, no analyses were conducted on ranking data.

Do measures of self-esteem, self-control, self-compassion, and not-self correlate with the respective descriptions of approaches to the self on likelihood? Pearson correlations were calculated between ratings on state and trait likelihood for the five descriptions of approaches to the self and the scales and subscales of the Rosenberg Self-Esteem scale (RSE), Brief Self-Control Scale (BSCS), Self-Compassion Scale (SCS), Acceptance & Action Questionnaire – II (AAQ), and Non-Attachment Scale (NAS). A Bonferroni-adjusted *p*-value of .002 was utilized for significance. The results are in *Table 7*.

Table 7

Pearson Correlations for Ratings of State and Trait Likelihood on the Five Descriptions of Approaches to the Self and Ratings on the Scales and Subscales of the RSE, BSCS, SCS, AAQ, and NAS

_	RSE	BSCS		Self-Compassion Scale						AAQ	NAS
Description	Total	Total	Self-	Self-	Common	Isolation	Mindfulness	Over-	Total	Total	Total
Description	Score	Score	Kindness	Judgment	Humanity	isolation	iviinutumess	Identification	Score	Score	Score
SL: Self-Esteem	.332*	.263*	.280*	230	.235	210	.330*	211	.345*	251	.288*
SL: Self-Control	.264*	.230	.213	058	.230	030	.195	203	.210	228	.324*
SL: Self-Compassion	.308*	.201	.448*	357*	.363*	230	.289*	349*	.477*	283*	.370*
SL: Not-Self Experiences	.195	.098	.298*	153	.256*	085	.241	242	.293*	156	.243*
SL: Not-Self Core	.084	.254*	.157	097	.198	078	.197	202	.211	123	.246*
TL: Self-Esteem	.474*	.404*	.510*	435*	.487*	380*	.391*	415*	.609*	413*	.585*
TL: Self-Control	.279*	.328*	.253*	079	.264*	050	.280*	179	.245*	213	.391*
TL: Self-Compassion	.281*	.258*	.461*	248*	.385*	152	.339*	226	.420*	199	.443*
TL: Not-Self Experiences	.294*	.193	.225	073	.228	134	.349*	253*	.277*	191	.323*
TL: Not-Self Core	.015	.086	.115	.034	.240	.053	.233	.038	.093	.000	.075

Note. RSE = Rosenberg Self-Esteem Scale; BSCS = Brief Self-Control Scale; SCS = Self-Compassion Scale; AAQ = Acceptance & Action Questionnaire - II; NAS = Non-Attachment Scale; SL = State Likelihood; TL = Trait Likelihood. Bold coefficients indicate relationships relevant to the research question.

<sup>\*</sup>p < .002 (Bonferroni-adjusted p-value; two-tailed).

There was a positive correlation between state self-esteem and the RSE, r = .332, n = 168, p < .001. There was no significant correlation between state self-control and the BSCS. The correlations between state self-compassion and the scales of the SCS were in the expected directions where significant: there were positive correlations with Self-Kindness, r = .448, n = 167, p < .001, Common Humanity, r = .363, n = 165, p < .001, Mindfulness, r = .289, n = 166, p < .001, and Total Score, r = .477, n = 167, p < .001; there were negative correlations with Self-Judgment, r = -.357, n = 167, p < .001, and Over-Identification, r = -.349, n = 165, p < .001. There was no significant correlation between state not-self experiences and the AAQ, but there was a positive correlation between state not-self core and the AAQ, but there was a positive correlation with the NAS, r = .246, n = 168, p = .001.

There was a positive correlation between trait self-esteem and the RSE, r = .474, n = 168, p < .001. There was a positive correlation between trait self-control and the BSCS, r = .328, n = 168, p < .001. The correlations between trait self-compassion the scales of the SCS were in the expected directions where significant: there were positive correlations with Self-Kindness, r = .461, n = 167, p < .001, Common Humanity, r = .384, n = 165, p < .001, Mindfulness, r = .339, n = 166, p < .001, and Total Score, r = .420, n = 166, p < .001; there was a negative correlation with Self-Judgment, r = -.248, n = 167, p = .001. Trait not-self experiences was not significantly correlated with the AAQ, but was positively correlated with the NAS, r = .323, n = 168, p < .001. There were no significant correlations between trait not-self core and either the AAQ or the NAS.

Do personality traits relate to ratings of approaches to the self on likelihood?

Pearson correlations were calculated between ratings on state and trait likelihood for the five

approaches to self and scores on the scales of the Big Five Inventory (BFI). A Bonferroniadjusted *p*-value of .002 was utilized for significance. The results are in *Table 8*.

Table 8

Pearson Correlations for Ratings of State and Trait Likelihood on the Five Descriptions of Approaches to the Self and Scores on the BFI Scales

Description	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
SL: Self-Esteem	.117	.147	.240*	250*	.135
SL: Self-Control	.121	.077	.306*	185	.175
SL: Self-Compassion	.075	.154	.052	255*	.034
SL: Not-Self Experiences	.118	.168	.088	226	.155
SL: Not-Self Core	.215	.261*	.224	189	.055
TL: Self-Esteem	.275*	.272*	.318*	363*	.161
TL: Self-Control	001	.114	.407*	212	.277*
TL: Self-Compassion	.080	.229	.118	188	.220
TL: Not-Self Experiences	.130	.257*	.206	284*	.164
TL: Not-Self Core	.149	.068	.074	125	.034

Note. SL = State Likelihood; TL = Trait Likelihood; BFI = Big Five Inventory.

There was a positive correlation between state self-esteem and Conscientiousness, r = .240, n = 167, p = .002, and a negative correlation with Neuroticism, r = -.250, n = 168, p = .001. State self-control was positively correlated with Conscientiousness, r = .306, n = 167, p < .001. State self-compassion was negatively correlated with Neuroticism, r = -.255, n = 168, p = .001. State not-self experiences was not correlated with any of the BFI scales. State not-self core was positively correlated with Agreeableness, r = .261, n = 168, p = .001.

There were positive correlations between trait self-esteem and Extraversion, r = .275, n = 168, p < .001, Agreeableness, r = .272, n = 168, p < .001, and Conscientiousness, r = .318, n = 167, p < .001, and a negative correlation with Neuroticism, r = -.363, n = 168, p < .001. Trait self-control was positively correlated with Conscientiousness, r = .407, n = 167, p < .001 and

<sup>\*</sup>p < .002 (Bonferroni-adjusted p-value; two-tailed).

Openness, r = .277, n = 168, p < .001. Trait self-compassion was not correlated with any of the BFI scales. Trait not-self experiences was positively correlated with Agreeableness, r = .257, n = 168, p = .001, and negatively correlated with Neuroticism, r = -.284, n = 168, p < .001. Trait not-self core was not correlated with any of the BFI scales.

Are current affect, quality of life, or psychological symptoms related to ratings on approaches to the self on likelihood? Pearson correlations were calculated between ratings on state and trait likelihood for the five descriptions of approaches to the self and the scales and subscales of the Positive and Negative Affect Scale (PANAS), Satisfaction with Life Scale (SWLS), and Outcome Questionnaire – 45.2 (OQ). A Bonferroni-adjusted *p*-value of .002 was utilized for significance. The results are in *Table 9*.

Table 9

Pearson Correlations for Ratings of State and Trait Likelihood on the Five Descriptions of Approaches to the Self and Ratings on the Scales and Subscales of the PANAS, SWLS, and OQ

	PA	NAS	SWLS		Outcome		
	Positive	Negative	Total	Total	Symptom	Interpersonal	Social
	Affect	Affect	Score	Score	Distress	Relations	Role
State Self-Esteem	.206	135	.181	219	239*	121	174
State Self-Control	.414*	060	.277*	209	213	144	177
State Self-Compassion	.282*	248*	.140	279*	302*	187	182
State Not-Self Experiences	.253*	028	.185	170	192	042	205
State Not-Self Core	.300*	075	.221	204	196	141	221
Trait Self-Esteem	.421*	268*	.400*	451*	454*	353*	332*
Trait Self-Control	.395*	170	.245*	227	257*	136	129
Trait Self-Compassion	.353*	093	.124	228	243*	163	142
Trait Not-Self Experiences	.264*	185	.131	206	228	124	136
Trait Not-Self Core	.268*	.075	.077	006	033	.039	.025

Note. PANAS = Positive and Negative Affect Scale; SWLS = Satisfaction with Life Scale; OQ = Outcome Questionnaire - 45.2.

