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The Social Self-Compassion Scale (SSCS): Support for a Multi-Domain View of the Self-Compassion Construct and its Relevance to Anxiety

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THE SOCIAL SELF-COMPASION SCALE (SSCS):

SUPPORT FOR A MULTI-DOMAIN VIEW OF THE SELF-COMPASSION

CONSTRUCT AND ITS RELEVANCE TO ANXIETY

by

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Abstract

Self-compassion refers to the tendency to be kind and understanding towards oneself in times of failure rather than responding to such situations with harsh self-criticism. There is reason to believe on the basis of existing research that self-compassion is particularly relevant within the social domain. As such, this thesis is focused on describing and evaluating the Social Self-Compassion Scale (SSCS), which was developed for the purposes of this research and measures the degree to which individuals tend to be kind and understanding towards themselves when confronted with social adversity. This thesis begins by describing Studies 1 through 3, which were online self-report studies that tested the psychometric properties of the scale using large samples of at least 200 participants. The SSCS related to a variety of outcomes as expected, and was predictive of measures beyond the general self-compassion scale such as social anxiety, perceived social self-efficacy and mattering. To expand on this research, Study 4 further evaluated the reliability and validity of the SSCS and attempted to temporarily induce self-compassion in a social context as well as affect among participants ($N = 91$). This final study also examined levels of self-improvement motivation and implicit beliefs related to the capacity to improve upon and change past social mistakes. As anticipated, those in the social self-compassion condition in Study 4 reported significantly higher levels of positive affect, although no differences emerged with respect to negative affect or subjective distress. In addition, those in the social self-compassion condition reported a greater endorsement of incremental beliefs regarding the ability to change social qualities as compared to both the self-esteem and control conditions. Additionally, in partial support of the initial hypothesis, both those in the social self-compassion condition and

the control condition reported higher self-improvement motivation regarding desire and willingness to change in the future. Implications of findings and suggestions for future research are discussed.

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The Social Self-Compassion Scale (SSCS): Support for a Multi-Domain View of the Self-Compassion Construct and its Relevance to Anxiety

Social anxiety disorder (SAD) is characterized by an excessive and irrational fear of scrutiny and negative evaluation from others in social and/or performance contexts. According to the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013), those with SAD exhibit strong inclinations to avoid supposedly dangerous social situations, and intense levels of discomfort and distress when escape from such situations is not possible. As such, this disorder is oftentimes debilitating and markedly impairs functioning in many facets of life, including work and social domains. It is not that people with SAD do not want social contact, but their fear of interacting with others prevents this from happening, and thus puts them at risk for social isolation (Coupland, 2001; Liebowitz, 1999).

Although SAD is one of the most prevalent mental disorders, a minority of those with the disorder obtains adequate treatment (McEvoy, Grove, & Slade, 2011; Weiller, Bisserbe, Boyer, Lepine, & Lecrubier, 1996). In part, this is due to the fact that according to the World Mental Health Survey, only 20.8% of individuals with SAD report seeking professional help (Ormel et al., 2011). Some common barriers to help seeking among those with social anxiety include poor mental health literacy, stigma, a belief in self-reliance, low levels of accessibility to treatment, and inadequate provider recognition of the disorder (Griffiths, 2013). Of course, ensuring that those with SAD receive proper treatment is of the utmost importance. However, self-compassion, which entails being caring and kind to oneself, may be a useful emotional regulation strategy that individuals can use in lieu of more intensive treatment, given the many barriers to help seeking. Self-compassion is an

accessible approach that those with SAD can utilize to counteract against self-critical thoughts and feelings that are often experienced as a result of feeling judged within relational contexts.

The current thesis will explore how the effects of a domain-specific form of self-compassion, known as social self-compassion, may influence those with varying degrees of social anxiety. Ultimately, this thesis will outline novel research that addresses this interpersonal approach to self-compassion. However, before this takes place a discussion will precede regarding the concepts and literature on social anxiety and self-compassion in general. Then, this will be followed by a discussion of how research has interconnected social anxiety and self-compassion both in theory and in practice. Finally, a section will follow that outlines hypotheses and research on the novel focus of social self-compassion along with its many anticipated benefits.

As recently conceptualized by Neff (2003), self-compassion refers to having a warm and accepting stance towards those aspects of oneself that are disliked or painful. Instead of minimizing pain or being highly self-critical, self-compassionate individuals provide themselves with warmth and non-judgmental understanding when they experience suffering, inadequacy, or failure. Self-compassion has been shown to be a robust predictor of symptom severity and quality of life among those seeking self-help for mixed anxiety and depression (Van Dam, Sheppard, Forsyth, & Earleywine, 2011).

Most investigations of social anxiety focus on the presence of negative attributes; however, the central focus of this thesis focuses on a positive characteristic that may be relatively missing in socially anxious people -- namely social self-compassion. Extensive research on self-compassion has focused on how self-compassion is related to and distinct

from constructs that are maladaptive such as narcissism and self-pity (for review, see Barnard & Curry, 2011). However, less research has explored how self-compassion predicts key outcomes beyond negative predictors such as neuroticism or self-criticism. Given that a large body of evidence suggests that self-compassion is quite an important source of happiness and psychological well-being (Barnard & Curry, 2011), it is our hope that this research may be enlightening within the positive psychology field both in terms of identifying possible psychological risk factors for dysfunction in general and exploring the need for more tailored interventions to take positive factors into consideration.

Social Anxiety

Social anxiety disorder (SAD), previously known as social phobia, is the fourth most common psychiatric disorder with a lifetime prevalence ranging from 7.2-12.1 per cent (Kessler, Chiu, Demler, & Walters, 2005; Ruscio et al., 2008). SAD has been described as "crippling shyness" (Kessler, 2003), as it is a chronic condition that is fairly stable in its course. The onset for this disorder typically occurs around the mid-teenage years between ages 13-16 with an average duration of about 20 years at the time of presentation (Davidson, Hughes, George, & Blazer, 1993; Wittchen & Beloch, 1996). According to a Canadian Community Health Survey, SAD tends to be more common among females, and it is also associated with a lack of social support with regards to marital status and living arrangement (MacKenzie & Fowler, 2013; Shields, 2004). However, it is difficult to approximate the total number of people who have SAD, given that many do not seek formal, professional treatment for the condition. Therefore, epidemiological population-based studies are one of the ways in which researchers are not only better able to estimate the prevalence of SAD but most notably, the severity of its

burden. Past epidemiological studies have linked SAD with a host of significant impairments influencing social and occupational life, educational attainment, financial independence, and interpersonal outcomes (Fehm, Beesdo, Jacobi, & Fiedler, 2008; Fehm, Pelissolo, Furmark, & Wittchen, 2005).

Evidently, diminished quality of life for those with SAD is a major concern. Individuals with SAD, perhaps due to the nature of the condition itself, may feel that they are unqualified and ill-equipped to deal with the challenges that daily life presents to them and consequently, various areas of life may suffer. It is well established that individuals with SAD report significantly lower quality of life compared to healthy controls (Ghaedi, Tavoli, Bakhtiari, Melyani, & Sahragard, 2010). Adults with SAD, compared to those without psychiatric morbidity, tend to report lower employment rates, lower income, and lower socio-economic status (Patel, Knapp, Henderson, & Baldwin, 2002). In fact, severity of SAD symptoms is predictive of lower hourly wages (Katzelnick & Greist, 2001). For those who have secured employment, SAD is associated with decreased work productivity, and increased absences (Kessler, 2003; Wittchen & Beloch, 1996). Those with SAD may also experience work impairment in the form of refusing promotions because of social fears. They are also most likely to experience impairments in workplace functioning compared to patients with other anxiety disorders (Moitra, Beard, Courtney, Weisberg, & Keller, 2011).

An intriguing study by Kashdan, Morina, and Priebe (2009) suggests that experiential avoidance, an aspect of emotion dysregulation, may also contribute to poorer quality of life for those with SAD. Experiential avoidance is the tendency to react negatively to unwanted thoughts and feelings, and desire to control or avoid these

experiences and their resulting distress (Kashdan et al., 2009). As a result, the term refers to any form of avoidance or escape strategy that is used to alter the form and frequency of unwanted experiences (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). The authors found that experiential avoidance partially mediated the effects of SAD on quality of life. This study provided preliminary support for a relationship among social anxiety, emotional dysregulation, and quality of life. Sung and colleagues (2012) have expanded further on this topic and have found that those with SAD are less likely to believe cognitive and behavioural strategies will be effective in alleviating negative mood compared to healthy controls. This may lead individuals to be less likely to engage in emotion-regulating strategies, thus contributing uniquely to poorer quality of life. Although many variables may contribute to poorer quality of life for the SAD population, quality of life is also known to decline overall as symptom severity increases.

With respect to the symptom severity of SAD, there is some debate within the research literature regarding how to best conceptualize the disorder. The DSM-5 still represents SAD as a diagnostic category primarily based on the medical model for classifying disease. In other words, the DSM-5 uses a categorical approach to classify and diagnose SAD, whereby an individual must meet a certain set of criteria in order to be diagnosed with the disorder. In contrast, the dimensional approach to classifying and diagnosing mental disorders involves quantifying symptoms and representing them with numeric values on one or more scales or continuums. This approach gives clinicians more flexibility in assessing the severity of a condition. Some have claimed that a dimensional approach, which does not use concrete thresholds to determine presence or absence of a given disorder, is most suitable for diagnosis and classification of SAD. For instance,

Davidson and colleagues (1993) have argued that an arbitrarily derived diagnostic threshold for SAD rather than a continuum of severity is problematic. This finding is because individuals may experience high levels of social anxiety yet still not fulfill the diagnostic criteria for the disorder. For instance, a recent study found that social anxiety symptoms among university students were widespread such that the presence of functional impairment was found among those who reported both moderate to high scores of social anxiety (Dell'Osso et al., 2014). Although these individuals may not have fulfilled the diagnostic criteria for SAD, they nonetheless reported experiencing damaging consequences associated with varying degrees of social anxiety.

SAD is also highly comorbid with other psychiatric conditions. For instance, SAD is highly comorbid with depression and anxiety disorders (Fehm et al., 2005), personality disorders (Torvik et al., 2016) and eating disorders (Pallister & Waller, 2008), and is associated with suicidality even in the absence of comorbid depression (Fehm et al., 2005). SAD is also associated with substance abuse (Fehm et al., 2005), but the evidence that it is associated with alcohol misuse has been mixed (Battista & Kocovski, 2010). Although many individuals do experience the co-occurrence of SAD and other psychiatric conditions, the research literature suggests that they tend to report that symptoms relating to social anxiety occur first (Chartier, Walker, & Stein, 2003; Shields, 2004). This finding may be one of several reasons that those suffering from SAD never seek formal treatment for the condition, or seek help after the disorder has progressed and become more severe. Individuals may tend to regard themselves as very shy rather than ill until comorbid disorders occur and present additional psychological suffering, thus propelling them to seek medical assistance (Steinert, Hofmanna, Leichsenring, & Kruse, 2013). The research

findings by Chartier and colleagues (2003) and Shields (2004) underscore the importance of prevention, early intervention, and treatment for those experiencing SAD symptoms, as these efforts may allow individuals to better realize their potential, and prevent subsequent mental disorders from forming (Kessler et al., 2005; Weiller et al., 1996).

Benefits of Being Self-Compassionate

As conceptualized by Neff (2003), the self-compassion construct is composed of (1) self-kindness (being kind and understanding towards oneself in instances of pain and failure); (2) common humanity (acknowledging failure and suffering are shared with others); and (3) mindfulness (observing and describing negative thoughts and feelings in a balanced and nonjudgmental way). Each component of self-compassion described above is associated with a bipolar, contrasting quality. For instance, self-judgment (harsh self-criticism, particularly after experiencing failure) is seen as an impediment to self-kindness. The opposite of common humanity is isolation, whereby an individual is less self-compassionate based on the view that experiences are not shared with others. Lastly, over-identification limits one's ability to be mindfully aware of negative thoughts and feelings given that it involves a focus on one's current emotional state in the face of failure.

As previously discussed, self-compassion is related to the maintenance of well-being given that it is positively associated with positive construal of the self and others, as well as optimism and happiness (Neff, Rude, & Kirkpatrick, 2007; Raque-Bogdan, Ericson, Jackson, Martin, & Bryan, 2011). It is also positively associated with social connectedness, emotional intelligence, self-acceptance, and self-improvement motivation, among many other positive outcome variables (Breines & Chen, 2012; Neff, 2003). In contrast, self-

compassion is negatively associated with self-criticism, depression, neurotic perfectionism, and social anxiety (Neff, 2003; Potter, Yar, Francis, & Schuster, 2014).

Self-compassion is also conceptually distinct from self-esteem given that it is not based on self-evaluations (Breines & Chen, 2012). As noted by Breines and Chen (2012), self-compassion predicts many positive outcomes above and beyond self-esteem, such as more measured responses to stressful events (Leary, Tate, Adams, Batts Allen, & Hancock, 2007), greater self-worth stability that is less dependent on external outcomes, as well as relatively accurate self-appraisals (Neff & Vonk, 2009), and lower narcissism (Neff, 2003). In comparison to self-esteem, self-compassion also has a stronger negative association with having a trait-like social comparison orientation, public self-consciousness, self-rumination, anger, and the need for cognitive closure.

What has research shown us thus far with respect to the relationship between self-compassion and social anxiety? Unfortunately, only a limited body of research has assessed self-compassion in relation to SAD among clinical samples, and social anxiety among healthy populations. To date, the majority of research has explored the relationship between social anxiety and mindfulness, otherwise known as the ability to be aware of, and accepting of, internal and external experiences within the present moment (Brown & Ryan, 2003). Correlational analyses have revealed that mindfulness is significantly related to low social anxiety (Rasmussen & Pidgeon, 2011), and clinical studies using mindfulness and acceptance-based interventions have been shown to effectively help treat SAD (see Dalrymple & Herbert, 2007; Kocovski, Fleming, Hawley, Huta, & Antony, 2013; Kocovski, Fleming, & Rector, 2009). However, one study suggests that self-compassion accounts for more of the variance in psychological distress than mindfulness does (Van

Dam et al., 2011). Importantly, it appears that researchers and clinicians alike are beginning to expand their focus on the link between social anxiety and mindfulness to now also include the construct of self-compassion, which shares an inextricable link with mindfulness. However, there are many future avenues that remain to be explored. To our knowledge, Werner and colleagues (2012) were the first to investigate self-compassion in clinical samples of persons with SAD. They found that people with SAD did report less self-compassion than healthy controls. However, contrary to the authors' expectations, within the SAD group, lesser self-compassion was not generally associated with severity of social anxiety. The exception to this finding was that one of the measures of social anxiety (the SIAS) was significantly and positively correlated with the self-judgment and isolation subscales. That being said, this finding may be consistent with past research showing that these two are the most predictive subscales in relation to anxiety symptoms and quality of life (Van Dam et al., 2011).

More recently, preliminary results of a single case experimental study (Boersma, Hakanson, Salomonsson, & Johansson, 2014) suggested that compassion focused therapy (CFT) for those diagnosed with SAD may be a promising method of addressing related problems such as shame and self-criticism. CFT involves integrating cognitive behavioural theories, affective neuroscience, Buddhism, and attachment and evolutionary theory (Gilbert, 2010). In this therapy, participants engage in specific cognitive, behavioural, mindfulness and compassion focused imagery exercises that promote self-care in the form of compassion for the self and for others (Gilbert, 2010). Outside of the clinical context, results from other studies have indirectly suggested that those with non-clinical levels of social anxiety may very well benefit from programs or interventions that foster self-

compassion. For instance, Cox, Fleet, and Stein (2004) showed that self-criticism was strongly associated with social phobia in a large general population survey. In addition, a self-report study by Gilbert (2000), which used both a student and clinical sample, showed strong positive associations among social anxiety, shame, submissive behaviour, and negative social comparison within both groups. Accordingly, additional research needs to be done that directly assesses whether self-compassion programs or interventions are effective for socially anxious individuals within the general population.