<sup>\*</sup>p < .002 (Bonferroni-adjusted p-value; two-tailed).

There was a negative correlation between state self-esteem and OQ Symptom Distress, r = -.239, n = 168, p = .002. State self-control was positively correlated with PANAS Positive Affect, r = .414, n = 168, p < .001, and the SWLS, r = .277, n = 168, p < .001. State self-compassion was positively correlated with PANAS Positive Affect, r = .282, n = 168, p < .001, and negatively correlated with PANAS Negative Affect, r = -.248, n = 168, p = .001, OQ Total Score, r = -.279, n = 168, p < .001, and OQ Symptom Distress, r = -.302, n = 168, p < .001. State not-self experiences was positively correlated with PANAS Positive Affect, r = .253, n = 168, p = .001. State not-self core was positively correlated with PANAS Positive Affect, r = .300, n = 168, p < .001.

There were positive correlations between trait self-esteem and PANAS Positive Affect, r = .421, n = 168, p < .001, the SWLS, r = .400, n = 168, p < .001, and negatives correlations with PANAS Negative Affect, r = -.268, n = 168, p < .001, OQ Total Score, r = -.451, n = 168, p < .001, OQ Symptom Distress, r = -.454, n = 168, p < .001, OQ Interpersonal Relations, r = -.353, n = 168, p < .001, and OQ Social Role, r = -.332, n = 168, p < .001. Trait self-control was positively correlated with PANAS Positive Affect, r = .395, n = 168, p < .001, and the SWLS, r = .245, n = 168, p = .001, and negatively correlated with OQ Symptom Distress, r = -.257, n = 168, p = .001. Trait self-compassion trait likelihood was positively correlated with PANAS Positive Affect, r = .353, n = 168, p < .001, and negatively correlated with OQ Symptom Distress, r = -.243, r = 168, r = .002. Trait not-self experiences was positively correlated with PANAS Positive Affect, r = .264, r = 168, r = .001. Trait not-self core was positively correlated with PANAS Positive Affect, r = .268, r = 168, r < .001.

# **Helpfulness Results**

Which approaches to the self do participants rate as helpful? This question was addressed first with descriptive statistics on the ratings of state and trait helpfulness. The results of these analyses are presented in *Table 10*, and *Figure 3*. Additionally, two, one-way, within subjects ANOVAs were conducted to compare ratings on helpfulness for the five descriptions: one for state helpfulness, the second for trait helpfulness. The results are in *Table 11*.

Table 10

Means and standard deviations (SD) for Ratings of

Helpfulness on the Five Descriptions of

Approaches to the Self Under State and Trait

Conditions

Description	Mean	SD
State Self-Esteem	4.07	1.024
State Self-Control	3.98	1.113
State Self-Compassion	3.76	1.103
State Not-Self Experiences	4.03	1.069
State Not-Self Core	3.17	1.158
Trait Self-Esteem	4.18	.952
Trait Self-Control	4.20	1.006
Trait Self-Compassion	3.85	1.048
Trait Not-Self Experiences	4.19	.909
Trait Not-Self Core	3.36	1.221

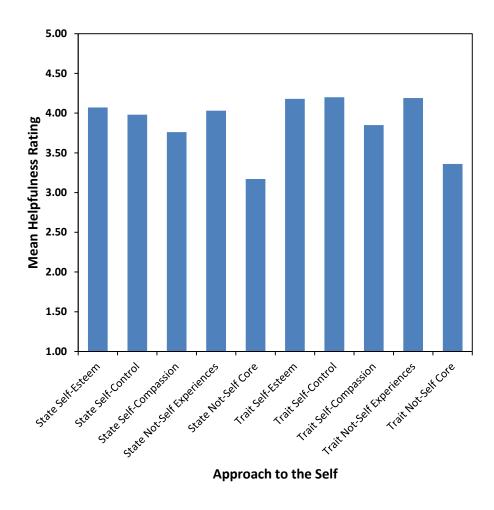


Figure 2. Mean Ratings of State and Trait Helpfulness on the Five Approaches to the Self.

Table 11

Two, One-Way, Within Subjects ANOVAs Comparing Ratings

Between State Helpfulness, and Ratings Between Trait

Helpfulness on the Five Descriptions of Approaches to the Self

Ratings	df	SS	MS	F
State Helpfulness	4	93.267	23.317	27.619***
Error	668	563.933	.844	
Trait Helpfulness†	3.774	89.107	23.608	30.919***
Error	630.320	481.293	.764	

<sup>\*\*\*</sup>p < .001. †Huynh-Feldt sphericity correction.

There was a significant difference on ratings of state helpfulness [F(4, 668) = 27.619, p < .001]. Post-hoc comparisons using paired samples t-tests for equality of means indicated that the mean rating for not-self core (M = 3.17, SD = 1.158) was significantly lower than self-esteem (M = 4.07, SD = 1.024); t(167) = -8.674, p < .001, self-control (M = 3.98, SD = 1.113); t(167) = -7.333, p < .001, self-compassion (M = 3.76, SD = 1.103); t(167) = -5.690, p < .001, and not-self experiences (M = 4.03, SD = 1.069); t(167) = -8.894, p < .001. The mean rating for self-compassion was significantly lower than self-esteem; t(167) = -3.593, p < .001, self-control; t(167) = -2.168, p = .032, and not-self experiences; t(167) = -2.893, p = .004.

There was a significant difference on ratings of trait helpfulness [F(3.774, 630.320) = 30.919, p < .001]. Post-hoc comparisons using paired samples t-tests for equality of means indicated that the mean rating for self-compassion (M = 3.85, SD = 1.048) was significantly lower than self-esteem (M = 4.18, SD = .952); t(167) = -4.217, p < .001, self-control (M = 4.20, SD = 1.006); t(167) = -3.514, p < .001, and not-self experiences (M = 4.19, SD = .909); t(167) = -3.888, p < .001; self-compassion's mean rating was, however, significantly higher than not-self core (M = 3.36, SD = 1.221); t(167) = 4.599, p < .001. The mean rating for not-self core was

significantly lower than self-esteem; t(167) = -8.589, p < .001, self-control; t(167) = -.8.081, p < .001, and not-self experiences; t(167) = -9.021, p < .001.

Do measures of self-esteem, self-control, self-compassion, and not-self correlate with the respective descriptions of approaches to the self on helpfulness? Pearson correlations were calculated between ratings on state and trait helpfulness for the five descriptions of approaches to the self and the scales and subscales of the Rosenberg Self-Esteem scale (RSE), Brief Self-Control Scale (BSCS), Self-Compassion Scale (SCS), Acceptance & Action Questionnaire – II (AAQ), and Non-Attachment Scale (NAS). A Bonferroni-adjusted *p*-value of .002 was utilized for significance. The results are in *Table 12*.