Although research that clearly links social anxiety and self-compassion is limited, recent studies have assessed the efficacy of self-compassion training in response to social evaluative threat. A recent study by Arch et al. (2014) examined the influence of self-compassion training on young womens' reactions to social evaluative threat, by assessing changes in psychobiological factors. Arch and colleagues posited that brief self-compassion training (SCT) would influence psychobiological responses to an acute stressor (in this case, the Trier Social Stress Test developed by Kirschbaum, Pirke, & Hellhammer, 1993). Compared to placebo and no-training control conditions, results showed that those who received the brief self-compassion training reported lower subjective anxiety and produced a psychobiological response to social evaluative threat that was indicative of lower stress (i.e., dampened sympathetic nervous system reactivity, more adaptive parasympathetic cardiac and subjective anxiety responses, less diminished heart rate variability responses). The self-compassion training reduced defensiveness to social threat to a greater extent than it reduced perceptions of uncontrollability. More recently, an expansion of this study found that the effectiveness of the intervention tended to vary depending on other pre-existing personality traits (Arch, Landy, & Brown, 2016). For instance, those higher in social

anxiety and unhealthy attachment to goals benefitted less than those with lower levels of these traits, and thus may have required more intensive or tailored self-compassion training. In this context, attachment referred to the degree to which an individual reported exhibiting unhealthy fixation with respect to achieving particular outcomes (Sahdra, Shaver, & Brown, 2010). In addition, Arch and colleagues found that a predisposition towards self-compassion (e.g., high trait self-compassion) neither predicted nor moderated responses to the acute stressor, suggesting that the intervention was appropriate even for those without a self-compassionate predisposition. However, they did not have a measure of self-compassion that was specific to a social evaluative context. Taken together, it is imperative that research continues to explore the mechanisms through which pre-dispositional traits influence one's receptiveness to self-compassion training or interventions, particularly among those with social anxiety.

More recently, another study by Harwood and Kocovski (2017) demonstrated the relevance of self-compassion for those with elevated levels of social anxiety. In this study, undergraduate students were pre-selected for having high or low social anxiety. Undergraduate students were randomly assigned to a self-compassion writing condition or a control writing condition. In the self-compassion condition, participants were asked to write about a negative work event that had previously made them feel badly about themselves and reflect upon it from a self-compassionate (kind and understanding) perspective. The participants in the control condition similarly wrote about a negative work experience but were asked to provide further details about what had occurred. All participants were led to believe that following this task, they would complete a 3-minute anxiety induction in which they would have to deliver a speech on why they should be

hired for a job. They were asked to fill out anticipatory anxiety measures related to their upcoming speech and were then later informed that they would not have to deliver the speech after all. Results revealed that those undergoing the self-compassion manipulation reported significantly reduced anticipatory state anxiety within the high socially anxious group but not the low socially anxious group. These results suggest that self-compassion can be induced and that highly socially anxious individuals may experience the most gains from self-compassion inductions such as the one employed. However, as Harwood and Kocovski (2017) note, although individuals high in social anxiety tend to engage in more anticipatory processing behaviours and to a greater degree (Clark & Wells, 1995), people across a range of social anxiety may engage in these behaviours as well. This finding is relevant given that Study 4, which will be discussed in later detail, tested participants ranging in levels of low to high social anxiety.

Future Avenues for Research on Self-Compassion and Social Anxiety

As noted earlier, an extensive literature already exists on the negative self in relation to social anxiety as well as its potentially debilitating consequences. Thus, it logically follows that a lack of positive self-attributes is also worth exploring in further depth. Although a self-compassionate stance is potentially beneficial for all people, it is particularly relevant for individuals with SAD or those who meet nonclinical but moderate to high thresholds for social anxiety, as they tend to be high in self-criticism while simultaneously low in levels of self-compassion (Werner et al., 2012). With respect to social anxiety, self-compassion might involve accepting and treating oneself kindly when encountering perceived social blunders, uncontrollable negative thinking, or physiological

arousal such as a racing heart due to social distress. However, at present there is limited research that explores the relationship between self-compassion and social anxiety.

When initially evaluating how to best conduct the present research, it was necessary to identify current limitations. For instance, it was important to acknowledge that only one general measure of self-compassion exists (see Neff, 2003), although different adaptations of the general scale have been developed thus far, such as a short-form version. This is a limitation given that the use of self-compassion is likely more or less relevant and advantageous in particular life domains. For instance, an individual may be compassionate toward themselves in certain situations (such as the loss of a loved one) but yet largely unable to show themselves the same level of kindness and understanding as it pertains to social mistakes and being negatively evaluated by others. Despite the utility of assessing self-compassion in the context of social anxiety, to date there is no existing method of measurement that incorporates both these constructs. Thus, to address this gap in the literature, we aimed to extend the scope of inquiry in the social anxiety field through the creation of a modified scale. This revised scale was specifically designed to measure individual differences in the level of self-compassion people typically report when reflecting upon interpersonally challenging situations they have encountered. Given the purpose of the present research, we anticipate that the addition of this newly developed scale will be of great utility.

The Distinctive Nature of Interpersonal Distress

Altogether, research suggests that there seems to be something particularly distinct and characteristically harmful about negative social interactions beyond events that generate feelings of general negativity. While self-compassion may be a beneficial strategy

used to cope with a wide variety of stress-inducing situations, it may be particularly needed in dealing with situations of interpersonal pain and distress. Therefore, in accordance with the aim of this thesis, research on the uniqueness of negative social experiences calls attention to the potential need to develop and test a revised version of the Self-Compassion Scale by Neff (2003), to measure self-compassion within difficult social situations. Such a measure may help to better identify those specific individuals who are suffering from a relative lack of social self-compassion, and also act as a catalyst for future research on related mechanisms and risk factors associated with the newly developed construct.

As stated in past literature, and intuitively, self-criticism tends to be most intense in situations where people feel critiqued and judged by others (Blatt, 1991). Research has shown that interpersonal stress is generally one of the most distressing, and impactful types of stress that a person can experience. In particular, research has shown that daily interpersonal stressors and unsupportive interactions can have a negative impact on psychological well-being over and above various other forms of stress.

To demonstrate, a study by Lakey, Tardiff, and Drew (1994) assessed the relationships among negative social interactions, perceived and enacted support, cognition about the self and others, and psychological distress using a postsecondary school sample. Lakey and colleagues predicted that exposure to negative social interactions may act similarly to stressful major life events, which tend to heighten negative evaluation of the self and the important life roles that an individual identifies with (Lakey & Edmundson, 1993; Pearlin, Menaghan, Lieberman, & Mullan, 1981). In other words, excessive criticism experienced during negative social interactions was said to lead individuals to perceive less control and agency over their own lives. Moreover, they proposed individuals would draw

dysfunctional conclusions about their social world, such as becoming more sensitive to rejection, supposing that a person who disagrees with you does not like you personally, and feeling more alienated and less trusting of people in general. Importantly, they also sought to illustrate that negative social interactions predicted psychological distress above and beyond negative life events and daily hassles using the Inventory of Negative Social Interactions (INSI). The authors confirmed their hypotheses and found that negative social interactions were related to negative affect, low self-esteem, external control beliefs, dysfunctional attitudes, and low interpersonal trust. As well, although negative social interactions were related to stressful events and hassles, the INSI had incremental validity beyond these in predicting symptoms of psychological distress.

Longitudinal research has also shown that the negative effects of interpersonal stress can persist, leading to later mental health problems. For instance, research by Lee, Hankin, and Mermelstein (2010) found that among surveyed youth in grades 6 to 10, the relationship between baseline perceived social competence and prospective changes in depressive symptoms was partially mediated by negative interactions with parents, even after accounting for initial levels of depressive symptoms. In addition, analyses revealed that adolescents with a more negative cognitive style were the most likely to exhibit increases in depressive symptoms over time and the interaction between cognitive vulnerability and parent stress predicted later depressive symptoms. These findings on the effects of negative interpersonal distress are supported by another study which found that the positive aspects of self-compassion (self-kindness, common humanity, mindfulness) and the negative aspects of self-compassion (self-judgment, isolation, over-identification), mediate the relationship between self-reported feelings of parental criticism and social

anxiety (Potter et al. 2014). Clearly, parents have an especially substantial role in conveying positive regard towards their children, given that negative parental interactions are associated with risk of children reporting mental health issues. The finding that parental criticism is associated with both dimensions of self-compassion is noteworthy, as it shows that parental criticism is not only predictive of self-criticism but also seems to limit the ability of individuals to experience positive and adaptive emotions (Potter et al., 2014).

Other research shows that peer victimization may be the most potent factor related to elicitation of emotional distress. A recent study by Iffland, Sansen, Catani, and Neuner (2014) used a simulated social exclusion ball-toss game (Cyberball) to illustrate that stress reactions to social exclusion depend more on prior experiences of peer victimization than on a previous diagnosis of SAD. Irrespective of diagnosis, participants who had experienced past relational peer victimization reported a more intense change in affect during the experiment. This suggests that the negative effects from social interaction are both fairly universal and persistent; although social anxiety certainly elevates levels of emotional distress, memories of negative social experiences can create lasting effects for all people, thereby impacting initial stress reactions to social threats. Given that reactivity to interpersonal stress among those with SAD is the primary focus of the current thesis, a discussion of research in this area will now follow.

Social Anxiety Regarding Social Performance Feedback

For those with SAD, symptoms tend to persist even with repeated exposure to feared social situations (Wild, Clark, Ehlers, & McManus, 2008). Cognitive models of social anxiety propose that symptoms of SAD are maintained when individuals become concerned about how they are portraying themselves, and thus shift their attention away

from others to self-monitor in detail (Clark & Wells, 1995). Self-monitoring draws their attention to internal information (such as somatic information, thoughts, and/or images), which they use to make erroneous inferences about how they appear to others (Clark & Wells, 1995). In essence, they are highly attuned to signs of physical symptoms such as blushing, trembling or sweating and tend to overestimate how visibly anxious they appear to their peers. Research suggests that while both high and low anxious individuals may use awareness of physical symptoms to infer judgments about visibility of their negative behaviours, it is those high in social anxiety who go on to use these cues to generate negative global inferences about themselves and their social performance (Mansell & Clark, 1999).

Research has not only explored how individuals with SAD respond to feedback in the form of their own internal, physical symptoms, but also how individuals with SAD respond to external, performance feedback from others. For instance, a study by Smith and Sarason (1975) explored how those ranging in low, moderate, or high social anxiety would respond to negative feedback from an impression formation experiment involving an interaction with another person. After engaging in the role-playing experiment with the other individual, all participants were asked to imagine that they had then received an evaluation from the person they had just conversed with. These evaluation ratings consisted of ten bipolar adjective scales (i.e., likeable-unlikable), of which seven scales were rated toward the negative pole. They then responded to self-report questionnaires about their response to both the evaluator and the feedback. Persons moderate and high in social anxiety perceived the same feedback as being negative compared to those low in social anxiety, and indicated that such feedback would elicit a more negative emotional response.

Moreover, those with high anxiety reported greater expectancy that others would evaluate them negatively. Similar findings on reactivity to negative feedback among those with low and high levels of social anxiety have also been found recently using computer-mediated experimental paradigms (Bautista & Hope, 2015). Both of the studies described above used the Brief Fear of Negative Evaluation Scale (BFNE; Leary, 1983) to prescreen college students on levels of social anxiety, given that it measures a core component of SAD.

Self-compassion may be a critical component of how one with social anxiety both anticipates and copes with receiving interpersonal feedback. For instance, Leary et al. (2007) conducted a series of studies that found that self-compassion substantially buffers against maladaptive reactions to negative social events. In their second study, they established that self-compassion was predictive of emotional reactivity and cognitive reactions to negative events, such that self-compassionate individuals reported a more balanced approach and response to hypothetical scenarios involving social distress. In Study 3, Leary et al. (2007) examined how participants prescreened for self-compassion would differentially respond to neutral (ambiguous) or positive feedback through a one-way video interaction. Neutral rather than negative feedback was provided due to the particularly distressing effects associated with ambivalent evaluations from others (Leary, Haupt, Strausser, & Chokel, 1998). In this study, participants spoke about themselves in front of a video camera, and were led to believe that simultaneously, a confederate within a separate room was viewing them via a video feed. During this time, the researcher left the room of the participant and later returned with an envelope from the supposed confederate containing either positive or neutral feedback about their video, depending on random assignment of condition. Participants low in self-compassion attributed positive feedback

more to themselves, but neutral feedback less to themselves whereas people high in self-compassion reacted similarly to both positive and neutral feedback. The authors theorized that this was because those low in self-compassion were the most likely to make defensive attributions by reporting that positive feedback, but not neutral feedback, was caused by their personality. These findings reinforce the benefits of self-compassion by suggesting that a self-compassionate stance buffers against reactions to both positive and negative events, including negative interpersonal encounters.

Given the research on fear-inducing social situations among socially anxious individuals, along with the benefits of self-compassion within interpersonal contexts, it seems particularly pertinent to further examine the relevance of social self-compassion. Although anyone can learn to become more self-compassionate, research suggests that without efforts to improve it, it remains a fairly stable trait-like characteristic over time (Raes, Pommier, Neff, & Van Gucht, 2011). Therefore, the existing self-report measure of self-compassion is intended to measure stable individual differences of the trait itself (Neff, 2003). Nonetheless, as mentioned previously levels of self-compassion may very well increase if efforts are made to improve upon it.

Despite the significance and resonance of self-compassion within social contexts for both individuals and researchers alike, only one measure of general self-compassion has been developed thus far (Neff, 2003). This is surprising, especially in light of the fact that self-compassion is a very popular topic of study; over 200 journal articles and dissertations on self-compassion have been released since the inception of the construct in 2003 (Neff & Dahm, 2015). To our knowledge, despite the utility of assessing self-compassion in the context of social situations, there has been no scale of social self-compassion developed for

assessment use in both socially anxious populations and the general public. It is our belief that such a scale would be predictive of a variety of psychosocial outcomes over and above the original self-compassion scale by Neff (2003). In addition, such a scale could potentially provide researchers and clinicians with the ability to more accurately assess the associated risk factors and mechanisms associated with low levels of social self-compassion, from both a cross-sectional and longitudinal standpoint.

Studies 1 To 3

The primary purpose of this research was to develop a new self-compassion scale, known as the Social Self-Compassion Scale (SCSS; see Appendix A) that is able to capture individual differences in one's ability to be self-compassionate in response to social situations that are perceived as challenging. In order to create this scale, all items from the short form version of the self-compassion scale (Raes et al., 2011) were revised to reflect having self-compassion (or having a relative lack thereof) within social contexts. The reasons supporting our decision to adapt the short-form version of the scale will be discussed in further depth within the upcoming methods section.

The main objectives of Studies 1 through 3 were to evaluate the factor structure and psychometric properties of the newly developed SSCS. In each of these studies, the factor structure and psychometric properties of the SSCS were assessed using large, postsecondary school samples. A formal diagnosis of social anxiety disorder is likely to be more strongly linked to extremely high levels of self-criticism and low levels of social self-compassion. However, although our samples are nonclinical in nature, both social anxiety and self-compassion are said to exist on a continuum. Therefore, we believed that student samples would suffice for these studies.