Table 12

Pearson Correlations for Ratings of State and Trait Helpfulness on the Five Descriptions of Approaches to the Self and Ratings on the Scales and Subscales of the RSE, BSCS, SCS, AAQ, and NAS

	RSE	BSCS		Self-Compassion Scale						AAQ	NAS
Description	Total	Total	Self-	Self-	Common	Isolation	Mindfulness	Over-	Total	Total	Total
Description	Score	Score	Kindness	Judgment	Humanity	isolation	wiinarumess	Identification	Score	Score	Score
SH: Self-Esteem	.166	.280*	.215	028	.290*	084	.167	012	.181	106	.321*
SH: Self-Control	.150	.218	.171	005	.144	049	.204	014	.131	149	.270*
SH: Self-Compassion	.027	.104	.159	.108	.240*	.092	.163	.163	.036	.040	.121
SH: Not-Self Experiences	.071	.065	.095	.071	.108	.174	.219	.140	006	.088	003
SH: Not-Self Core	.002	.218	.085	.083	.256*	.099	.318*	.148	.060	.079	.094
TH: Self-Esteem	.134	.323*	.231	086	.323*	111	.243	064	.234	090	.357*
TH: Self-Control	.199	.248*	.164	.023	.212	043	.213	038	.136	127	.311*
TH: Self-Compassion	.088	.268*	.302*	064	.313*	104	.107	029	.216	141	.329*
TH: Not-Self Experiences	.077	.155	.189	.073	.140	.104	.209	.050	.058	.069	.198
TH: Not-Self Core	.009	.185	.119	.066	.273*	.066	.242	.121	.072	.039	.145

Note. RSE = Rosenberg Self-Esteem Scale; BSCS = Brief Self-Control Scale; SCS = Self-Compassion Scale; AAQ = Acceptance & Action Questionnaire - II; NAS = Non-Attachment Scale; SH = State Helpfulness; TH = Trait Helpfulness. Bold coefficients indicate relationships relevant to the research question.

<sup>\*</sup>p < .002 (Bonferroni-adjusted p-value; two-tailed).

There was a positive correlation between state self-esteem and the RSE, r = .166, n = 168, p = .032. There was a positive correlation between state self-control and the BSCS, r = .218, n = 168, p = .005. The correlations between state self-compassion were in the expected directions where significant: Self-Kindness, r = .159, n = 167, p = .040, Common Humanity, r = .240, n = 165, p = .002, Mindfulness, r = .163, n = 166, p = .035; the one exception was a positive correlation with Over-Identification, r = .163, n = 165, p = .037. There were no significant correlations between either state not-self ratings and either the AAQ or NAS.

Trait self-esteem was not correlated with its respective construct measure. There was a positive correlation between trait self-control and the BSCS, r = .248, n = 168, p = .001. Trait self-compassion was correlated in the expected directions where significant: Self-Kindness, r = .302, n = 167, p < .001, Common Humanity, r = .313, n = 165, p < .001, and Total Score, r = .216, n = 167, p = .005. Trait not-self experiences was not correlated with the AAQ, but was positively correlated with the NAS, r = .198, n = 168, p = .010. There were no correlations between trait not-self core and either the AAQ or the NAS.

Do personality traits relate to ratings of approaches to the self on helpfulness? Pearson correlations were calculated between ratings on state and trait helpfulness for the five approaches to self and scores on the scales of the Big Five Inventory (BFI). A Bonferroniadjusted *p*-value of .002 was utilized for significance. The results are in *Table 13*.

Table 13

Pearson Correlations for Ratings of State and Trait Helpfulness on the Five Descriptions of Approaches to the Self and Scores on the BFI Scales

Description	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
SH: Self-Esteem	.123	.278*	.210	043	.095
SH: Self-Control	019	.179	.203	041	.086
SH: Self-Compassion	.127	.214	.098	.124	.111
SH: Not-Self Experiences	.162	.180	.166	.035	.039
SH: Not-Self Core	.216	.197	.137	094	.152
TH: Self-Esteem	.148	.260*	.266*	076	.161
TH: Self-Control	040	.146	.331*	032	.209
TH: Self-Compassion	.018	.275*	.132	010	.226
TH: Not-Self Experiences	031	.262*	.189	.005	.271*
TH: Not-Self Core	.087	.274*	.237*	022	.147

*Note*. SH = State Helpfulness; TH = Trait Helpfulness; BFI = Big Five Inventory.

State self-esteem was positively correlated with Agreeableness, r = .278, n = 168, p < .001. State self-control, self-compassion, not-self experiences, and not-self core were not correlated with any of the BFI scales.

There were positive correlations between trait self-esteem and Agreeableness, r = .260, n = 168, p = .001, and Conscientiousness, r = .266, n = 167, p = .001. Trait self-control was also positively correlated with Conscientiousness, r = .331, n = 167, p < .001. Trait self-compassion was positively correlated with Agreeableness, r = .275, n = 168, p < .001. Trait not-self experiences was positively correlated with Agreeableness, r = .262, n = 168, p = .001, and Openness, r = .271, n = 168, p < .001. Trait not-self core was positively correlated with Agreeableness, r = .274, n = 168, p < .001, and Conscientiousness, r = .237, n = 167, p = .002.

Are current affect, quality of life, or psychological symptoms related to ratings on approaches to the self on helpfulness? Pearson correlations were calculated between ratings

<sup>\*</sup>p < .002 (Bonferroni-adjusted p-value; two-tailed).

on state and trait helpfulness for the five descriptions of approaches to the self and the scales and subscales of the Positive and Negative Affect Scale (PANAS), Satisfaction with Life Scale (SWLS), and Outcome Questionnaire – 45.2 (OQ). A Bonferroni-adjusted *p*-value of .002 was utilized for significance. The results are in *Table 14*.

Table 14

Pearson Correlations for Ratings of State and Trait Helpfulness on the Five Descriptions of Approaches to the Self and Ratings on the Scales and Subscales of the PANAS, SWLS, and OQ

	PA	NAS	SWLS		Outcome	Questionnaire	
	Positive	Negative	Total	Total	Symptom	Interpersonal	Social
	Affect	Affect	Score	Score	Distress	Relations	Role
State Self-Esteem	.190	013	.172	113	118	049	134
State Self-Control	.223	054	.109	144	130	113	166
State Self-Compassion	.167	.035	.092	053	018	071	124
State Not-Self Experiences	.057	002	.052	.016	.006	.090	083
State Not-Self Core	.138	.035	.093	087	079	059	113
Trait Self-Esteem	.274*	.030	.202	193	171	162	210
Trait Self-Control	.247*	144	.181	143	163	043	154
Trait Self-Compassion	.171	028	.127	189	146	192	235*
Trait Not-Self Experiences	.134	.012	.069	.017	.027	.083	152
Trait Not-Self Core	.137	011	.182	044	014	080	069

Note. PANAS = Positive and Negative Affect Scale; SWLS = Satisfaction with Life Scale; OQ = Outcome Questionnaire - 45.2. \*p < .002 (Bonferroni-adjusted p-value; two-tailed).

None of the state ratings were significantly correlated with any of these variables. There was a positive correlation between trait self-esteem and PANAS Positive Affect, r = .274, n = 168, p < .001. Trait self-control was positively correlated with PANAS Positive Affect, r = .247, n = 168, p = .001. Trait self-compassion was negatively correlated with OQ Social Role, r = .235, n = 168, p = .002. Neither trait not-self experiences nor not-self core were correlated with any of these variables.

# What Combination of Measures Best Predict Outcomes for the Ratings on Each Description of Approaches to the Self?

Stepwise multiple regressions were conducted to evaluate which variables best predicted trait ratings on likelihood and helpfulness of approach to the self descriptions. Trait ratings on descriptions were exclusively chosen because of their higher test-retest reliability relative to state ratings. In order to remain consistent with this choice conceptually, predictors were chosen from personality-related variables (i.e., RSE, BSCS, SCS, AAQ, NAS, BFI), rather than other variables (i.e., PANAS, SWLS, OQ). To ensure that there were an adequate number of participants for each analysis, no more than seven variables were used for each regression.

Predictor variables were chosen based on their correlations with the outcome variable; in other words, the top seven—when applicable—highest correlations with each rating were used as predictors.