Hypotheses for Studies 1 To 3

H1: Given the inclusion of positive items pertaining to social self-compassion and negative items reflecting a relative lack of social self-compassion, both groups of items were expected to emerge as factors of the SSCS. Our reasons for presenting findings that pertain to both the positive and negative factors of the SSCS will be further discussed in the results section, in light of the controversy surrounding the factor structure of the SCS and whether both factors are theoretically meaningful.

H2: The SSCS was expected to show a moderately significant, positive association with the established self-compassion scale developed by Neff, as well as relate similarly to other psychosocial outcomes as expected.

H3: The SSCS was expected to show incremental validity and predict additional variance, above the established short-form version of self-compassion, in predicting a variety of relevant psychological outcomes. For instance, it was hypothesized that total SSCS scores would be predictive of measures related to negative factors such as social anxiety and social inhibition, as well as shame and loneliness, while being predictive of measures related to positive factors such as perceived social self-efficacy and feelings of mattering. In this regard, we predicted that higher social self-compassion would predict lower social anxiety as well as outcomes like those mentioned above.

Method

Main Objectives

Among the different samples, our goal was to show that the SSCS is reliable and consistent by assessing its overall effectiveness and utility. This was accomplished in terms of relating the SSCS to both measures it should and should not be theoretically related to as

well as demonstrating its ability to predict significant unique variance beyond the variance attributable to general self-compassion. More specifically, we aimed to provide support for the convergent validity of the SSCS by showing that it is theoretically related to the short-form version of the SCS (SCS-SF; Raes et al., 2011). Ultimately, however, we aimed to illustrate that the SSCS shows incremental validity with respect to its ability to contribute additional variance above and beyond the SCS-SF given the interpersonal focus of the SSCS. Lastly, a component of Study 3 was focused on providing support for the discriminant validity of the SSCS by illustrating that it is largely unrelated to particular constructs, similar to findings within the pre-existing self-compassion literature. While there was not a specific a priori plan formed for sample size or power, we collected samples we felt would be large enough based on the approximate guideline that *N* should be at least 200 cases to conduct factor analyses (Guilford, 1954; in MacCallum, Widaman, Zhang, & Hong, 1999).

Participants and Demographics

All three studies surveyed samples of undergraduate participants enrolled at Wilfrid Laurier University and registered in the Psychology Research Experience Program. Each study was hosted separately online using the Qualtrics website, whereby volunteers could elect to participate in exchange for receiving bonus credit towards their final grade. Alternatively, participants could earn this same credit by choosing to select, read, and report on a variety of psychological research articles. Total numbers of participants for each sample outlined below are those that were retained after removing those who repetitively responded across many items on a wide variety of measures. More specifically, participants who responded with the same rating on every scale item were removed from

each sample. Overall, the amount of participants removed from each sample varied between approximately 10 to 20 cases.

Study 1 Demographics. The sample was composed of 221 participants (142 females, 79 males) with an average age of 19.5 years. Ages of the participants ranged from 17 to 28 years old, with approximately one-third of the sample reporting the most common age of 18 years old. The majority of the sample was Caucasian (65.6%), followed by Asian (18.1%), African American (5.4%), Hispanic (0.5%), South Asian and Middle Eastern descent (6.4%), and mixed race individuals or those specifying another race (4%).

Study 2 Demographics. The sample consisted of 227 participants (171 females, 56 males) with an average age of 19.68 years. Ages of the participants ranged from 17 to 36 years old, with approximately one-third of the sample reporting the most common age of 19 years old. The majority of the sample was 68.3% Caucasian, 15.9% Asian, 6.2% African American, 1.7% Hispanic, 5.6% South Asian and Middle Eastern descent, and 2.3% specifying mixed race or another race.

Study 3 Demographics. The final online sample consisted of 271 participants (217 females, 54 males) with a mean age of 19.31 years old. Ages of the participants ranged from 17 to 60 years old, with nearly half of the sample reporting they were 18 years old. Again, the majority of the sample was mostly Caucasian (73.4%), followed by Asian (15.5%), African American (3%), Hispanic (0.8%), South Asian and Middle Eastern descent (4.7%), and those identifying as mixed race or another race (2.6%).

Procedures and Measures

Irrespective of the particular study that was completed, all participants received a demographics questionnaire, the short-form Self-Compassion Scale (SCS-SF; Raes et al.,

2011), the Social Self-Compassion Scale (SSCS; Flett & Kocovski), and the Social Phobia Inventory (SPIN; Connor et al., 2000) (see Appendix A). These same scales, excluding the SPIN, were also used in the in-lab study (Study 4). Therefore, the descriptions of the SCS-SF, the SSCS and the SPIN, which includes information pertaining to their psychometric properties, will be described in detail once below. The remaining measures for each online study will be listed and briefly described in separate tables (see Table 1, 2, and 3), along with alphas as an indicator of scale reliability (see Table 7, 11, and 15). Please refer to Appendix B (study one), Appendix D (study two), and Appendix F (study three) to view the sets of measures along with their accompanying references.

Short-form Self-Compassion Scale (SCS-SF; Raes et al., 2011). The SCS-SF is a 12-item scale measuring the degree to which individuals are kind to themselves rather than harshly self-critical when confronted with pain and suffering. As conceptualized by Neff (2003), the self-compassion construct is composed of three bipolar subscales (1) self kindness (being kind and understanding towards oneself in instances of pain and failure) versus self-judgment (harsh self-criticism, particularly after experiencing failure); (2) common humanity (acknowledging failure and suffering are shared with others) versus isolation (feeling as if experiences are perceived as individual); and (3) mindfulness (observing and describing negative thoughts and feelings in a balanced and nonjudgmental way) versus over-identification (focusing on one's current emotional state in the face of failure).

In the short-form version of the SCS, there are two items designated to each subscale. Participants are asked to rate their responses using a five-point Likert scale ranging from 1 *(almost never)* to 5 *(almost always)*, with higher total scores being

indicative of higher self-compassion. For Studies 1 through 3, the SCS-SF produced a Cronbach's alpha of 0.79, 0.84 and 0.86, respectively. This demonstration of high internal consistency is comparable with previously reported alphas for this scale (Raes et al., 2011).

Social Self-Compassion Scale (SSCS; Flett & Kocovski). The SSCS was developed by adapting the 12-item, short-form version of the Self-Compassion Scale created by Raes and colleagues (2011) and thus uses the same rating scale. As mentioned previously, the SSCS measures the degree to which individuals tend to be kind and understanding towards themselves when they feel they have committed social blunders. Examples of items include, "I try to be understanding and patient towards myself when I fall short of my social expectations," and "When I fail to do the right thing in a social situation, I tend to feel alone in my failure." Studies 1 through 3 showed the SSCS has good internal consistency with Cronbach alpha coefficients of 0.79, 0.82 and 0.83, respectively.

We chose to adapt the short-form version of the scale rather than the original longer version given that we were more interested in examining total scores rather than subscale scores. The main reason for this decision was for the sake of practicality, as we wanted to develop a version of the scale that was shorter in length and could easily be used in future research alongside other measures as well as the existing self-compassion scales. With respect to the short-form version, Raes and colleagues (2011) have recommended that total scores be assessed instead of the subscale scores, as they tend to be more reliable. They have also reported that the short-form version of the SCS has an almost perfect correlation with the long-form version of the scale when total scores are examined. For these reasons, we also believed that results garnered from the short-form version would be most valuable

and informative for researchers given its focus on the use of total social self-compassion scores.

Given that the construct of social self-compassion is dissimilar to those that currently exist within the psychological literature, we did not feel it was suitable to pre-select particular items from the scale for adaptation. Rather, each item was revised to refer to having (or having a relative lack of) self-compassion after perceiving that a social blunder has been committed among others (see Appendix A for full modification of items based on the short-form SCS). In this regard, we adapted all items in a way that we believe best reflects the core meaning of the construct and then tested whether they should all be retained through the use of various factor analyses.

Social Phobia Inventory (SPIN; Connor et al., 2000). The SPIN is a 17-item self-report scale for social anxiety disorder (social phobia). The scale asks participants to rate the frequency with which they have experienced problems relating to social phobia over the past week using a Likert scale ranging from 0 *(not at all)* to 4 *(extremely)*. Items assess each of the symptom domains of social anxiety (fear, avoidance, and physiological arousal). Examples of items include, "Being criticized scares me a lot," and, "I avoid activities in which I am the center of attention." This measure showed high internal consistency in Studies 1 through 3 with Cronbach alphas of 0.93, 0.93 and 0.94.

Table 1

Study 1 Measures and Scale Descriptions

Scale	Measurement Description
Adaptive Disengagement Scale	4 items, measures the extent to which an individual is able to adaptively disengage (by using self-protection and self-safety strivings) after a negative social experience. Seven-point Likert scale ranging from 1 *(strongly disagree)* to 7 *(strongly agree)*
Depression Anxiety Stress Scale: Depression Subscale	42 items, includes 3 subscales that measure the degree to which someone has experienced depression, anxiety, and stress in the last week. The depression subscale was used in the present study. Four-point Likert scale ranging from 0 *(did not apply to me at all)* to 3 *(applied to me very much, or most of the time)*
Freiberg Mindfulness Inventory	14 items, measures dispositional mindfulness including the degree to which one reports attention to present moment, and nonjudgmental attitude. Four-point Likert scale ranging from 1 *(rarely)* and 4 *(almost always)*
Depressive Experiences Questionnaire: Self-Criticism Subscale	9 items, using the self-criticism subscale, measures the extent to which an individual tends to be self-critical. Seven-point Likert scale from 1 *(strongly disagree)* to 7 *(strongly agree)*
Perceived Social Self-Efficacy Scale	25 items, measures the level of confidence an individual has in relation to performing various social activities. Five-point Likert scale ranging from 1 *(no confidence at all)* to 5 *(complete confidence)*

Table 2

Study 2 Measures and Scale Descriptions

Scale	Measurement Description
Brief Fear of Negative Evaluation	12 items, measures the extent to which you typically fear evaluation from others. Five-point Likert scale ranging from 0 *(not at all characteristic or true of me)* to 4 *(extremely characteristic or true of me)*
UCLA Loneliness Scale	20 items, measures the extent to which participants identify with feeling lonely and alone. Four-point Likert scale ranging from 1 *(I never feel this way)* to 4 *(I often feel this way)*
Personal Report of Communication Apprehension	24 items, participants respond to items concerning feelings about communicating with other people. Five-point Likert scale ranging from 1 *(strongly agree)* to 5 *(strongly disagree)*
Rejection Sensitivity Questionnaire	Contains 8 scenarios in which you rate how concerned or anxious hypothetical social situations would make you, using a rating scale from *1 (very unconcerned)* to *6 (very concerned*). Also measures your expectation for each situation (using a rating scale from *1 very unlikely* to *6 very likely*)
Experience of Shame Scale	25 items, measures the degree to which individuals felt ashamed, embarrassed, or self-conscious within the last year. Four-point Likert scale ranging from 1 *(not at all)* to 4 *(very much)*

Table 3

Study 3 Measures and Scale Descriptions

Scale	**Measurement Description**
Negative Self-Portrayal Scale	27 items, assesses the degree to which individuals worry that characteristics they perceive to be inferior about themselves will be scrutinized and negatively evaluated by critical others in social situations. Five-point Likert scale from 1 *(not concerned at all)* to 5 (*extremely concerned)*
Brief Narcissistic Personality Inventory	16 forced choice response items for which participants select one of two statements that best describe them. Assesses normal or subclinical levels of narcissism within the general population, for who do not necessarily meet diagnostic criteria for narcissistic personality disorder.
Rosenberg Self-Esteem Scale	10 items, measures global self-worth, assesses both positive and negative feelings towards the self. Four-point Likert scale ranging from 0 *(strongly disagree)* to 3 *(strongly agree)*
General Mattering Scale	5 items, assesses the degree to which an individual feels they matter to others in his or her life. Four-point Likert scale ranging from 0 *(not at all)* to 5 *(a lot)*
Revised Ryff's Psychological Well-being Scale	42 items, measures a variety of psychological well-being indicators including autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. Six-point Likert scale ranging from 1 *(strongly disagree)* to 6 *(strongly agree)*
Self-Pity Scale	6 items, measures the extent to which an individual pities himself or herself when they feel upset by something or someone, or when something has thrown them off balance. Five-point Likert Scale ranging from 0 *(not at all)* to 4 *(very likely)*
Self-Critical Rumination Scale	10 items, measures the extent to which an individual engages in negative self-evaluation by ruminating (repetitively thinking). Four-point Likert Scale ranging from 1 *(not at all)* to 4 *(very well)*

Results

Presentation of Results in Light of the Controversy Surrounding the Factor Structure of the Self-Compassion Scale

Some researchers have argued that with regards to the SCS, only the positive subscales (self-kindness, common humanity, and mindfulness) matter and truly measure the construct of self-compassion (Muris, 2015). Muris (2015) claims that this is largely due to the negative, reverse-scored items from the negative subscales (self-judgment, isolation, and overidentification) inflating the inverse relationship between self-compassion and psychopathology. In other words, in his own work, Muris has observed that scores from the negative subscales tend to be more strongly correlated with negative psychological outcomes than scores from the positive subscales, which measure self-compassionate behaviours. In addition, authors of other papers such as Costa, Marôco, Pinto-Gouveia, Ferreira, and Castilho (2015) as well as López et al. (2015) have argued against using a total self-compassion score that includes the negatively worded items from the SCS. They alternatively propose using two subscale scores. By this view, items from the positive subscales represent "self-compassion" and items from the negative subscales represent "self-criticism".

However, the explicit aim of a paper by Neff (2016) was to address these concerns by exploring the factor structure of the SCS using distinct samples. This paper mentions that within five distinct samples, bi-factor analyses have showed that at least 90% of the reliable variance in SCS scores can be explained by an overall self-compassion factor (Neff, Whittaker, & Karl, 2017). This suggests that use of a total self-compassion score can and should be used if it is considered theoretically suitable for the particular research

questions being addressed. There are several reasons why use of a total score may be preferred. First, the majority of researchers are likely most interested in using total scores as self-compassion is often conceptualized as a single state of mind that encapsulates the various ways that people react, cognitively understand, and pay attention to feelings of personal inadequacy and experiences of suffering (Neff, 2016). Second, perhaps most obviously, use of a single score simplifies statistical analyses and interpretation (Neff, 2016). Lastly, interventions tend to address all six components of self-compassion at the same time, so intuitively it seems to make more sense to look at how overall SCS scores relate to well-being. Other recent research has further supported the use of a total scale score rather than a bi-dimensional view of self-compassion composed of a positive factor only and a negative factor only (Krieger, Berger, & Holtforth, 2016).

Given the recent controversy over the factor structure of the SCS, for Study 1, Study 2, and Study 3, the decision was made to explore the amount of variance accounted for by both the positive and negative subscales of the SSCS in the factor analyses conducted in each study. As mentioned previously, the six individual subscales from the short-form version of the SCS, which the SSCS was adapted from, contain only two items each and are thus not considered reliable enough for use. However, debate remains about whether to use the overall positive and negative subscale scores. Given that the SCS can be used flexibly to suit research needs, we will focus on presenting correlations using both SCSS total scores as well as scores from the SSCS positive and negative subscales. This presentation format will be used to emphasize the magnitude in which the positive and negative subscales of the SSCS relate to various psychological phenomena, for comparison purposes.