The RSE, SCS Self-Kindness, SCS Self-Judgment, SCS Common Humanity, SCS Over-Identification, SCS Total Score, and NAS scales were used in a stepwise multiple regression to predict self-esteem trait likelihood. The model was statistically significant and contained three of the seven predictors in three steps, F(3, 162) = 40.597, p < .001, and accounted for 43.4% of the variance of self-esteem trait likelihood. Self-esteem trait likelihood was primarily predicted by SCS Total Score, followed by the NAS, and the RSE. Results are in *Table 15*.

Table 15

Stepwise Multiple Regression Analysis Predicting Self-Esteem Trait Likelihood Ratings of the Five Descriptions of Approaches to the Self from its Seven Highest Significantly Correlated Variables (i.e., RSE, SCS Self-Kindness, SCS Self-Judgment, SCS Common Humanity, SCS Over-Identification, SCS Total Score, NAS)

	TL: Self-E	Esteem
Predictors	Adjusted R <sup>2</sup>	В
Step 1	.352	
SCS Total Score		.596***
Step 2	.412	
SCS Total Score		.362***
NAS		.345***
Step 3	.423	
SCS Total Score		.283**
NAS		.330***
RSE		.149*

Note. RSE = Rosenberg Self-Esteem Scale; SCS = Self-Compassion Scale; NAS = Non-Attachment Scale; TL = Trait Likelihood. Standardized coefficients.

The RSE, BSCS, SCS Common Humanity, SCS Mindfulness, NAS, BFI Conscientiousness, and BFI Openness scales were used in a stepwise multiple regression analysis to predict self-control trait likelihood. The prediction model contained three of the seven predictors in three steps, was statistically significant, F(3, 162) = 20.679, p < .001, and accounted for 26.7% of the variance of self-control trait likelihood. Self-control trait likelihood was primarily predicted by BFI Conscientiousness, followed by BFI Openness, and the NAS. Results are in *Table 16*.

<sup>\*\*\*</sup>p < .001, \*\*p < .01, \*p < .05.

Table 16

Stepwise Multiple Regression Analysis Predicting Self-Control Trait Likelihood Ratings of the Five Descriptions of Approaches to the Self from its Seven Highest Significantly Correlated Variables (i.e., RSE, BSCS, SCS Common Humanity, SCS Mindfulness, NAS, BFI Conscientiousness, BFI Openness)

	TL: Self-Control		
Predictors	Adjusted R <sup>2</sup>	В	
Step 1	.170		
BFI Conscientiousness		.418***	
Step 2	.241		
BFI Conscientiousness		.419***	
BFI Openness		.276***	
Step 3	.267		
BFI Conscientiousness		.332***	
BFI Openness		.226**	
NAS		.200*	

Note. RSE = Rosenberg Self-Esteem Scale; BSCS = Brief Self-Control Scale; SCS = Self-

Compassion Scale; NAS = Non-Attachment Scale; BFI = Big Five Inventory; TL = Trait Likelihood. Standardized coefficients.

The RSE, BSCS, SCS Self-Kindness, SCS Common Humanity, SCS Mindfulness, SCS Total, and NAS scales were used in a stepwise multiple regression analysis to predict self-compassion trait likelihood. The prediction model contained two of the seven predictors in two steps, was statistically significant, F(2, 163) = 26.860, p < .001, and accounted for 24.1% of the variance of self-compassion trait likelihood. Self-compassion trait likelihood was primarily predicted by SCS Self-Kindness, followed by the NAS. Results are in *Table 17*.

<sup>\*\*\*</sup>p < .001, \*\*p < .01, \*p < .05.

Table 17
Stepwise Multiple Regression Analysis Predicting Self-Compassion Trait Likelihood
Ratings of the Five Descriptions of Approaches to the Self from its Seven Highest
Significantly Correlated Variables (i.e., RSE, BSCS, SCS Self-Kindness, SCS Common
Humanity, SCS Mindfulness, SCS Total, NAS)

	TL: Self-Compassion		
Predictors	Adjusted R <sup>2</sup>	В	
Step 1	.186		
SCS Self-Kindness		.437***	
Step 2	.241		
SCS Self-Kindness		.290***	
NAS		.284***	

*Note*. RSE = Rosenberg Self-Esteem Scale; BSCS = Brief Self-Control Scale; SCS = Self-Compassion Scale; NAS = Non-Attachment Scale; TL = Trait Likelihood. Standardized coefficients.

The RSE, SCS Mindfulness, SCS Over-Identification, SCS Total Score, NAS, BFI Agreeableness, and BFI Neuroticism scales were used in a stepwise multiple regression analysis to predict not-self experiences trait likelihood. The prediction model contained two of the seven predictors in two steps, was statistically significant, F(2, 163) = 15.560, p < .001, and accounted for 15.2% of the variance of not-self experiences trait likelihood. Not-self experiences trait likelihood was primarily predicted by SCS Mindfulness positively, followed by BFI Neuroticism negatively. Results are in *Table 18*.

<sup>\*\*\*</sup>p < .001.

Table 18

Stepwise Multiple Regression Analysis Predicting Not-Self Experiences Trait Likelihood
Ratings of the Five Descriptions of Approaches to the Self from its Seven Highest
Significantly Correlated Variables (i.e., RSE, SCS Mindfulness, SCS Over-Identification,
SCS Total Score, NAS, BFI Agreeableness, BFI Neuroticism)

	TL: Not-Self Experiences		
Predictors	Adjusted R <sup>2</sup>	В	
Step 1	.126		
SCS Mindfulness		.362***	
Step 2	.152		
SCS Mindfulness		.303***	
BFI Neuroticism		185*	

Note. RSE = Rosenberg Self-Esteem Scale; SCS = Self-Compassion Scale; NAS = Non-Attachment Scale; BFI = Big Five Inventory; TL = Trait Likelihood. Standardized coefficients.

Because no variables were correlated with not-self core trait likelihood, no stepwise multiple regression was conducted. The BSCS, SCS Common Humanity, NAS, BFI Agreeableness, and BFI Conscientiousness scales were used in a stepwise multiple regression analysis to predict self-esteem trait helpfulness. The prediction model contained two of the five predictors in four steps, was statistically significant, F(2, 163) = 15.943, p < .001, and accounted for 15.5% of the variance of self-esteem trait helpfulness. Self-esteem trait helpfulness was primarily predicted by the BSCS, followed by SCS Common Humanity. Results are in *Table 19*.

<sup>\*\*\*</sup>p < .001, \*p < .05.

Table 19
Stepwise Multiple Regression Analysis Predicting Self-Esteem Trait Helpfulness Ratings of the Five Descriptions of Approaches to the Self from its Five Significantly Correlated Variables (i.e., BSCS, SCS Common Humanity, NAS, BFI Agreeableness, BFI Conscientiousness)

	TH: Self-Esteem		
Predictors	Adjusted R <sup>2</sup>	В	
Step 1	.124		
NAS		.360***	
Step 2	.148		
NAS		.256**	
BSCS		.199*	
Step 3	.164		
NAS		.159	
BSCS		.197*	
SCS Common Humanity		.174*	
Step 4	.155		
BSCS		.259***	
SCS Common Humanity		.245***	

*Note.* BSCS = Brief Self-Control Scale; SCS = Self-Compassion Scale; NAS = Non-Attachment

Scale; BFI = Big Five Inventory; TH = Trait Helpfulness. Standardized coefficients.

The BSCS, NAS, and BFI Conscientiousness scales were used in a stepwise multiple regression analysis to predict self-control trait helpfulness. The prediction model contained two of the three predictors in two steps, was statistically significant, F(2, 166) = 13.849, p < .001, and accounted for 13.4% of the variance of self-control trait helpfulness. Self-control trait helpfulness was primarily predicted by BFI Conscientiousness, followed by the NAS. Results are in *Table 20*.

<sup>\*\*\*</sup>p < .001, \*\*p < .01, \*p < .05.

Table 20
Stepwise Multiple Regression Analysis Predicting Self-Control Trait Helpfulness Ratings of the Five Descriptions of Approaches to the Self from its Three Significantly Correlated Variables (i.e., BSCS, NAS, BFI Conscientiousness)

	TH: Self-Control		
Predictors	Adjusted R <sup>2</sup>	В	
Step 1	.104		
BFI Conscientiousness		.331***	
Step 2	.134		
BFI Conscientiousness		.242**	
NAS		.207**	

Note. BSCS = Brief Self-Control Scale; NAS = Non-Attachment Scale; BFI = Big Five Inventory;

The BSCS, SCS Self-Kindness, SCS Common Humanity, NAS, and BFI Agreeableness scales were used in a stepwise multiple regression analysis to predict self-compassion trait helpfulness. The prediction model contained two of the five predictors in two steps, was statistically significant, F(2, 164) = 12.926, p < .001, and accounted for 12.7% of the variance of self-compassion trait helpfulness. Self-compassion trait helpfulness was primarily predicted by the NAS, followed by SCS Self-Kindness. Results are in *Table 21*.

TH = Trait Helpfulness. Standardized coefficients.

<sup>\*\*\*</sup>p < .001, \*\*p < .01.

Table 21

Stepwise Multiple Regression Analysis Predicting Self-Compassion Trait Helpfulness
Ratings of the Five Descriptions of Approaches to the Self from its Five Significantly
Correlated Variables (i.e., BSCS, SCS Self-Kindness, SCS Common Humanity, NAS, BFI
Agreeableness)

	TH: Self-Compassion		
Predictors	Adjusted R <sup>2</sup>	В	
Step 1	.103		
NAS		.329***	
Step 2	.127		
NAS		.223**	
SCS Self-Kindness		.201*	

Note. BSCS = Brief Self-Control Scale; SCS = Self-Compassion Scale; NAS = Non-Attachment Scale; BFI = Big Five Inventory; TH = Trait Helpfulness. Standardized coefficients.

The BFI Agreeableness, and BFI Openness scales were used in a stepwise multiple regression analysis to predict not-self experiences trait helpfulness. The prediction model contained both of the predictors in two steps, was statistically significant, F(2, 167) = 12.462, p < .001, and accounted for 12.1% of the variance of not-self experiences trait helpfulness. Not-self experiences trait helpfulness was primarily predicted by BFI Openness, followed by BFI Agreeableness. Results are in *Table 22*.

<sup>\*\*\*</sup>p < .001, \*\*p < .01, \*p < .05.

Table 22

Stepwise Multiple Regression Analysis Predicting Not-Self Experiences Trait

Helpfulness Ratings of the Five Descriptions of Approaches to the Self from its Two

Significantly Correlated Variables (i.e., BFI Agreeableness, BFI Openness)

	TH: Not-Self Experiences		
Predictors	Adjusted R <sup>2</sup>	В	
Step 1	.068		
BFI Openness		.271***	
Step 2	.121		
BFI Openness		.252***	
BFI Agreeableness		.241***	

*Note.* BFI = Big Five Inventory; TH = Trait Helpfulness. Standardized coefficients.

The SCS Common Humanity, BFI Agreeableness, and BFI Conscientiousness scales were used in a stepwise multiple regression analysis to predict not-self core trait helpfulness. The prediction model contained two of the three predictors in two steps, was statistically significant, F(2, 163) = 10.496, p < .001, and accounted for 10.4% of the variance of not-self core trait helpfulness. Not-self core trait helpfulness was primarily predicted by BFI Agreeableness, followed by SCS Common Humanity. Results are in *Table 23*.

<sup>\*\*\*</sup>p < .001.

Table 23

Stepwise Multiple Regression Analysis Predicting Not-Self Core Trait Helpfulness

Ratings of the Five Descriptions of Approaches to the Self from its Three Significantly

Correlated Variables (i.e., SCS Common Humanity, BFI Agreeableness, BFI

Conscientiousness)

	TH: Not-Self Core		
Predictors	Adjusted R <sup>2</sup>	В	
Step 1	.073		
BFI Agreeableness		.281***	
Step 2	.104		
BFI Agreeableness		.213**	
SCS Common Humanity		.203*	

*Note.* SCS = Self-Compassion Scale; BFI = Big Five Inventory; TH = Trait Helpfulness. Standardized coefficients.

#### Discussion

The focus of this study was on utilizing scientific methods to examine a view of the self based in Buddhist philosophy, "not-self." Little to no previous empirical research has addressed the extent to which Westerners may relate to this approach to the self. Not-self is a term which describes a process of ultimately "letting go" of the self as a result of relinquishing "attachments" (e.g., thoughts, feelings, and experiences with which individuals identify). These attachments are considered impediments to genuine happiness, which is achieved once they are released. The study examined how likely Westerners are to draw on this approach in times of hardship, or to consider it a helpful way to view the self. The present research was intended to advance scientific understanding of Buddhist concepts, many of which have already been incorporated into Western psychology over the past 25 years. For example, mindfulness and compassion are concepts that have received substantial research attention; however, not-self,

<sup>\*\*\*</sup>p < .001, \*\*p < .01, \*p < .05.

although a concept central to Buddhist psychology, has not been addressed by Western psychologists.

Not-self, as investigated within this study, focused on the notion of "letting go," meaning refraining from grasping or clinging to certain aspects of experience or reality, while rejecting or attempting to escape from others. In order to study this concept in a more detailed way, not-self was divided into two aspects. The first, not-self experiences, involved letting go of feelings and expectations—which are types of attachments—as a means of managing difficulties. The second, not-self core, involved explicitly letting go of the notion of self. The results of the study suggested that participants on the whole responded quite differently to these two different aspects of not-self.

Despite being a concept unfamiliar to most Westerners, participants generally endorsed the description of not-self experiences as an approach that they would be relatively likely to use in difficult situations, and that they would find helpful for those situations. Their ratings of not-self experiences were similar to, or higher than, those of more established approaches, such as bolstering self-esteem. At the most basic level, this suggests that participants were interested in a stance which reflects a Buddhist approach to difficult experiences, in spite of being drawn from an almost exclusively non-Buddhist population.

It may be that the aspect of not-self which involves letting go of generally day-to-day attachments (i.e., those which do not directly implicate the self) may reflect cross-cultural values. For example, the virtue of letting go can be found in the "serenity prayer," an early 20<sup>th</sup> century Christian prayer which was famously adopted by Alcoholics Anonymous and related programs (Anonymous, 2002). The prayer is as follows:

God, grant me the serenity to accept the things I cannot change,

The courage to change the things I can,

And the wisdom to know the difference.

Clearly a key idea of this popular prayer is that acceptance and surrender, under certain circumstances, will facilitate well-being and happiness.

Other examples also illustrate the extent to which the notion of "letting go" is visible in Western culture. Tim Ryan, an Ohio congressman and author of the book, *A Mindful Nation*, was interviewed about his mindfulness practice. He offered an example, stating that "if something arouses some anger, I try to see it, and then let it go" (Bellantoni, 2014). There is even a recent example of a commercial airline that created an in-flight guided mindfulness series for passengers which guides people toward "letting go of thoughts and worries" (Amey, 2015). American culture is generally viewed as one which values solving problems, accomplishing things, and experiencing as much pleasure as possible; however, the above examples suggest a greater willingness by mainstream Western culture to move toward acceptance and letting go, which are consistent with a not-self experiences approach.

Given that participants endorsed being likely to use a not-self experiences approach at a similar rate as Western approaches to the self, it makes sense that they also felt it would be a helpful strategy. Across situations, participants saw being able to let go of feelings and expectations as helpful for getting through difficulties. This is interesting in light of the many ways Western culture emphasizes quickly solving problems and getting rid of painful emotions. For example, psychopharmaceutical use has skyrocketed; 20% of Americans use at least one psychiatric medication ("America's state of mind," 2011). Applying not-self experiences to

problems would likely not be a "quick fix," but it could be that it strikes a balance with culturally reinforced desires to be rid of pain.