Exploratory Factor Analyses (EFA) To Test Factor Structure of the SSCS

Study 1. For each study, the negatively phrased items of the SSCS were reverse coded prior to analysis, and thus all items were coded in the same direction. EFA was conducted using principal components analyses (PCA) to ascertain which component factors to retain. Note that component factors will simply be referred to as factors from this point onwards. For the study one sample, the initial PCA revealed that three factors of the SSCS had eigenvalues greater than one, suggesting that the scale may be over-factored. However, this may be expected given that the method of including all factors with eigenvalues greater than one is said to be one of the least accurate ways of determining which factors to retain (Velicer & Jackson, 1990). For this purpose, Scree plots are a visual inspection method that is said to outperform the use of eigenvalues (Costello & Osborne, 2005; Zwick & Velicer, 1986). Thus, for each of the three self-report studies, we assessed the factor structure of the SSCS items using Scree plots (see Figures 1 through 3). The initial inspection of Figure 1 seemed to again support the notion that there were two clear factors, composed of the positive and negative subscales.

Given that the SSCS contains items worded positively in the self-compassion direction and items worded negatively in the self-critical direction, a two-factor solution reflecting item wording directions was expected. An initial principal components analysis revealed that the two-factor solution accounted for 45.73% of the variance, and of that percentage 31.24% of variance was accounted for by the negatively worded, self-criticism items. As such, the two-factor model was re-run extracting two factors with an item loading cut-off of .40 in order for items to be retained on each factor. Given that it is well supported that the positive and negative factors of the original SCS are related to one another, the

method of oblique rotation with Kaiser normalization was selected to allow for correlations among the factors. As can be seen from Table 4 below, all items loaded on the expected factor at 0.50 or above, with the exception of item 7 ("when something upsets me, I try to keep my emotions in balance") which had a factor loading of 0.33. In addition, item 6 ("when I'm having a hard time in social situations, I give myself the caring and tenderness I need") cross-loaded on both factors, although in line with our expectations, it loaded more strongly on the factor that is representative of the positively worded items. Nonetheless, this signaled that these particular scale items might be problematic, so further studies were run in order to conduct additional factor analyses of the SSCS. The factor analysis results for each study will first be presented, and will be followed by a summary of the correlation and regression results found for each study.

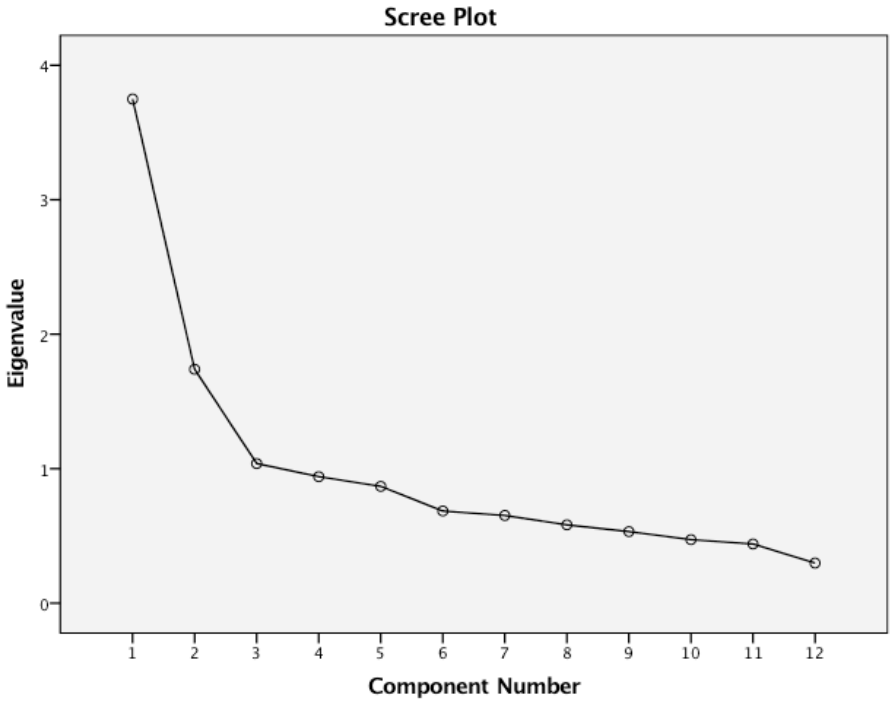

Figure 1. SSCS Scree Plot Indicating a Two-Factor Solution for Study One

Table 4

Study 1 Factor Loadings for the SSCS

Item	Negative Factor	Positive Factor
1	**.66**	.09
2	.13	**.68**
3	.19	**.70**
4	**.60**	-.02
5	.17	**.70**
6	**.47**	**.60**
7	.11	.31
8	**.76**	.21
9	**.79**	.33
10	.09	**.59**
11	**.78**	.32
12	**.66**	.32

Note. Oblique Rotation Method with Kaiser normalization

Study 2. Using the data from this sample, after running a PCA on the SSCS items, only two factors had eigenvalues greater than one, in line with the depiction in Figure 2. After again extracting two factors with a cut-off of .40, the self-compassion items accounted for 17.99% of the variance and the self-critical items accounted for 34.47% of the variance. With this sample, all SSCS items loaded onto the expected factor at .50 or higher, and no items cross-loaded on both factors.

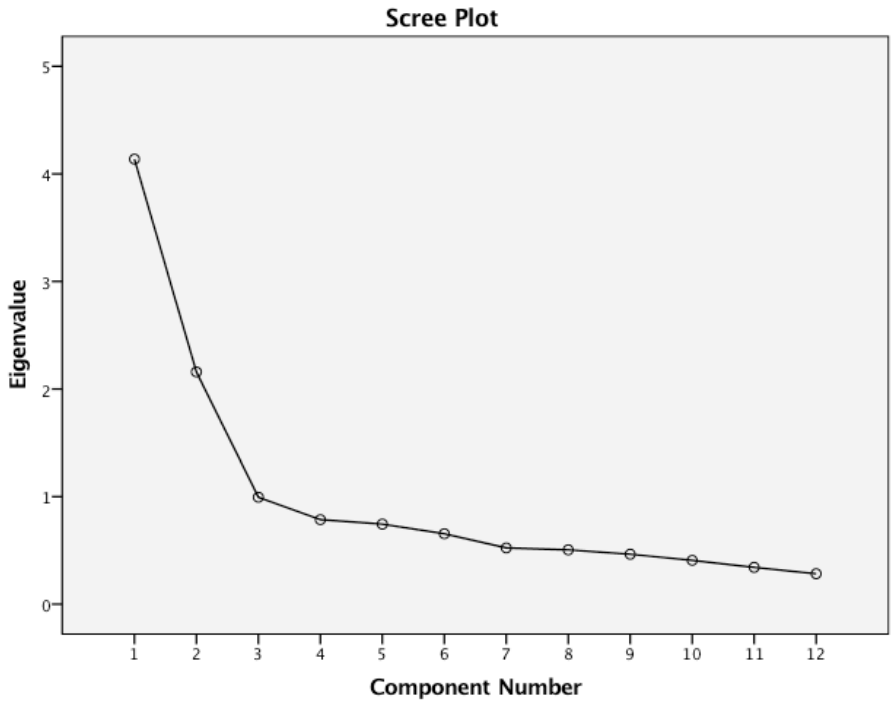

Figure 2. SSCS Scree Plot Indicating a Two-Factor Solution for Study Two

Table 5

Study 2 Factor Loadings for the SSCS

Item	Negative Factor	Positive Factor
1	**.71**	-.04
2	.02	**.73**
3	.07	**.76**
4	**.76**	-.22
5	-.02	**.70**
6	.22	**.65**
7	.03	**.51**
8	**.73**	.12
9	**.84**	.01
10	-.14	**.63**
11	**.70**	.11
12	**.73**	.17

Note. Oblique Rotation Method with Kaiser normalization

Study 3. Similar results were again found, as only two factors had eigenvalues greater than one in accordance with visual inspection of item responses using the Scree plot

(Figure 3). Items worded in the self-compassion direction accounted for 17.53% of the variance and items worded in the self-critical direction accounted for 35.37% of the variance. These results, in conjunction with visual inspection of item responses using the Scree plot (Figure 3), provided further support for a two-factor solution consisting of two correlated factors (a self-compassion factor, and a self-criticism factor). Like previously, all scale items from the SSCS loaded .50 or higher on the expected factor, and no items cross-loaded on both factors.

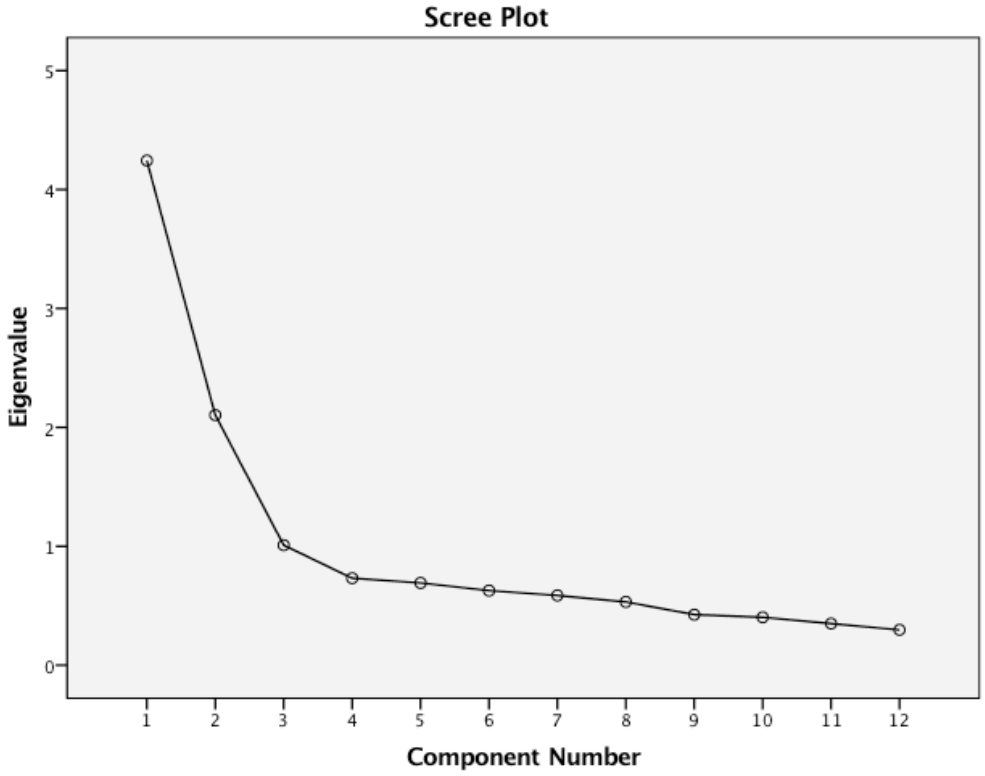

Figure 3. SSCS Scree Plot Indicating a Two-Factor Solution for Study Three

Table 6

Study 3 Factor Loadings for the SSCS

Item	Negative Factor	Positive Factor
1	**.70**	.05
2	-.04	**.73**
3	-.10	**.71**
4	**.73**	.06
5	.05	**.66**
6	-.20	**.65**
7	.13	**.50**
8	**.82**	-.03
9	**.82**	-.02
10	-.03	**.66**
11	**.79**	-.04
12	**.77**	-.08

Note. Oblique Rotation Method with Kaiser normalization

Results from Correlations and Regression Analyses

Study 1. As can be seen from Table 7, the SSCS total scores showed a fairly strong correlation with self-compassion (SCS). Using Cohen's conventions for interpreting effect size of correlations coefficients (1988), the SSCS showed moderate correlations with social anxiety (SPIN), depression (DASS), mindfulness (FMI), and perceived social self-efficacy (PSSE). The SSCS showed strong correlations with adaptive disengagement as well as self-criticism (ADS, DEQ). As illustrated, the SCSS and the SCS performed quite similarly when looking at the direction and magnitude of associations for the outcomes measured. From Table 8, you can see that both the positive and negative subscales of the SSCS are significantly related to each of the variables. In addition, these correlations are all moderate to strong in magnitude, with the exception of the DASS, and the DEQ, which show markedly smaller, negative associations with the positive subscale of the SSCS.

As mentioned previously, past literature has illustrated that low self-compassion tends to be related to high levels of self-criticism, social anxiety, and depression. As such, we conducted a series of partial correlations that control for the effect of these other influential variables. We first needed to demonstrate that social self-compassion (as measured by the SSCS) is highly related to various outcomes by simultaneously controlling for the effects of social anxiety, self-criticism, and state depression. When controlling for the effects of all three variables, the SSCS was still significantly related to perceived social self-efficacy ($r = .29$, $p \leq .01$), adaptive disengagement ($r = .40$, $p \leq .01$), as well as mindfulness ($r = .29$, $p \leq .01$).

Then, we also needed to demonstrate that it is specifically social self-compassion that is highly related to various outcomes, as opposed to other protective variables. When simultaneously controlling for the effects of perceived social self-efficacy, mindfulness, and adaptive disengagement, social self-compassion was still significantly related to self-criticism ($r = -.29$, $p \leq .01$), and state depression ($r = -.14$, $p = .04$), as well as social anxiety ($r = -.14$, $p = .05$). Altogether, these partial correlations provide support for the notion that social self-compassion is uniquely related to various outcomes independent of the influence of other variables that it is likely associated with.

Hierarchical linear regression analyses were conducted for each study to assess the incremental validity of the SSCS. For each study, the regression analyses results believed to be most noteworthy are presented. That being said, regression result analyses for all variables can be located in Appendix H. For each of the analyses, the SCS was added in step-one, while the SSCS was added in step-two. As illustrated in Table 9, with regards to the prediction of social anxiety (F (2, 209) = 31.13, $p < .001$) using Sample 1 data, the

SSCS significantly added an additional 5.6% of variance in social anxiety (SPIN) scores. In the final step of the regression analysis, both the SCS and the SSCS emerged as significant predictors of social anxiety, although the SCS was not related as strongly to social anxiety compared to the SSCS. As illustrated in Table 10, with regards to the prediction of perceived social self-efficacy (F (2, 211) = 32.33, $p < .001$) using Sample 1 data, the SSCS significantly added an additional 6.8% of variance in PSSE scores.