Conversely, participants generally did not feel positively about the not-self core approach to the self in stressful circumstances. On average, they were only slightly likely to use the approach for their difficulties, and they viewed it as only somewhat helpful. Participants rated not-self core, on both likelihood and helpfulness dimensions, significantly lower than the self-esteem, self-control, self-compassion, and not-self experiences descriptions. The concept of letting go of the self, unlike a stance of letting go of difficult feelings, does not have an apparent Western cultural equivalent. Western culture emphasizes having a strong, separate, and distinct sense of self as a means to feeling good about the self. This is further reinforced by the connotation of Western psychological terms, such as "ego strength," and Western religious practices which invoke the soul as the "true" form of the self (Turner, 1976). It is therefore unsurprising how strongly ingrained the importance of selfhood is to Western culture.

It is possible that methodological issues influenced the findings on not-self core.

Simplifying the idea of letting go of the self into four sentences may not have given an adequate picture of this complex concept. Reducing the construct of not-self to this brief description was in fact quite difficult; the resulting description may have been hard for participants to understand. Their more negative reaction to this approach may have resulted from a lack of understanding, rather than genuine disapproval. Future research directly assessing participants' understanding of the construct would be useful. The present results, however, support the use of approaches which involve the process of letting go of thoughts and expectations during stress. They suggest that Western psychology should consider a broader perspective on how one can respond to the self in times of difficulty.

## **Personality Factors Related to Approaches to the Self**

One goal of the study was to better understand individual differences in people around their attraction to the not-self approach. Personality-related variables were examined as predictors of use, and perceived helpfulness, of the not-self approach. The personality variables included the scales of the Big Five Inventory (BFI; i.e., openness, conscientiousness, extraversion, agreeableness, neuroticism), as well as measures related to the approaches to the self (i.e., Rosenberg Self-Esteem Scale, Brief Self-Control Scale, Self-Compassion Scale, Acceptance & Action Questionnaire — II, Nonattachment Scale). The purpose of this component of the study was to better understand what characteristics predict a person's use of a not-self approach during times of stress. Results of analyses utilizing the trait form of the approaches to the self measure will be explored in this and all subsequent sections, because trait ratings were more reliable.

The likelihood that participants would use not-self experiences as an approach to their difficulties was predicted primarily by mindfulness (i.e., a subscale of the SCS), and by low neuroticism. This finding is striking, in that it is directly relevant to key aspects of not-self. The Buddhist perspective on mindfulness is that it is the means by which attachments are relinquished in the process toward not-self. In essence, mindfulness' nonjudgmental appraisal of experiences—including the desire to hold onto attachments—leads to individuals feeling less inclined to maintain those attachments. In the case of the not-self experiences description, the targeted attachments were feelings and expectations. While it is improbable that participants conceptualized the approach in terms of attachments, those who were likely to use it appeared to be high in facilitatory traits.

It similarly makes sense that low neuroticism predicted not-self experiences ratings. Digman (1990) noted that the personality factor of neuroticism exists on a continuum, with its opposing trait labeled as "emotional stability" (e.g., as extraversion is on a continuum opposite introversion). Emotionally stable individuals are considered "calm, imperturbable, and [unconcerned] about their personal worries and anxieties" (Hills & Argyle, 2001, p. 1359). This trait is comparable to a fundamental concept in not-self: equanimity. Equanimity, which is in fact best described as emotional stability, is understood in Buddhist psychology to be the generalization of mindfulness practice. When individuals fully integrate mindfulness practice into their daily experiences, a result is that emotional experiences are viewed dispassionately, allowing the person to be less affected by painful emotions or thoughts.

The degree to which participants expected not-self experiences to be helpful for their problems was strongly accounted for by two personality traits: openness and agreeableness.

Openness in part reflects an interest in alternative experiences. It may be that the notion of "letting go of the way you wish things were" was interpreted by participants as allowing for different outcomes in difficult circumstances. For example, a person might become upset over not getting a particular job, but then could let go of that desire in order to see the other possible opportunities.

Agreeableness was also predictive of viewing not-self experiences as helpful. A key component of agreeableness is altruism; it may be that individuals viewed the idea of letting go of difficult feelings and expectations as consistent with the colloquial understanding of selflessness. In other words, participants more willing to defer their needs to the needs of others may be more likely to see letting go of their own expectations and wants as helpful. For

example, an individual struggling with conflicting perspectives in a relationship might find it helpful to be willing to let go of his own perspective in service to the relationship.

Looking at not-self core, there were no personality-related predictors for ratings of how likely participants were to use the approach. This may have been due to limited variability in ratings on the likelihood of using the not-self core approach. Participants generally did not rate it as very likely. Seeing not-self core as a helpful approach, however, was predicted by agreeableness, and the SCS variable of common humanity. Both of these variables reflect a focus on kindness, either toward others or toward oneself. Specifically, as already noted, agreeableness is associated with altruistic behavior. Common humanity relates to feeling connected to others as a means of feeling kindness toward oneself. For example, an individual strongly aware of her common humanity would be less judgmental toward herself when making a mistake, because she knows that others also make mistakes.

The kindness narrative which emerges from agreeableness and common humanity as predictors is strikingly relevant to a fundamental aspect of not-self: lovingkindness.

Lovingkindness is the practice of directing a sense of caring and goodwill toward oneself and others. Its importance within the not-self process is that it highlights the "nonseparateness" of all people. When feelings of goodwill are applied in equal measure to oneself and others, the boundaries between people are less consequential. For example, if an individual truly cares as deeply for a friend as she does for herself, she feels less separate from his friend. This aids the process of letting go of the self, because it renders holding onto a reified and separate self less meaningful (Salzberg, 1999). Participants who thought that not-self core would be helpful may be people who are focused on the needs of others, as well as focused on directing kindness

toward themselves and others. This is particularly interesting because the not-self core description made no mention of helping or being kind to others.

Conceptually, the two most fundamental aspects of not-self are equanimity and lovingkindness. Notably, results of the current study suggest that engagement with not-self experiences, and viewing not-self core as helpful, were predicted by constructs reflecting these two central components of not-self. The not-self experiences approach was predicted by mindfulness and emotional stability (i.e., low neuroticism), which can be understood as reflecting equanimity. The helpfulness of not-self core was predicted by agreeableness and common humanity, which can be understood to reflect lovingkindness.

## **Approaches to Self and Respective Constructs**

Analyses were conducted to examine whether the extent to which participants endorsed self-esteem, self-control, and self-compassion approaches related to measures directly assessing the respective constructs; for example, whether ratings on the likelihood of using a self-esteem approach are related to self-reported self-esteem. There were significant relationships in the majority of cases: self-esteem was correlated with the Rosenberg Self-Esteem scale, self-control was correlated with the Brief Self-Control Scale, and self-compassion was correlated to a majority of scales on the Self-Compassion Scale. These results suggest that participants were likely to report using approaches to the self during stress which reflected resources (i.e., aspects of their personalities) which were at their disposal. These results also lend support to the construct validity of the measure developed to assess approaches to self.

An interesting counter example arose, however. A measure of acceptance, the Acceptance & Action Questionnaire – II (AAQ), was not related to how likely participants were to use the not-self experiences approach. The AAQ measures an Acceptance and Commitment

Therapy-oriented process termed "psychological inflexibility," which is a rigid set of approaches to experience, such as judging difficult feelings as "bad," and avoiding those feelings and related thoughts. The opposite of psychological inflexibility is psychological flexibility (i.e., reflected by a low score on the AAQ), or acceptance, meaning the recognition that difficult thoughts and feelings are separate from oneself, and engaging in behaviors in spite of them (Bond et al., 2011). In other words, individuals accept their struggles and continue on with their lives, focusing on important values and goals. If it can be inferred that participants were likely to use approaches that reflected aspects of their own personalities (e.g., as with the self-esteem approach and the self-esteem measure), then acceptance was not reflective of the not-self experiences approach. Instead, the measure of nonattachment was significantly related to using the not-self experiences approach. This suggests that the not-self experiences description may have been capturing more about nonattachment than about acceptance.

Nonattachment, which is a Buddhist concept measured by the Non-Attachment Scale (NAS), reflects an emphasis on equanimous appraisal of thoughts, feelings, ideas, memories, and experiences (Sahdra et al., 2010). For example, an individual high in nonattachment might feel less overwhelmed by difficult emotional experiences as a result of taking a dispassionate stance toward them. It may be that, although both the AAQ and the NAS assess aspects of flexibility, nonattachment's Buddhist origins may have more closely mirrored the sentiment described by the not-self experiences description. This makes further sense, given that not-self experiences was strongly associated with personality variables which suggest equanimous stances.

Not-self core, however, was not associated with either the AAQ or the NAS, which were expected to be most related to not-self core. Either or both of two potential reasons may explain these null findings. Participants simply may not have understood how to apply what was

suggested by the not-self core approach. The notion of letting go of the self is so foreign that it may have elicited confusion from those participants who attempted to envision its use. For example, it may be difficult for an individual to readily see how he would let go of the self in order to manage difficult feelings stemming from failing a midterm exam. This explanation, however, may not fully explain not-self core's lack of association with the AAQ and NAS; participants did in fact understand the approach to the degree that helpfulness ratings were associated with the fundamental not-self concept of lovingkindness.

Another potential explanation lies in the constructs which the AAQ and NAS measured. Although psychological flexibility and nonattachment would surely aid the process of letting go of the self, neither of these concepts directly reflect not-self core. The AAQ's seven items do not reference the self, and none of the NAS's 30 items explicitly describe nonattachment from the self (i.e., mental phenomena which can be considered attachments are described, but the self which they comprise is not). It may be that a measure which more explicitly references the self would be associated with the not-self core approach.

It is important to note that although a number of the approaches to self were correlated with their corresponding constructs, many of them were also correlated with constructs for other approaches. For example, the likelihood of using the self-esteem approach was related to level of self-esteem, and it was also related to all of the other self-related constructs measured. These results may decrease confidence in the construct validity of the approaches to self measure; however, in the broad literature on self-esteem, it has been found to be related to a wide variety of constructs (e.g., self-efficacy, self-acceptance; Blascovich & Tomaka, 1991; Chen, Gully, & Eden, 2004). Thus, it may not be surprising that the tendency to bolster self-esteem is also related to engaging in self-control behaviors, self-compassion behaviors, and others. It may be

that individuals with high self-esteem are simply more likely to have a broad repertoire of responses from which they can draw when stressed.

While participants' ratings of how likely they were to use the approaches largely were correlated with measures of corresponding constructs, this did not hold true for the majority of approaches which participants thought would be helpful. The exceptions were ratings on the helpfulness of the self-control approach, which were associated with the BSCS, and ratings on the helpfulness of the self-compassion approach, which were associated with the SCS subscales of self-kindness and common humanity. It is not entirely clear why these approaches were not consistent with the trend. Regarding self-control, Baumeister and Alquist (2009) found that trait self-control (i.e., the construct measured by the BSCS) is an objectively valuable trait. In other words, it is not associated with unhelpful costs which detract from its benefits. For example, they found that individuals with high, rather than low, trait self-control do not experience costs to intelligent thought, effective decision-making, and initiative. Consistent with this sentiment, participants high in self-control may have expressed their positive feelings about the approach's value by rating it highly on both the likelihood and helpfulness dimensions. Because of their experiences with self-control, they may have felt surer about its usefulness and benefits than participants who rated the other approaches highly.

The literature has less to offer for potential explanations of why ratings on the self-compassion approach's helpfulness, in addition to its likelihood, were associated with SCS scales. While likelihood was associated with all but two scales, helpfulness was associated with only two: self-kindness and common humanity. A reason for the associations could be found in how explicitly the self-compassion description emphasized these qualities. Its key aspects were "feeling kindness for yourself," and thinking about "how all people make mistakes and struggle."

It may be that participants high in these particular qualities recognized and felt strongly about how helpful they would be in response to difficult situations.

## **Approaches to Self and Personality Factors**

Exploratory analyses were conducted to determine which of the Five-Factor Model personality traits (i.e., openness, conscientiousness, extraversion, agreeableness, neuroticism) were associated with each approach to the self. The highest of the correlations from these analyses were loaded into the aforementioned stepwise regressions. Relative to the not-self approaches, the results lent further evidence to the consistency of the not-self experiences approach, as measured in this study with the underlying Buddhist philosophy. The extent to which participants were likely to use a not-self experiences approach was not only associated with emotional stability (i.e., a negative relationship with neuroticism), but was also associated with agreeableness (i.e., a trait which includes altruism). As previously noted, the lovingkindness aspect of not-self may have again played a role in associations with personality traits.

While there were no additional associations between the helpfulness of not-self experiences and personality traits beyond what has already been explored, more light was shed on traits associated with the helpfulness of not-self core. In addition to the previously considered agreeableness factor, conscientiousness was associated with participants' ratings.

Conscientiousness is consistent with an important element of letting go of the self: self-control. This is most strongly employed in the service of the rigorous meditative practices which are required for realizing the not-self process. For example, a commonly used term within meditation practice is to meditate with "strong determination"; in other words, to control oneself toward the intention of meditation (Goenka, 2000). The combination of agreeableness and

conscientiousness, therefore, potentially suggests a commitment to kindness toward others, and potentially an attraction to determined, persistent effort that is commonly understood to be a part of achieving a state of not-self. Additionally, these two personality factors have been categorized under a higher-order factor which is characterized by "motivational processes associated with self-regulation—attentional, emotional, and effortful control" (Mount, Barrick, Scullen, & Rounds, 2005, p. 469). While this description may reflect many different approaches to the self, it is also consistent with a not-self approach.

Relative to relationships between personality traits and the self-esteem, self-control, and self-compassion approaches to the self, some familiar patterns reemerged. In all cases but self-control, the constellations of personality traits associated with the likelihood of using each approach were different from those of each approach's helpfulness. This illustrates again that different factors were captured by the likelihood dimension than were the helpfulness dimension. In the case of the self-control approach, the only associated personality factor was conscientiousness. Given conscientiousness' strong association with self-control, this corroborates the inference that participants who were likely to use self-control as an approach believed that there was no end to the helpfulness of the approach.

# Approaches to Self, Affect, Quality of Life, and Psychological Symptoms

Affect, quality of life, and psychological symptomology were compared to the not-self approaches to further understand associated factors. A single variable, the degree to which participants experienced recent positive affect, was associated with how likely participants were to use both not-self experiences and core approaches. Positive affect was in fact related to how likely participants were to use any of the approaches. One possibility is that being in a positive mood state led to people having more favorable responses to the descriptions. Alternatively, it

may be that participants with greater positive affect were more likely than others to actively engage in a variety of approaches to the self when stressed. Their affect may have been positive because they generally implement strategies which assist with their difficulties. On the other hand, actively engaging adaptive ways of responding under stress may lead to greater positive affect.

It is noteworthy that the not-self approaches had no other associations with satisfaction with life or psychological symptoms. It may be that use of not-self approaches is actually unrelated to psychological well-being and life satisfaction. If so, one would be less inclined to implement these approaches to the self in the service of reducing psychological symptoms. In particular, while not-self experiences was an approach participants were just as likely to use as self-esteem and self-control, the latter two approaches were both associated positively with satisfaction with life, and negatively with symptomology variables. The explanation for this discrepancy may be simple, however: more specific measures of psychological resources (e.g., emotion regulation, mindfulness skills) or symptomology (e.g., anxiety, personality symptoms) might identify relationships with engaging not-self approaches. The measures used in this study were quite general.