Table 7

Descriptive statistics for Study 1 including Pearson correlation coefficients

	1	2	3	4	5	6	7	8
1 SCSS	-							
2 SCS	.69**	-						
3 SPIN	-.47**	-.42**	-					
4 ADS	.59**	.55**	-.51**	-				
5 DASS	-.33**	-.37**	.38**	-.38**	-			
6 FMI	.45**	.54**	-.34**	.47**	-.28**	-		
7 DEQ	-.51**	-.58**	.52**	-.46**	.48**	-.38**	-	
8 PSSE	.47**	.41**	-.59**	.49**	-.17*	.50**	-.35**	-
Alpha	.79	.79	.93	.87	.95	.82	.83	.95

** Correlation significant at .01 level (two-tailed); * Correlation significant at .05 level (2-tailed); n = 221. *SCSS* Social Self-Compassion Scale; *SCS* Short-form Self-Compassion Scale; *SPIN* Social Phobia Inventory; *ADS* Adaptive Disengagement Scale; *DASS* Depression Subscale; *FMI* Freiberg Mindfulness Inventory; *DEQ* Self-criticism Subscale; *PSSE* Perceived Social Self-Efficacy Scale

Table 8

Descriptive statistics for Study 1: Negative and positive subscales of the SSCS

	Negative	Positive
1 SCS	-.61**	.50**
2 SPIN	.52**	-.34**
3 ADS	-.48**	.49**
4 DASS	.34**	-.18**
5 FMI	-.31**	.45**
6 DEQ	.52**	-.28**
7 PSSE	-.43**	.32**

** Correlation significant at .01 level (two-tailed); * Correlation significant at .05 level (2-tailed); n = 221. *SCSS* Social Self-Compassion Scale; *SCS* Short-form Self-Compassion Scale; *SPIN* Social Phobia Inventory; *ADS* Adaptive Disengagement Scale; *DASS* Depression Subscale; *FMI* Freiberg Mindfulness Inventory; *DEQ* Self-criticism Subscale; *PSSE* Perceived Social Self-Efficacy Scale

Table 9

Study 1 regression with SCS and SSCS predicting social anxiety

	ΔR^2	F	β	t	p
Block One	.173	43.98[a]			
SCS			-0.42	-6.63	.000
Block Two	.056	31.13[a]			
SCS			-0.19	-2.31	.022
SCSS			-0.33	-3.91	.000

Note. [a]: $p < 0.001$; ΔR^2: R-Squared Change; Dependent variable = social anxiety; SCS = Short-form Self-Compassion Scale; SSCS = Social Self-Compassion Scale; N = 211

Table 10

Study 1 regression with SCS and SSCS predicting perceived social self-efficacy

	ΔR^2	F	β	t	p
Block One	.166	42.26[a]			
SCS			0.41	6.50	.000
Block Two	.068	32.33[a]			
SCS			0.16	1.95	.053
SCSS			0.36	4.34	.000

Note. [a]: $p < 0.001$; ΔR^2: R-Squared Change; Dependent variable = perceived social self-efficacy; SCS = Self-Compassion Scale; SSCS = Social Self-Compassion Scale; $N = 213$

Study 2. As can be seen from Table 11, the SSCS again showed a fairly strong correlation with self-compassion (SCS). The SSCS showed moderate correlations with loneliness (UCLA), communication apprehension (PRCA), and rejection sensitivity (RSQ). The SSCS showed strong correlations with social anxiety (SPIN), fear of negative evaluation (BFNE), and the experience of shame (ESS). Although the majority of correlations between the SCS and SSCS are similar in nature, the negative correlation between the SSCS and fear of negative evaluation, as well as rejection sensitivity is stronger in magnitude, though when the magnitude of the correlations were tested they were not significantly different from one another. Table 12 replicates the previous results, which showed that SSCS positive and negative subscales significantly relate to all variables in the expected directions. In addition, both subscales produced correlations ranging from small to strong in strength; however, overall the positive subscale seemed to result in smaller associations among the variables measured.

As illustrated in Table 13, within the second step of the regression analysis, the SSCS was a significant predictor of fear of negative evaluation. With regards to the prediction of fear of negative evaluation (F (2, 218) = 56.49, p < .001) using Sample 2 data, the SSCS significantly predicted an additional 10.4% of variance above the SCS. As illustrated in Table 14, with regards to the prediction of the experience of shame (F (2, 219) = 71.11, p < .001) using Sample 2 data, the SSCS significantly added an additional 4.3% of variance above the SCS. In the final step of the regression analysis, both the SCS and the SSCS were significant predictors of shame.

Table 11

Descriptive statistics for Study 2 including Pearson correlation coefficients

	1	2	3	4	5	6	7	8
1 SCSS	-							
2 SCS	.72**	-						
3 SPIN	-.54**	-.47**	-					
4 BFNE	-.57**	-.49**	.61**	-				
5 UCLA	-.33**	-.33**	.46**	.28**	-			
6 PRCA	-.40**	-.36**	.48**	.36**	.24**	-		
7 RSQ	-.39**	-.30**	.39**	.30**	.47**	.14*	-	
8 ESS	-.57**	-.59**	.62**	.65**	.43**	.38**	.35**	-
Alpha	.82	.84	.93	.77	.95	.50	.65	.94

** Correlation significant at .01 level (two-tailed); * Correlation significant at .05 level (2-tailed); n = 227. *SCSS* Social Self-Compassion Scale; *SCS* Short-form Self-Compassion Scale; *SPIN* Social Phobia Inventory; *BFNE* Brief Fear of Negative Evaluation; *UCLA* Loneliness Scale; *PRCAS* Personal Report of Communication Apprehension Scale; *RSQ* Rejection Sensitivity Questionnaire; *ESS* Experience of Shame Scale

Table 12

Descriptive statistics for Study 2: Negative and positive subscales of the SSCS

	Negative	Positive
1 SCS	-.61**	.55**
2 SPIN	.53**	-.31**
3 BFNE	.61**	-28**
4 UCLA	.29**	-.23**
5 PRCA	.40**	-.22**
6 RSQ	.31**	-.33**
7 ESS	.58**	-.32**

**Correlation significant at .01 level (two-tailed); *Correlation significant at .05 level (2-tailed); n = 227. *SCSS* Social Self-Compassion Scale; *SCS* Short-form Self-Compassion Scale; *SPIN* Social Phobia Inventory; *BFNE* Brief Fear of Negative Evaluation; *UCLA* Loneliness Scale; *PRCAS* Personal Report of Communication Apprehension Scale; *RSQ* Rejection Sensitivity Questionnaire; *ESS* Experience of Shame Scale

Table 13

Regression for Study 2 with SCS and SSCS predicting fear of negative evaluation

	ΔR^2	F	β	t	p
Block One	.237	68.07[a]			
SCS			-0.49	-8.25	.000
Block Two	.104	56.49[a]			
SCS			-0.16	-1.96	.051
SCSS			-0.46	-5.87	.000

Note. [a]: $p < 0.001$; ΔR^2: R-Squared Change; Dependent variable = perceived social self-efficacy; SCS = Self-Compassion Scale; SSCS = Social Self-Compassion Scale; N = 220

Table 14

Regression for Study 2 with SCS and SSCS predicting shame

	ΔR^2	*F*	*β*	*t*	*p*
Block One	.351	119.08[a]			
SCS			-0.59	-10.91	.000
Block Two	.043	71.11[a]			
SCS			-0.38	-5.04	.000
SCSS			-0.30	-3.92	.000

Note. [a]*: p* < 0.001; ΔR^2: *R*-Squared Change; Dependent variable = shame; SCS = Self-Compassion Scale; SSCS = Social Self-Compassion Scale; *N* = 221

Study 3. Once again, the SSCS showed a fairly strong correlation with self-compassion (see Table 15). The SSCS showed moderate correlations with negative self-portrayal (NSPS) and psychological well-being (PWB), and strong correlations with social anxiety (SPIN), general mattering (GMS), and self-pity (SVF). Although the SSCS was significantly and strongly associated with self-pity, the correlation was negative. Furthermore, as anticipated based on past literature, the SSCS had a significant but small association with both narcissism and self-esteem. Correlations between the SCS and the SSCS appear to be fairly similar in magnitude and strength. Table 16 shows that the positive and negative subscales are significantly correlated with the vast majority of variables, and also that these correlations range from small to strong in magnitude.

As illustrated in Table 17, with regards to the prediction of general mattering (*F* (2, 261) = 45.76, *p* < .001) using Sample 3 data, the SSCS significantly added an additional 5% of variance above the SCS. The SCSS was the only significant predictor in the final step of the regression analysis and was thus predictive of general mattering. As illustrated

in Table 18, with regards to the prediction of psychological well-being (F (2, 259) = 40.75, $p < .001$) using Sample 3 data, the SSCS significantly added an additional 2.7% of variance above the SCS. In the final step of the regression analysis, both the SCS and the SSCS were significant predictors of psychological well-being.

Table 15

Descriptive statistics for Study 3 including Pearson correlation coefficients

	1	2	3	4	5	6	7	8	9	10
1 SCSS	-									
2 SCS	.80**	-								
3 SPIN	-.57**	-.49**	-							
4 NSPS	-.48**	-.48**	.65**	-						
5 B-NPI	.17**	.12*	-.39**	-.20**	-					
6 SES	.21**	.25**	-.12	-.21**	.09	-				
7 GMS	.50**	.46**	-.41**	-.39**	.18**	.23**	-			
8 PWB	.45**	.46**	-.47**	-.35**	.13*	.14*	.55**	-		
9 SVF	-.51**	-.57**	.53**	.51**	-.27**	-.27**	-.33**	-.41**	-	
10 SCR	-.68**	-.70**	.59**	.65**	-.22**	-.31**	-.49**	-.46**	.62**	-
Alpha	.83	.86	.93	.96	.71	.90	.83	.93	.90	.93

** Correlation significant at .01 level (two-tailed); * Correlation significant at .05 level (2-tailed); n = 271. *SCSS* Social Self-Compassion Scale; *SCS* Short-form Self-Compassion Scale; *SPIN* Social Phobia Inventory; *NSPS* Negative Self-Portrayal Scale; *B-NPI* Brief Narcissistic Personality Inventory; *SES* Self-Esteem; *GMS* General Mattering Scale; *PWB* Psychology Well-Being; *SVF* Self-Pity; *SCR* Self-Critical Rumination Scale

Table 16

Descriptive statistics for Study 3: Negative and positive subscales of the SSCS

	Negative	Positive
1 SCS	-.70**	.59**
2 SPIN	.61**	-.26**
3 NSPS	.56**	-.16**
4 B-NPI	.21**	.04
5 SES	.06	.29**
6 GMS	-.43**	.36**
7 PWB	-.38**	.36**
8 SVF	.57**	-.19**
9 SCR	.73**	-.31**

** Correlation significant at .01 level (two-tailed); * Correlation significant at .05 level (2-tailed); n = 271. *SCSS* Social Self-Compassion Scale; *SCS* Short-form Self-Compassion Scale; *SPIN* Social Phobia Inventory; *NSPS* Negative Self-Portrayal Scale; *B-NPI* Brief Narcissistic Personality Inventory; *SES* Self-Esteem; *GMS* General Mattering Scale; *PWB* Psychology Well-Being; *SVF* Self-Pity; *SCR* Self-Critical Rumination Scale

Table 17

Regression for Study 3 with SCS and SSCS predicting mattering

	ΔR^2	*F*	*β*	*t*	*p*
Block One	.210	69.50[a]			
SCS			.46	8.34	.000
Block Two	.050	45.76[a]			
SCS			.16	1.73	.086
SCSS			.38	4.20	.000

Note. [a]*: p* < 0.001; ΔR^2: *R*-Squared Change; Dependent variable = Mattering; SCS = Self-Compassion Scale; SSCS = Social Self-Compassion Scale; *N* = 271

Table 18

Regression for Study 3 with SCS and SSCS predicting psychological well-being

	ΔR^2	*F*	*β*	*t*	*p*
Block One	.212	69.91[a]			
SCS			.46	8.36	.000
Block Two	.027	40.75[a]			
SCS			.24	2.58	.010
SCSS			.28	3.06	.002

Note. [a]*: p* < 0.001; ΔR^2: *R*-Squared Change; Dependent variable = Psychological Well-Being; SCS = Self-Compassion Scale; SSCS = Social Self-Compassion Scale; *N* = 271

Discussion

The primary aim of these studies was to develop a self-compassion scale specific to interpersonal situations that measures the tendency to be self-compassionate following challenging social situations. Thus far there is no domain-specific scale of self-compassion, and we believe that our social adaptation of the scale, the Social Self-Compassion Scale

(SSCS), is highly relevant for a wide assortment of people. As such, we examined the psychometric properties of the newly formed scale using three large student samples. We found evidence suggesting that the SSCS is reliable for use, and that the scale also demonstrates convergent, discriminant, and incremental validity.

Factor Structure

As mentioned previously, researchers oftentimes choose to view and present self-compassion as an overall construct rather than two separate constructs composed of positively and negatively worded items. However, in light of this ongoing controversy, we chose to explore the amount of variance accounted for by both the positive and negative subscales of the SSCS. Factor analyses conducted with the data from Studies 1 through 3 show that the positive subscale accounts for a percentage of variance that is about half that of the negative subscale variance. Although it is clear that the negative subscale is accounting for more of the variance, the positive subscale is also contributing a fairly substantial percentage of variance as well, with there being some variability across measures. Information obtained from the factor loadings and Scree plots both seem to support the notion that the SSCS is composed of two clear factors (the positive and negative subscales). Overall, these results support our contention that the self-compassion construct, and in this case the social self-compassion scale, should be viewed as being composed of both the positive and negative subscales. As expected, the positive and negative subscales of the SSCS are negatively correlated with one another in Study 1 (r = -.34 , $p \leq .01$), Study 2 (r = -.31, $p \leq .01$), and Study 3 (r = -.29, $p \leq .01$).

This assertion is further supported by the subscale correlations that were presented from Studies 1 through 3. In all cases, both the negative and positive subscales of the SSCS

were significantly related to each of the variables assessed in ways that one would anticipate. Although it could be argued that the negative subscale correlations were generally stronger in magnitude, the positive subscale correlated with many outcomes at a magnitude that was moderate in strength. Our results suggest that neglecting to analyze the scores from both subscales (such as by only assessing the positive subscale scores) would result in a loss of key and pivotal information that could be quite informative in understanding and addressing individuals' levels of self-compassion.

Correlations

Correlational results obtained from three samples helped to better ascertain the extent to which the SSCS was a valid measure. First, we assessed the convergent validity of the SSCS. The majority of findings showed that the SSCS is significantly and moderately correlated with measures such as mindfulness, shame, fear of negative evaluation, self-critical rumination, and social anxiety, to name a few. As mentioned previously, mindfulness is a core component of the self-compassion construct itself and so it makes logical, theoretical sense that it is positively and significantly related to the SSCS. In addition, self-compassion is typically negatively related to maladaptive outcomes such as shame, fear of negative evaluation, and self-critical rumination. Similar to the SCS, the negative relationships between the SSCS and shame, fear of negative evaluation, and self-critical rumination adds support for the convergent validity of the scale.

As mentioned before, past literature has shown that a relative lack of self-compassion is strongly linked to social anxiety. The correlation between social anxiety and social self-compassion was significant, negative, and moderate in nature. This is somewhat surprising, given that we would expect to see that the SSCS is much more negatively

correlated with social anxiety compared to the SCS. Although this finding does provide convergent validity for the scale in some sense, it also raises the question of why the SSCS was not more strongly related to social anxiety compared to the SCS as one might anticipate. To address this limitation, it was necessary to test whether the SCSS is adding any additional variance beyond the SCS in terms of both social anxiety, and a variety of other more global outcomes we expect the SSCS to be predictive of. At this stage, although there is preliminary support for the concurrent validity of the SSCS, further testing was needed to tell whether there were ways in which the SSCS was distinguishable from the SCS. These results will be discussed shortly in the next section on regression analyses.

The specific goal of Study 3 was to include some variables that would help to address whether the SSCS demonstrates discriminant validity. This is evidenced by the inclusion of variables such as self-esteem, which is said to be related but theoretically distinct from self-compassion, and narcissism and self-pity, which are typically negatively related to self-compassion. In line with our predictions, the SSCS had only a small, significant positive correlation with self-esteem. In addition, the SSCS was significantly and negatively related to self-pity with a correlation that was strong in magnitude. Perhaps most surprisingly, both the SCS and the SSCS were significantly and positively related to narcissism, although the correlation was fairly weak in magnitude. Although this is not consistent with past findings, it seems to make more sense when considering that there have been studies establishing that there are links between subclinical levels of narcissism and indicators of psychological well-being, with self-esteem fully accounting for this relationship (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004).

Regression Analyses

In order to test the incremental validity of the SSCS, we conducted several hierarchical linear regression analyses. As can be seen from the regression tables, in all cases the SSCS was a significant predictor in the final step of the regression analyses. For instance, the SSCS was a significant predictor of perceived social self-efficacy, and fear of negative evaluation. In both analyses, the SSCS added a fairly small, but significant percentage of variance above the SCS. Perceived social self-efficacy and fear of negative evaluation are likely key contributing factors to the development and persistence of social anxiety and a relative lack of social self-compassion.

Within each regression, social self-compassion was also significantly predictive of social anxiety, shame, psychological well-being, and mattering. Although one might assume that the nature of the social self-compassion scale may be most closely tied with the dependent measure of social anxiety, these results demonstrate that the SSCS is predictive of a wider array of outcomes. In each case, the SSCS added a small but significant percentage of variance in the prediction of these dependent measures over and above the SCS. It is worth mentioning that the SSCS was predictive of mattering over and above the SCS. A sense of mattering to others, otherwise known as the extent to which one feels valued when reflected through the eyes of others, is a global self-worth measure. According to Rosenberg and McCullough (1981) it is "the feeling that others depend on us, are interested in us, are concerned with our fate, or experience us as an ego-extension" (as cited in Taylor & Turner, 2001, p.311). There is no question that mattering is a protective factor that both buffers against stressors and setbacks and fosters resiliency (Taylor & Turner, 2001). The fact that the SSCS is predictive of mattering in particular provides support for

the universal relevance of the scale and its applications. Overall, results from all featured regressions show that there is something particularly characteristic about social self-compassion and its applicability that is not otherwise captured by the more general construct of self-compassion itself.

Limitations and Future Directions

It should be noted that this research was associated with several limitations. The most evident of these limitations is that support for the scale was obtained through use of student samples. Although all these samples were large in number, there may be attributes of these samples that somehow vary or differ in comparison to community or clinical samples. It may be the case that levels of variables such as these would be elevated in community samples, and likely extremely elevated in clinical samples. Future research will need to evaluate the utility of the SSCS by assessing these samples, as the predictive value of the SSCS may be even higher when examining samples with higher self-reported levels of mental illness. In addition, although we are confident that it was most practical to adapt the short-form version of the SCS when developing the SSCS, this poses some restraints on how the SSCS can be used within future research. With the short-form version of the SSCS, given that it is best to look at total scores, potentially insightful information from subscale scores could be missed. For this reason, it may be useful to develop a long-form version of the SSCS as well.

Other limitations with this research include the age, ethnicity, and gender of the participants. In each study, the average age of participants hovered around 19 years old. Although we feel the scale would be applicable for all ages, the restricted age range of our samples makes it difficult to draw inferences about the applicability of the scale for

younger or older samples. In addition, the vast majority of the samples reported being White/Caucasian, as well as female. It is necessary to further explore the relevance of social self-compassion cross-culturally, as individuals' perspective on social self-compassion may very well vary due to social norms or cultural ideals. Perhaps most importantly, thus far there appears to be quite a bit less research on self-compassion with respect to males. It is vital that future research recognizes rather than neglects this gap in the research literature by specifically assessing how males may conceptually respond and react differently to conceptions and interventions of self-compassion, and specifically social self-compassion. For instance, males may be less likely to endorse social self-compassion if their cultural norms and upbringings dictate that they respond to social adversities by being emotionally closed off, rather than being kind and understanding to oneself, when negative social situations arise.

Given these limitations, future research should continue to examine the psychometric properties of the SSCS. Researchers interested in further pursuing work with social self-compassion should be mindful and considerate of using samples that are diverse in age, ethnicity, and gender. In addition, researchers should continue to examine the validity of the SSCS by assessing how it relates to outcomes beyond those assessed in the three online studies, particularly with respect to other global measures of self-worth and well-being. Moreover, researchers should continue to simultaneously measure general self-compassion for comparison purposes in order to further test the unique properties and predictive abilities of the SSCS. Lastly, although three online studies were conducted in order to evaluate the test-retest reliability of the SSCS, we encourage continued testing of the stability and reliability of the measure across time. Since this research is cross-sectional

and self-report in nature, we recommend that research explicitly focus on assessing it longitudinally and through the use of experimental interventions that aim to increase levels of social self-compassion. Given that we have not yet used other research designs beyond self-report, Study 4 focuses on experimentally inducing social self-compassion as well as further assessing the psychometric properties of the SSCS.

Study 4

A separate, secondary aim of this research was to conduct an in-lab experimental study examining whether social self-compassion could be induced in a situation of social evaluative threat. This study approximated the research design we mentioned previously by Leary et al. (2007), whereby individuals were led to believe that their social skills and likeability would be recorded and rated by both a confederate and the principal researcher after engaging in a short conversation. The present research was also based on research questions proposed by Breines and Chen (2012), which will be described in further detail below.

For the present research, we sought to empirically test the public misconception that a sense of self-compassion can lead to feelings of self-acceptance and complacency, rather than efforts to improve oneself. Research by Breines and Chen (2012) has addressed this concern through a series of experiments. They proposed that self-compassion is linked to increased self-improvement motivation because it encourages self-awareness of mistakes and weaknesses without self-deprecation and is more strongly related to use of realistic self-appraisal rather than self-enhancement (Leary et al., 2007). In Study 1, participants were asked to identify their biggest weakness, which made them feel bad about themselves. They were asked to reflect upon this weakness from one of three perspectives depending on

the writing condition to which they were assigned: a self-compassion condition, a self-esteem (self-validation) condition, and a control (no writing condition), followed by measures of affect. The written responses were coded for the extent to which they contained evidence of incremental beliefs (weakness is changeable) or entity beliefs (weakness is fixed and unchangeable) (see Dweck, 1999). Then, participants responded to prompts about whether they had done anything to change their weakness and the source of where they thought the weakness originated from, as a means of measuring self-improvement motivation.

Results from the study by Breines and Chen (2012) showed that responses from the self-compassion condition contained a significantly greater number of incremental beliefs compared to the other two groups. The vast majority of the weaknesses or transgressions people reported involved social difficulties (such as lack of confidence, social anxiety, shyness, and insecurity in relationships), and all participants reflected upon a weakness that could be hypothetically changed in some way. In Breines and Chen's second study, which used a somewhat similar writing exercise, participants in the self-compassion condition reported higher desire to change a past moral transgression and avoid repeating it in the future compared to the other two groups. In both of the described studies, these results held even when controlling for positive affect. Moreover, with respect to positive affect, no significant differences were found between groups. The present study will similarly include written exercises and questions on self-improvement motivation, derived from the Breines and Chen (2012) study.

Before the study began, participants were told about this exchange during sign up for the study and within the lab. Then, they provided demographic information, completed

self-report questionnaires, and were asked to write about a negative social experience they felt primarily responsible for. It is true that self-compassion tends to be equally effective at buffering people against negative events irrespective of whether the event was perceived to be their fault (Leary et al., 2007). However, due to the relatively small total sample we collected, we preferred to keep the instructions targeted and specific for all participants. Moreover, we expect that self-compassion within interpersonal contexts is especially needed to combat the tendency to blame oneself following mistreatment from others, such as in the case of abused children and youth who oftentimes blame themselves for their misfortune (Flett, Flett, & Wekerle, 2015), or for those who assume responsibility for a romantic breakup (Zhang & Chen, 2016).

Next, participants were given further writing exercises depending on the condition to which they were assigned (self-compassion, self-esteem, or control). Pre-measures before the writing exercises included self-report scales such as self-compassion, social self-compassion, state anxiety, depression, and anticipatory processing, whereas post-measures of affect and subjective distress were distributed afterwards. The writing exercise paradigm was derived from the Breines and Chen study (2012) that was previously described, as well as the questions that asked participants about incremental beliefs and self-improvement motivation related to the social mistake that participants chose to write about. The exact order of the procedure will be detailed within the methods section.

Hypotheses for Study 4

H1: It was predicted that there would be differences in emotional reactivity across conditions in response to the manipulation based on the study by Leary et al. (2007). All participants were asked to describe a past negative social experience and were led to

believe that shortly thereafter they would engage in a short conversation with another participant that would then be evaluated and recorded. Although this proposed scenario was likely mildly aversive for all those involved, it was expected that participants who were asked to reflect on the past negative social situation they described (by using a self-compassionate perspective) would consequently report more positive outcomes. More specifically, it was anticipated that compared to the self-esteem and control conditions, the self-compassion condition would report lower levels of maladaptive outcomes such as negative affect and subjective distress, while also reporting higher levels of adaptive outcomes such as positive affect. This is in accordance with previously described research linking higher self-compassion to several well-being indicators, and conversely, research findings linking lower self-compassion with decreases in outcomes related to emotional self-regulation.

H2: Similar to the study by Breines and Chen (2012), it was anticipated that those in the self-compassion condition would be more likely to report a greater incidence of incremental beliefs related to their social mistake (i.e., that the underlying causes of their social mistake could be improved) as compared to the other two groups. This hypothesis reflects the belief that those who are self-compassionate are more likely to believe they can grow and improve in response to past failures, as their personal characteristics are perceived to be changeable rather than fixed.

H3: Compared to the self-esteem and control groups, it was expected that participants in the self-compassion condition would report higher motivation and desire to correct (and not repeat) the past social mistake they had described and reflected upon, as signified by higher scores in self-improvement motivation. We expect that asking participants to reflect on

their past social mistake using a self-compassionate perspective will replicate results by Breines and Chen (2012) who found that self-compassion was linked with self-improvement motivation rather than complacency.

Method

Participants and Demographics

A sample of 91 Wilfrid Laurier University students registered in the Psychology Research Experience Program took part in this study. Participants' ages ranged from 17-46 years (M = 18.89, SD = 3.23), with 82.4% being either 18 or 19 years of age. In addition, the majority of participants reported being female (83.5%), and White/Caucasian (64.8%). With respect to the sample size for each experimental condition, 31 participants were randomly assigned to the self-compassion condition, 30 were randomly assigned to the self-esteem condition, and 30 were randomly assigned to the control condition. We did not pre-screen participants for particular levels of social anxiety and social self-compassion prior to the experiment, as we wanted a range of those with both high and low levels of these variables. For more detailed demographic information, see Table 19.

Table 19

Participants' Descriptive Statistics for Demographic Variables.

Demographic Variable	Frequency	Percent
Gender		
Male	14	15.4
Female	76	83.5
Transgender	1	1.1
Race/Ethnicity		
White/Caucasian	59	64.8
Asian	11	12.1
Black/African Canadian	4	4.4
Middle Eastern	11	12.1
Hispanic	2	2.2
Mixed Race	4	4.4

Note. Missing data refers to data omitted by participants.

Measures

Re-administered Measures from Studies 1 Through 3 (Appendix A)**.** The same measures included in the previous three studies were administered once again to the participants in this sample. These measures included the Demographic Questionnaire, the short form Self-Compassion Scale (SCS; Raes et al., 2011), and the Social Self-Compassion Scale (SSCS; Flett & Kocovski). The internal consistency for the SCS (α = .86) and the SSCS (α = .85) were both very good in the present study.

State Social Anxiety (Kashdan & Steger, 2006). This 7-item scale measures the extent to which an individual has experienced symptoms of social anxiety over the past day. Responses range from 1 (very slightly or not at all) to 5 (extremely). This measure has been known to demonstrate strong convergent validity with acceptable reliability (α = .91). In the present study, the scale produced an alpha of .92.

Anticipatory Processing (APQ; Vassilopoulos, 2004). This questionnaire consists of 18 items and measures the extent to which individuals review in detail what they believe could occur in an upcoming anxiety-provoking event. A part of this process involves recalling images of the self and recollecting past similar events. In this case, questions were modified slightly in reference to the upcoming recorded and rated conversation with another participant. Each item asks participants to rate the degree to which they are engaging in this type of processing by marking their response from 0 to 100 on a visual analogue scale. The only exception to this is item 17, which has a yes/no format and is excluded from the final score. The APQ has been found to be reliable, showing high internal consistency (α = .91, Vassilopoulos, 2004), which is similar to the reliability of the APQ in the current study (α = .94).

Positive Beliefs about Anticipatory Processing (PB-APQ; Vassilopoulos, Brouzos, & Moberly, 2015). The new 21-item PB-APQ uses a 5-point Likert-type rating scale, ranging from 1 (*disagree*) to 7 (*agree*). PB-APQ items assess the positive beliefs that individuals hold about the benefits of engaging in anticipatory processing. Specifically, items assessed recent social interactions, thoughts about the interaction before it occurred, and motivation for ruminating over the anticipated social interaction. Internal consistency of the items have been shown to be good (α = .89, Vassilopoulos et al., 2015). In the present study, the scale produced a similar Cronbach alpha of .87.

Positive Beliefs about Rumination Adapted for Social Anxiety (PBRA-SA; Wong & Moulds, 2010). The PBRS-SA is a nine-item self-report questionnaire designed to measure the extent to which an individual considers recurrent thinking about social events/interactions to be a useful coping strategy. Each item is rated on a 4-point Likert

type scale (1 = *do not agree* to 4 = *agree very much*). The PBRS-SA has good internal consistency (α = .88, Wong & Moulds, 2010), which is also reflected in the current study (α = .89).

State Depression (MTSD-S; Chiappelli, Nugent, Thangavelu, Searcy, & Hong, 2014). The MTSD consists of 36 items, of which half the items measure state depression experienced in the last 7 days and half the items measure depressive symptoms throughout adulthood excluding the past 7 days. We used the state subscale in the current study. Items in the MTSD were developed based on recent criteria in the latest edition of the DSM (5th ed.; DSM-5; American Psychiatric Association, 2013). The responses ask participants to rate the frequency in which they have experienced particular symptoms using a Likert scale ranging from 0 (not at all) to 4 (5-7 days). The scale has been known to demonstrate suitable psychometric properties and construct validity (Chiapelli et al., 2014). In the current study, the measure produced an alpha of .94.

State Trait Anxiety Index-Form Y (STAI; Spielberger, 1983). The state anxiety subscale (STAI-S) measures anxiety, apprehension, uneasiness, and worry for specific situations. This 20-item measure utilizes a 4-point scale ranging from 1-4. Total possible scores on the scale range from 20-80 with higher scores indicating greater state anxiety. This scale has shown very good internal consistency in previous research (e.g., Quek, Low, Razack, Loh, & Chua, 2004) and in this study, the measure produced an alpha of .95.

Positive and Negative Affect (PANAS; Watson, Clark, & Tellegen, 1988). The PANAS is composed of two mood scales, one of which measures positive affect, and one of which measures negative affect. There are 10 items designated to each subscale. Participants are required to respond to the 20 descriptors of positive or negative affect

using a 5-point scale ranging from very slightly or not at all (1) to extremely (5). Reliability and validity of the PANAS is moderately good (Watson et al., 1988), with both subscales resulting in a Cronbach alpha coefficient of at least .80. The PANAS has strong reported validity with general distress and dysfunction, depression, and state anxiety. In the current study, the measure produced an alpha of .82.

Subjective Distress (SUDS; Wolpe, 1982). The Subjective Units of Distress Scale is a one-item indicator that assesses the subjective level of anxiety or distress experienced with regard to a specific situation. The measure utilizes a 0 – 100 scale with higher numbers indicating higher levels of distress.

Self-Improvement Motivation. Four items were selected and adapted from the study by Breines and Chen (2012) based on their suitability for use in the given experimental context. Participants rate their desire to change using a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). The item that is reverse coded is, "I am committed to not repeating this behavior (or anything like it) again". With respect to self-improvement motivation, the four items we derived from the Breines and Chen (2012) study produced an alpha of 0.67 ($M = 4.70$, $SD = 1.27$). This is fairly comparable to the alpha that was reported in the initial study by Breines and Chen in 2012 ($\alpha = .75$, $M = 4.49$, $SD = 1.12$).