Relative to the helpfulness dimension, there were no associations between not-self ratings and affect, quality of life, or symptomology. This was similar across all approaches, which had very few associations, except for self-esteem and self-control's association with positive affect, and self-compassion's negative association with one facet of symptomology. It appears that helpfulness ratings were generally independent of participants' psychological states.

## Self-Esteem, Self-Control, and Self-Compassion

While understanding factors related to not-self was the central focus of the current study, there were notable findings concerning the other approaches to the self. Participants' likelihood of using the self-esteem approach was associated in the expected directions with every variable under investigation, with the exception of openness. These findings indicate that a wide range of variables are related to level of reported self-esteem, including greater psychological well-being, lower symptomatology, and more positive personality characteristics such as agreeableness, conscientiousness, and others. There is a large literature base suggesting that levels of selfesteem are related to many positive psychological outcomes. The current description used to assess likelihood of bolstering self-esteem may reflect a broadly adaptive way of approaching the self. It makes sense, for example, that the ability to remind oneself that a specific life problem does not change one's basic worth as a person would be associated with positive outcomes. Although the direction of causality is unclear, one can imagine that this ability would increase well-being, and greater well-being would also facilitate being able to hold onto this perspective. Further studies of this phenomenon, however, should also take into account previously noted cautions about self-esteem, such as associations with narcissism (Baumeister, 2005), costs related to autonomy and competence (Crocker & Park, 2004), and judgmentalism (Neff, 2003b).

Additional findings associated with the self-control approach, including relationships with self-compassion variables, openness, and satisfaction with life, were important, because self-control is strongly associated with meditation approaches related to the not-self process. The effortful determination required by not-self meditation practices would likely be bolstered by self-control. Given the self-control approach's relatively high ratings, new insights could be developed through investigating the construct when explicitly integrated with not-self. For

example, individuals might find not-self more accessible or appealing if self-control were used as an entry point for further exploration.

The relatively low ratings for self-compassion are also important because there is a growing body of research focused on the importance of self-compassion to general well-being, and the teaching of skills to increase self-compassion (Gilbert & Irons, 2005; Neff & Germer, 2013). It is concerning that participants reported that they were unlikely to respond to themselves with self-compassion, and that they did not find it to be a helpful approach, in light of this research. Gilbert and Procter (2006) found that individuals actually feared the prospect of becoming self-compassionate. Examples of reasons for this included being concerned about forgiving oneself too easily for past mistakes, or becoming gentle to the degree that others would take advantage of them. Addressing these kinds of fears may be essential to increasing the likelihood that people will engage in self-compassion.

Limitations. The present study yielded valuable clues for further investigation of not-self and related processes. There were a number of limitations, however, due to cultural—both Western and Buddhist—and methodological constraints. The chief Western cultural limitation was lack of popular familiarity with the concept of not-self. While brief descriptions of other approaches (i.e., self-esteem, self-compassion) likely cued familiar cultural associations, there were probably few to no such associations for not-self. This likely forced participants to heavily rely on the provided not-self descriptions, which highly simplified the concepts' complexities. It may be, with such limited information, that participants' interpretations of the descriptions may not have reflected an understanding of the essential principles of not-self. Thus, interpretations of the findings should be made with this limitation in mind.

Relative to Buddhist cultural limitations, there is no monolithic "Buddhist" way of approaching not-self. However central the doctrine of not-self is to Buddhism, its tenets and practices have evolved over the 2500 years since its inception. The current study's conceptualization of not-self stems from Western empirical analysis of members from one Buddhist sect (Herwitz, 2012). There are three major sects of Buddhism, and within each are various schools of thought, including the popularly known Tibetan, and Zen—neither of which were the basis for this study's exploration. Essentially, associations with not-self which exist within this study may not definitively generalize to all Buddhist conceptualizations of not-self.

Beyond the brevity of not-self descriptions, there were other methodological limitations. One of these is the issue of whether individuals are truly likely to engage in behaviors which they endorse as their intention. Ajzen and Fishbein (2005) wrote extensively on the relationship between attitudes (i.e., stated intention) and behaviors (i.e., completed intention), noting that two variables particularly moderate whether the former predicts the latter. The first is whether individuals have a vested interest in the outcome of the intended behavior. In other words, if the stated behavior would personally benefit the individual, the behavior would be more likely. The second moderator is whether the individual has direct experience with the behavior. For example, a woman who says she is likely to open doors for strangers is more likely to do so if she has done so in the past. Within the current study, although it may be reasonably assumed that participants had a vested interest in the intentions they endorsed (i.e., improvement in well-being), there was no measure which directly assessed the degree to which this was true. Relative to direct experience, once again there are cases in which this may be inferred by construct measures (e.g., individuals likely to use a self-esteem approach also scored highly on self-

esteem), but without direct observation of strategies for managing difficult situations, this could not be confirmed.

Relative to other methodological concerns, the vast majority of participants were heterosexual and European American, and all were undergraduates at a four-year university in the northwestern United States. As a result, study conclusions may not generalize to other populations. Additionally, this study only looked at responses to the self in time of stress or hardship. These results could differ from normal, day-to-day ways of relating to the self.

**Future directions.** As previously noted, the conclusions of the current study offer "clues" for more comprehensive explorations of the concept of not-self. While even a brief description of the concept of letting go of attachments (i.e., not-self experiences) fared positively with participants, it may be that individuals would feel similarly about letting go of the self (i.e., not-self core) if they were given more information. A future study could, for instance, include several aspects of not-self in order to provide more detail, as well as to increase the validity of the approaches. Alternatively, future research could investigate opinions on a brief didactic discussion on not-self, and then assess the degree to which participants understand the concept.

It may be that different approaches to the self are more or less helpful depending on contextual factors. Future research could explore when each approach is most useful. This could potentially then inform clinical intervention. For example, self-control is essential for engaging in not-self practices, such as meditation. A not-self-based intervention, therefore, could include goal-directed elements around scheduling meditation, or focusing on the present and minimizing distractions. Furthermore, because self-control was viewed by participants more favorably than not-self core, the latter concept could be bolstered by incorporation of the former. Over the course of subsequent studies, this and similar combinations of concepts and approaches

could coalesce into a comprehensive, module-based treatment. This treatment may find applications for various mental disorders related to negative feelings about the self (e.g., mood disorders, anxiety disorders, various personality disorders), or to individuals with subclinical concerns (e.g., interpersonal concerns).

#### Conclusion

The present study focused on the ways in which individuals approach the self when encountering stressful or difficult circumstances. The primary focus was on not-self, which reflects a Buddhist conceptualization of the self that is generally unfamiliar to Western culture. The process of not-self involves relinquishing attachments, and ultimately the self, in order to experience happiness. It reflects equanimity, lovingkindness, compassion, and sympathetic joy. In order to more comprehensively evaluate not-self, two aspects of not-self were presented to participants. The first, not-self experiences, suggested the process of letting go of attachments as a means of managing problems. The second, not-self core, suggested letting go of the self toward the same end. Exploratory research questions revealed some aspects of not-self which were appealing to participants, and others which were less appealing.

On both likelihood of use and helpfulness dimensions, participants rated not-self experiences as highly as self-esteem and self-control, and higher than self-compassion and not-self core. Not-self core, however, was rated lower than the other approaches on both likelihood and helpfulness. These findings suggest that relinquishing attachments is likely a viable approach to the self, but that the notion of letting go of the self is not particularly viable, at least within the constraints of the population studied. Additional analyses found that not-self experiences is particularly likely to be used by individuals who report high levels of mindfulness, as well as low levels of neuroticism, which can be conceptualized as reflecting equanimity.

Likewise, individuals reporting high levels of openness and agreeableness saw not-self experiences as more helpful. Although there were no traits which predicted how likely participants were to use not-self core, those who viewed this approach as more helpful were individuals who reported more traits of agreeableness and common humanity, which may be interpreted to reflect lovingkindness toward oneself and others. Although they were not predicted, and although not all data could be interpreted, these findings are strikingly consistent with Buddhist conceptualizations of not-self.

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