Incremental Beliefs. Participants responded to exercise 3a and 3b (see Appendix M) and written answers were scored for the level of incremental beliefs they demonstrated. If an individual possesses incremental beliefs about social abilities, their written response will reflect that they have learned from the past negative social experience, and applied this knowledge to new situations. They will also be less likely to attribute that the negative

social experience occurred due to their social qualities, and instead will be more likely to describe that it occurred due to the situation itself based on their belief that social characteristics can be modified. A score of 0 indicated an absence of incremental beliefs, 1 indicated some evidence of incremental beliefs, and 2 indicated strong evidence of incremental beliefs. If responses showed mixed evidence of entity beliefs and incremental beliefs they were coded as 1. Sole absence or presence of incremental beliefs was assigned a score of 0 or 2, respectively. Scores from the two written exercises were summed to form a composite score.

Procedure

Upon arrival at the lab, participants were reminded that they would be later asked to introduce themselves to a participant who was in another room down the hall, and engage in a conversation with that participant for approximately five minutes. They were told that this exchange would be recorded on video camera to assess their conversation skills; mention of the video camera was used to elicit anxiety similar to that posed by an audience. They were informed that each participant would independently rate the overall quality of the conversation after it had taken place. They were also informed that the researcher would eventually watch the recorded conversations and use a set of social criteria to rate how each person performed. Unbeknownst to participants, however, this exchange did not actually take place and participants' performance was therefore not evaluated (as outlined by the debriefing form). Following the reminder about the upcoming conversation, participants were asked to:

(1) Complete a variety of baseline measures, including a demographics questionnaire, the short-form version of the Self-Compassion Scale (Raes et al., 2011), and the Social Self-

Compassion Scale (Flett & Kocovski). This was followed by measures of state social anxiety (Kashdan & Steger, 2006), anticipatory processing (Vassilopoulos, 2004), beliefs about anticipatory processing (Vassilopoulos, Brouzos, & Moberly, 2015), beliefs about rumination adapted for social anxiety (Wong & Moulds, 2010), state depression (Chiappelli, Nugent, Thangavelu, Searcy, & Hong, 2014), and state anxiety (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983), which can be found in Appendix I.

(2) Complete a short writing exercise based on a procedure developed by Breines and Chen (2012) by identifying a time when they felt primarily responsible for a negative social interaction, which resulted in them feeling badly (see Appendix J). This instruction differed from the initial study, which had asked participants to identify what they considered to be their biggest weakness or shortcoming, the majority of which happened to involve social difficulties (Breines & Chen, 2012)

(3) Complete one of three exercises, depending on the random condition to which they were assigned. In the self-compassion reflection condition, participants were instructed to reflect upon the past negative event they previously described by writing for 3 minutes in response to the following prompt, "Imagine that you are talking to yourself about this conversation from a compassionate and understanding perspective. What would you say?" For another 3 minutes, they were also asked to write a paragraph to themselves from a compassionate perspective regarding the event they described. These exercises emphasized the self-kindness and common humanity elements of self-compassion. In the first control (self-esteem) condition, participants were asked to "Imagine that you are talking to yourself about this conversation from a perspective of validating your positive (rather than negative) qualities. What would you say?" For another 3 minutes, they were asked to write a

paragraph to themselves which focused on their other positive (rather than their negative) social characteristics. As can be seen above, both participants in the self-compassion and self-esteem conditions were instructed to write to themselves using a third person perspective. In the second control condition, participants did not receive any reflection instructions after identifying a past negative social experience. These exercises can be found in Appendix K)

(4) Complete the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988) and the Subjective Units of Distress Scale (SUDS; Wolpe, 1982) (see Appendix L)

(5) Spend five minutes responding to two writing prompts. They were asked to describe (a) whether they learned anything from the negative social interaction and if so, what and (b) if they felt the situation went badly more so due to their personality or the situation itself. These statements were rated for the extent to which they contained evidence of incremental beliefs (i.e. social skills can change), or entity beliefs (i.e. social skills are fixed and unchangeable) related to the self (see Appendix M).

(6) Rate their desire to not repeat the mistake they described, and their willingness to improve upon it in the future, using a short self-report questionnaire (see Appendix N).

(7) Complete a mood-boosting exercise (Appendix N) and then respond to a question asking them what they thought the true purpose of the experiment was (as a suspicion probe). This was designed so that anyone who correctly guessed the conversation would not actually take place was then excluded from subsequent data analyses.

(8) On the final page of the survey, participants were informed that they had reached the end of the study and that the recorded video conversation with another participant would not occur.

(9) All participants were fully debriefed and informed of the true nature of the experiment (see Appendix O)

Results

Data Pre-Screening

All data were pre-screened for univariate outliers, of which there were very few. The criteria for outliers were any data points three standard deviations above or below the mean on any of the measures included in each of the study conditions. The outliers were removed from the data set before further analysis was undertaken.

Baseline Differences

To examine if any baseline differences in means existed across conditions before the intervention took place, one-way ANOVAs were conducted on all premeasures. Premeasures assessed in this way included self-compassion, social self-compassion, state social anxiety, anticipatory processing, positive beliefs about anticipatory processing, positive beliefs about rumination related to social anxiety, state depression, and state anxiety (see Table 20). In line with our expectations, there were no significant differences found between conditions. Given there were no significant differences among conditions for the pre-measure variables, we proceeded with the analysis.

Table 20

Baseline Levels of Pre-measures Occurring Before the Experimental Manipulation

	Social Self-Compassion		Self-Esteem		Control			
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
SCS	2.95	.50	2.78	.76	2.82	.62	.60	.55
SSCS	3.07	.42	3.03	.71	2.89	.57	.87	.42
State Social Anxiety	2.59	.92	2.60	1.05	2.69	.99	.10	.91
State Anxiety	44.03	5.82	43.43	5.25	42.60	5.54	.51	.60
State Depression	36.90	14.20	34.10	13.37	37.80	16.01	.53	.59
Anticipatory Processing	515.23	355.36	557.90	330.56	473.50	317.86	.48	.62
Positive Beliefs AP	52.26	8.21	51.80	11.17	52.13	9.86	.02	.98
Positive Beliefs R	24.97	4.74	23.77	6.34	22.80	5.82	1.12	.33

Note. *SCS* Self-Compassion Scale; *State S Anx* State Social Anxiety; *State Anxiety* State-Trait Anxiety Inventory; *State Depression* Maryland State-Trait Depression Scale; *Anticipatory Processing* Anticipatory Processing Questionnaire; *Positive Beliefs AP* Positive Beliefs about Anticipatory Processing; *Positive Beliefs R* Positive Beliefs about Rumination Adapted for Social Anxiety

Correlations Between Premeasures

In order to see if variables were related to one another as expected we conducted correlational analyses on all premeasures (see Table 21). This analysis was done to obtain further information about how the SSCS related to various outcomes. Furthermore, this was also done as a method of comparing correlations between the SCS and the SSCS with

respect to magnitude and level of significance. As you can see from the table, both the SCS and the SSCS produce highly significant, negative correlations among the variables measured. These correlations range from moderate to strong in magnitude. As compared to the SCS, the SSCS produced a noticeably stronger, negative correlation with outcomes such as state social anxiety, anticipatory processing, positive beliefs about anticipatory processing, and positive beliefs about rumination (adapted for social anxiety).

Table 21

Comparing SCS and SSCS Pre-measure Correlations

	SCS	SSCS
SCS	-	.79**
State Social Anxiety	-.50**	-.68**
State Anxiety	-.52**	-.53**
State Depression	-.51**	-.45**
Anticipatory Processing	-.39**	-.48**
Positive Beliefs AP	-.38**	-.49**
Positive Beliefs R	-.32**	-.46**

Note. ** Correlation significant at .01 level (2-tailed); * Correlation significant at .05 level (2-tailed); n = 91. *SCS* Self-Compassion Scale; *State S Anx* State Social Anxiety; *State Anxiety* State-Trait Anxiety Inventory; *State Depression* Maryland State-Trait Depression Scale; *Anticipatory Processing* Anticipatory Processing Questionnaire; *Positive Beliefs AP* Positive Beliefs about Anticipatory Processing; *Positive Beliefs R* Positive Beliefs about Rumination Adapted for Social Anxiety

Suspicion Probe As mentioned previously, all participants were asked what they thought the true purpose of the experiment was (as a suspicion probe, see Appendix N). Out of 97

viable participants who underwent the study, 6 individuals correctly guessed the conversation would not actually take place and were thus excluded from subsequent data analyses, leaving 91 participants. This exclusion was important given that we expected that writing about a past negative experience would influence how participants anticipated the upcoming conversation, depending on the condition to which they were assigned. Participants who guessed the conversation would not take place were thus removed because it would not be possible to draw inferences about the connection between writing about a past negative social event and anticipation for the future interaction.

Testing Experimental Hypotheses

A summary of results with respect to each experimental hypothesis is given below. For descriptive statistics pertaining to the dependent measures across conditions, please refer to Table 22.

Hypothesis 1. With regards to whether inducing self-compassion in a social context leads to increases in positive mood, a one-way ANOVA revealed that there were differences in positive affect depending on condition, F (2, 88) = 5.43, $p < .01$, $\eta^2 = .11$. With respect to specific group comparisons, the social self-compassion group reported significantly higher levels of positive affect (M = 28.19, SD = 7.70) compared to the self-esteem group (M = 22.03, SD = 8.22), t(59) = 3.02, $p < .01$, d = 0.77. The social self-compassion group also reported significantly higher levels of positive affect compared to the control group (M = 24.17, SD = 6.18), t(59) = 2.25, p = .03, d = 0.58. However, there were no significant differences among conditions for negative affect as measured by the PANAS, F (2, 88) = 1.23, p = .29, or subjective distress as measured by the SUDS, F (2, 86) = .15, p = .85.

Hypothesis 2. We expected that the self-compassion condition would be more likely to report incremental beliefs about interpersonal deficiencies as compared to the other two conditions. In other words, we anticipated that the self-compassion condition would be more likely to report viewing their social qualities as malleable and changeable rather than fixed and unchangeable. For the third written exercise, we used the coding scheme from Breines and Chen (2012) for scoring the two responses. Each score was an indicator of the degree to which a response contained evidence of incremental beliefs related to the interpersonal mistake that participants previously described. In line with our expectations, a Kruskal-Wallis H test showed that there was a statistically significant difference among conditions with respect to rate of incremental beliefs, χ^2 (2) = 7.26, p = .026, with a mean rank of 55.74 for the self-compassion condition, 43.13 for the self-esteem condition, and 38.80 for the control condition. More specifically, Kruskal-Wallis H tests revealed that the self-compassion condition reported higher incremental beliefs compared to both the self-esteem condition, χ^2 (1) = 3.72, p = .05 and the control condition, χ^2 (1) = 6.61, p = .01.

A second independent rater randomly selected approximately 30% of the written responses (from 30 participants) and coded them so that interrater reliability (i.e. the degree of score agreement between raters) could be assessed. They were provided with the coding scheme and were also briefed about the definition of incremental beliefs in relation to social qualities. There was approximately 63 percent degree of agreement between raters. However, Cohen's kappa was also used to evaluate interrater reliability as it took into account the possibility that agreement on codes could have occurred by chance alone. Based on suggested guidelines from Landis and Koch (1977), there was moderate

agreement between the two raters, $\kappa = .53$, $p < .001$. As such, the findings on incremental beliefs should be interpreted with some caution given the moderate level of interrater reliability that was found using a relatively small subset of the data.

Hypothesis 3. There was a significant effect of condition on self-improvement motivation, $F(2, 88) = 4.07$, $p = .02$, $\eta^2 = .09$. With respect to specific group comparisons, the self-compassion group reported significantly higher self-improvement motivation ($M = 5.01$, $SD = .94$), compared to the self-esteem condition ($M = 4.27$, $SD = 1.04$), $t(59) = 2.92$, $p < .01$, $d = .75$. However, contrary to our expectations, the self-compassion condition ($M = 5.01$, $SD = .94$) and the control group ($M = 4.80$, $SD = 1.14$) did not differ significantly on self-improvement motivation, $t(59) = .78$, $p = .44$.

Table 22

Descriptive Statistics of Outcome Measures After Experimental Manipulation

	Social Self-Compassion		Self-Esteem		Control			
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Positive Affect	28.19	7.70	22.03	8.22	24.17	6.18	5.42	<.01
Negative Affect	15.80	4.60	15.07	4.20	17.30	7.48	1.23	.29
Subjective Distress	31.10	21.62	27.97	24.13	30.50	23.06	.15	.85
Incremental Beliefs	2.70	1.07	2.13	1.11	1.97	1.03	4.06	.02
Self-Improvement Motivation	5.01	.94	4.27	1.04	4.80	1.14	4.07	.02

Note. *Positive Affect* PANAS; *Negative Affect* PANAS; *Subjective Distress* SUDS

Discussion

The primary purpose of this study was to assess whether self-compassion as well as increases and decreases in affect could be temporarily induced as a result of a brief experimental manipulation. The other purpose of the study was to explore whether self-compassion in a social context was linked to higher incremental beliefs as well as higher self-improvement motivation.

In line with our expectations, positive affect differed significantly across conditions. More specifically, the self-compassion condition reported higher positive affect as compared to both the self-esteem and control condition. In addition, we also found that the self-compassion condition reported higher incremental beliefs related to their ability to improve upon past social mistakes as compared to the other two conditions. As can be seen from the results above, the effect sizes were medium to large in magnitude. Overall, these findings speak to the positive factors associated with self-compassion, and in this particular instance, self-compassion. Participants who were asked to reflect on their social shortcoming using a self-compassionate and understanding perspective were more likely to report high levels of positive emotion as well as a belief that social characteristics were amenable and that past interpersonal mistakes could be improved upon. These results are reflective of the cognitive style and behaviour that we would expect a socially self-compassionate individual to exhibit.

Contrary to our expectations, however, although we saw that the self-compassion condition reported higher positive affect, participants did not report differences in negative affect and subjective distress. This may have occurred because the anticipated interaction itself may not have been strong enough, in that it may not have been as anxiety provoking

as we had initially anticipated. When looking at the means for each of the variables, we noticed that there were fairly low levels of state social anxiety, state anxiety, and anticipatory processing within the sample. In light of this trend, it follows that levels of affect and distress may not have varied as much as one may have expected following the situation presented to participants. It is possible that our results may have been amplified, or may have been in line with our initial predictions, if community or clinical samples were used instead given that in samples such as these, rates of general anxiety, social anxiety, and depression may be higher. That being said, as mentioned previously there is reason to believe that people across a range of social anxiety also experience anticipatory anxiety to a certain degree (Harwood & Kocovski, 2017).

Ultimately, the research design may have needed to be modified. For instance, it would be helpful to include a more detailed suspicion probe than the one used in the present experiment. In the study, participants were asked to describe what they thought the main hypothesis of the study was. However, if the experiment were to be conducted again it would be ideal to include a funneled debriefing procedure to more accurately assess whether participants truly believed a conversation would take place after completing the self-report measures. This could then be used as an indicator of the degree to which participants were experiencing anticipatory anxiety in relation to the upcoming exchange. In addition, it would be beneficial to include a manipulation check to ensure that higher levels of self-compassion and self-esteem had indeed been induced. Lastly, perhaps actually asking participants to engage in an anxiety-provoking task, or providing more contact with a confederate at the beginning of the experiment, would raise believability of the proposed, potentially threatening social scenario. Modifications such as these may help

lead to temporary increases in anxiety, negative affect, and subjective distress. In any event, the fact that the self-compassion condition exhibited such significant differences in positive affect as opposed to negative affect and subjective distress suggests that inducing self-compassion within a socially evaluative context can lead to temporary mood benefits.

We found that with respect to self-improvement motivation, there was a significant difference between the self-compassion and self-esteem conditions. In line with our original hypotheses, these results suggest that describing your other positive qualities (as was done in the self-esteem condition) is not conducive to increasing positive mood, and motivating oneself to improve in the future. These findings are consistent with studies suggesting that exercises that attempt to boost mood and self-worth through the use of positive self-affirmation strategies may be generally unsuccessful, particularly for those with already low levels of self-esteem (for a review see McQueen & Klein, 2006). In the case of our experiment, when participants in the self-esteem condition were asked to write about other positive qualities they possessed, the exercise may not have distracted them from thinking further about the past negative social experience they had previously described. Thus, when asked to generate a description of their other positive traits, individuals in the self-esteem condition were likely experiencing lower positive affect, less motivation, and difficulty responding to the task. Asking participants to write positive self-statements may have been largely ineffective at increasing positive mood, thereby influencing the self-esteem condition to report lower levels of self-improvement motivation. This is in line with research showing that while positive self-statements tend to somewhat benefit certain people, such as those high in self-esteem, it is largely ineffective for those with lower levels of self-esteem. For instance, among participants with low self-

esteem, positive self-statements can actually make individuals feel worse (Wood, Perunovic, & Lee, 2009).

However, contrary to our expectations, no significant differences in self-improvement motivation were found between the self-compassion and control conditions. That is, both the self-compassion condition and the control condition reported fairly similar levels of self-improvement motivation, and these levels were both higher than those reported by the self-esteem condition. There are a couple of reasons why this may have occurred. First, the control group was not asked to further reflect on the negative social experience they previously described. In this regard, although they did not engage in self-compassionate reflection in relation to their past mistake, they were less likely to engage in ruminative thinking. This may be why the control group reported similar levels of self-improvement motivation compared to the self-compassion condition, because they were simply not as cognitively preoccupied with reflecting upon their past mistake.

In addition, rather than experiencing more positive gains in self-improvement motivation as compared to the baseline control group, the self-compassion condition may have been exhibiting reduced defensiveness to the proposed social evaluative threat. After completing the self-compassion writing exercises, individuals may have been better able to self-regulate their emotions in response to the past negative social event they previously described. Thus, the writing exercises may have led them to feel more tolerant and accepting of their past social mistake, and therefore more self-assured that they could improve their behaviour in future social contexts. This may be another reason why similar findings for the self-compassion and control conditions emerged.

At the very least, our results support the notion that self-compassion is linked with self-improvement motivation as opposed to the inverse which involves being self-indulgent and complacent with respect to bettering oneself. These findings are consistent with a more recent paper by Wang, Chen, Poon, Teng, and Jin (2016), which found that self-compassionate people actually tend to accept their own moral transgressions less, and consequently treat past mistakes with more care and consideration. Results also provide further support for the psychometric properties of the SSCS. Table 21, which compared the SCS and the SSCS, showed that the SSCS was related to the pre-measures as we had expected. With the exception of state anxiety and state depression, the SSCS produced stronger correlations among the variables measured as compared to the SCS. In light of the fact that the content of these scales (such as anticipatory processing, state social anxiety, positive beliefs about rumination, etc.) can arguably be seen as being more closely tied to negative social outcomes, it makes sense that the SSCS produced these stronger associations.

There are a few noteworthy limitations of Study 4, which must be mentioned. Perhaps most evidently, a few main limitations of Studies 1 to 3 similarly apply to Study 4. For instance, future studies should focus on sampling a wider, more diversified array of individuals with respect to age, gender, and race. It may be necessary to collect data from a larger sample in order to accomplish this particular aim. Most importantly, however, results suggest that use of a similar but longer-term manipulation may be needed, at least over repeated time points, in order to see the expected pattern of results. This is in line with the widely held belief that self-compassion is a skill that must be cultivated and improved over time (Galla, 2016). Perhaps workshops or interventions that specifically focus on self-

compassion and social skills training may result in sustained benefits, in terms of bolstering positive mood while simultaneously lowering negative mood. Lastly, using a small subset of data, agreement between raters was modest with respect to incremental beliefs that related to past social mistakes. Taking this into account, the original paper on self-improvement motivation by Breines and Chen (2012) also reported some shortcomings with respect to reliability. Given that another independent rater coded only a small subsample of the data, it may be useful to more fully assess intterrater reliability so that more accurate conclusions about the results can be drawn.

In addition, there are some improvements to the research design that we think may be useful for implementation within similar future research. For instance, due to practical constraints, we were not able to administer the self-compassion measure during mass testing before the intervention took place. Due to this, we cannot be assured that participants' self-compassion scores are truly a baseline measure, because they may be confounded in some way with the situation of social threat that was presented at the beginning of the study. As well, although our intervention was aimed at getting participants to reflect on past mistakes using a socially self-compassionate perspective, we acknowledge that the reflection exercises did not provide coverage of all fundamental aspects of self-compassion (self-kindness, mindfulness, and common humanity). Ideally, future research would include exercises that specifically describe and encourage the use of these core components of self-compassion so that participants are left with more guidance as to what socially self-compassionate thinking and behaviour entails. Lastly, if there were no restrictions on the length and time of the study, we would perhaps consider including more pre and post measures. We modeled our study design on past research, and we

wanted to ensure that the experiment was not too long and onerous for participants, but additional measures would undoubtedly provide more wealth of information. For instance, it may be beneficial to ensure that key measures (such as positive and negative affect, subjective distress, self-compassion and self-compassion) appear both before and after the manipulation to measure pre-to-post manipulation differences occurring within the experimental session itself.

Conclusion

The primary purpose of this study was to assess whether self-compassion could be induced in a situation of social evaluative threat through the use of a brief experimental manipulation. In response to the manipulation, we found that the self-compassion condition reported significantly higher positive affect, but no significant differences were found with respect to negative affect or subjective distress. The self-compassion condition also reported a significantly higher incidence of incremental beliefs related to their social mistake, as compared to the two other groups. Lastly, we found that the self-compassion condition and control condition reported similar levels of increased self-improvement motivation. Altogether, results from this experiment suggest that short-term self-compassion manipulations may lead to temporary gains in positive mood and adaptive thoughts. To produce long-lasting and sustainable changes in levels of self-compassion, future research may want to explore the use of longer term, more complex and involved interventions.

General Discussion

The primary goal of this research was to test the domain-specific view of the self-compassion construct by testing the feasibility of developing a measure of social self-

compassion that should be particularly relevant when assessing self-compassion within interpersonal contexts. Then this new scale, called the Social Self-Compassion Scale (SSCS), was evaluated with respect to its suitability for use. To address this primary goal, three large online studies were conducted, which assessed the extent to which the SSCS was a reliable and valid measure for use within this research and future work. Then, in Study 4, a brief intervention was conducted which attempted to induce self-compassion before an interaction involving social evaluation. Individuals in the social self-compassion condition reported significantly higher positive affect as well as incremental beliefs related to a past mistake, in response to the proposed social evaluative threat.

Ultimately, across all four studies, the obtained evidence indicated that the newly adapted social self-compassion measure had sound psychometric properties. For Studies 1 to 3, the factor structure of the SSCS was consistent, in that the data revealed that two clear factors emerged composed of the negatively worded items and the positively worded items. In addition, correlation analyses revealed that in a large majority of cases the SSCS related to measures in the direction and magnitude we would expect based upon both the past literature and the relevance of constructs measured. Most notably, we demonstrated that the SSCS has incremental validity in that it is able to predict many different outcomes above and beyond the variance attributable to the original Self-Compassion Scale.

Study 4 was unique from the first three studies given that it involved an experimental manipulation, however it also further supported the psychometric properties of the SSCS. It was notable that the majority of the correlations for the SSCS were larger in magnitude than for the SCS. In this regard, the SSCS appeared to be more relevant than the SCS with respect to predicting interpersonal outcomes. These findings support the notion

that within relational contexts, the SSCS tends to be a more robust predictor for individuals as compared to the original short-form self-compassion scale.

Collectively, the results of the four studies helped provide a deeper understanding of the social self-compassion construct, and its potential value. For instance, it was learned that the social self-compassion scale relates to a variety of social outcomes in the expected direction and magnitude. We also learned that there is predictive value in using the SSCS to explore both social outcomes, and more globally relevant outcomes. For instance, the SSCS was predictive of outcomes such as social anxiety, fear of negative evaluation, and perceived social self-efficacy. However, the SSCS was also predictive of the more global outcomes such as feelings of mattering and shame, as well as overall psychological well-being. In the majority of cases, the SSCS added a small but significant amount of variance above the general Self-Compassion Scale. This speaks to the importance of having social self-compassion in response to experiencing difficult interpersonal experiences, particularly in light of research suggesting just how characteristically harmful social stress can be beyond other types of stress.

Some main limitations for each study were noted. Perhaps most notably, future research needs to explore social self-compassion within samples beyond just postsecondary samples. It is anticipated that social self-compassion will be especially relevant for groups who typically suffer from a relative lack of self-compassion and a high incidence of social anxiety in response to negative social events that have occurred in the past. Also, future research must seek to explore social self-compassion among bullied youth, who may perceive they have inadequate social support resources. Moreover, individuals who are physically or emotionally abused by others in their life may have particularly low levels of

social self-compassion (Flett et al., 2015). This can become especially problematic if they then model future relationships based on these past instances of abuse that occurred beyond their control. Ultimately, although we believe that social self-compassion is universally relevant and important for all individuals, there is still a need to assess social self-compassion in people from a variety of backgrounds.

Taken together, results with this measure help to paint a picture of how a socially self-compassionate person can be characterized. Based on the findings from Studies 1 through 4, inferences can be drawn about how a person with high as opposed to low social self-compassion tends to think, feel, and behave. For instance, an individual who is socially self-compassionate would tend to report lower levels of social anxiety, and higher levels of perceived social self-efficacy. In response to social adversity, they would be less likely to report fears of negative self-evaluation, and would also be less likely to internalize feelings of shame. However, the effects of social self-compassion extend beyond outcomes that are primarily relevant to the social domain. A socially self-compassionate individual would tend to have higher psychological well-being and also be more likely to report that they feel they matter to others. Assessment of these variables ultimately provides a more solid and in depth understanding of the qualities that a socially self-compassionate person possesses, as well as the psychological benefits that tend to be associated with social self-compassion.

In summary, our findings support the utility of this new measure of social self-compassion, and its use beyond general measures of self-compassion. In Studies 1 through 4, we found support for the validity and reliability of the scale. Within the fourth experimental study specifically, we found that inducing social self-compassion led to temporary gains in positive affect as well as higher reported incremental beliefs after being

asked to reflect upon a past social mistake using a socially self-compassionate perspective. Altogether, results from these studies provided support for the relevance and suitability of using the social self-compassion measure within this work, as well as future research.

Appendix A
Measures Common to All Studies

Demographics Questionnaire

Please answer the following questions listed below by writing your response or checking the most appropriate answer.

1. What is your age? _____

2. What is your gender?

Male □
Female □
Transgender □

3. Which ethnicity do you most closely identify with?

White/Caucasian □
Asian □
Black/African Canadian □
First Nations □
Other □ Please specify _____

4. What is the highest level of education that you have completed?

Completed some high school □
Graduated from high school □
Completed some college or university (i.e., taken some courses) □

Graduated from university:
Undergraduate degree □
Masters degree □
Doctoral degree □
Graduated from college □
Other professional degree (e.g., medicine, education, pharmacy, etc.) □

5. What is your occupational status? Please check all that apply.
Full time Student □ Part time Student □ Full time Employee □

Part time Employee □ Unemployed □ Other _____
(Please specify)

6. What is your marital status?
Married □ Separated □ Divorced □

Cohabitating □ Single □ Widowed □

Social Self-Compassion Scale (SSCS; Flett & Kocovski), Adaptation of the Short-Form Self-Compassion Scale (Raes, Pommier, & Neff, 2011)

Original items from the Self-Compassion Scale (Neff, 2011) are featured in italics.

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

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

Almost never				Almost always
1	2	3	4	5

1. When I fail to do the right thing in a social situation, I become consumed by feelings of inadequacy
   When I fail at something important to me, I become consumed by feelings of inadequacy.
2. I try to be understanding and patient towards myself when I fall short of my social expectations
   I try to be understanding and patient towards those aspects of my personality I don't like.
3. When I make a mistake in public, I try to take a balanced view of the situation
   When something painful happens, I try to take a balanced view of the situation.
4. When I'm feeling anxious in a social setting, I feel like other people are probably more relaxed than I am
   When I'm feeling down, I tend to feel like most other people are probably happier than I am.
5. I try to see my failings in social situations as part of the human condition
   I try to see my failings as part of the human condition.
6. When I'm having a hard time in social situations, I give myself the caring and tenderness I need
   When I'm going through a very hard time, I give myself the caring and tenderness I need.
7. When something upsets me in social situations, I try to keep my emotions in balance
   When something upsets me I try to keep my emotions in balance.
8. When I fail to do the right thing in a social situation, I tend to feel alone in my failure
   When I fail at something that's important to me, I tend to feel alone in my failure.
9. When I'm feeling socially anxious, I tend to obsess and fixate on everything that's wrong
   When I'm feeling down I tend to obsess and fixate on everything that's wrong.
10. When I'm feeling socially inadequate, I try to remind myself that feelings of inadequacy are shared by most people
    When I feel inadequate in some way, I try to remind myself that feelings of

inadequacy are shared by most people.

11. I'm disapproving and judgmental about my own social flaws and inadequacies
    I'm disapproving and judgmental about my own flaws and inadequacies.
12. I'm intolerant and impatient towards myself when socially anxious
    I'm intolerant and impatient towards those aspects of my personality I don't like.

SPIN (Social Phobia Inventory; Connor, Davidson, Churchill, Sherwood, Foa, & Weisler**)**

Please indicate how much the following problems have bothered you during the past week. Mark only one box for each problem, and be sure to answer all items.

0 = Not at all 1 = A little bit 2 = Somewhat 3 = Very much 4 = Extremely

Social Phobia Inventory items

- I am afraid of people in authority
- I am bothered by blushing in front of people
- Parties and social events scare me
- I avoid talking to people I don't know
- Being criticised scares me a lot
- Fear of embarrassment causes me to avoid doing things or speaking to people
- Sweating in front of people causes me distress
- I avoid going to parties
- I avoid activities in which I am the center of attention
- Talking to strangers scares me
- I avoid having to give speeches
- I would do anything to avoid being criticised
- Heart palpitations bother me when I am around people
- I am afraid of doing things when people might be watching
- Being embarrassed or looking stupid is among my worst fears
- I avoid speaking to anyone in authority
- Trembling or shaking in front of others is distressing to me

Appendix B – Study One Measures

Adaptive Disengagement Scale (ADS; Leitner, Hehman, Deegan, & Jones, 2014)

Please respond to the following statements using the rating scale below (1 strongly disagree to 7 strongly agree)

(1 strongly disagree, 2 disagree, 3 somewhat disagree, 4 neither agree/disagree, 5 somewhat agree, 6 agree, 7 strongly agree)

1. I am good at "shaking off" failures and keeping a positive attitude
2. When I perform poorly at something, I do my best to keep a positive sense of self-esteem
3. I can adapt to almost any situation to maintain my self-esteem
4. When bad things happen to me, I try to not feel bad about myself

DASS (Depression) Subscale (Lovibond & Lovibond, 1995)

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

The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

1. I couldn't seem to experience any positive feeling at all
2. I just couldn't seem to get going
3. I felt that I had nothing to look forward to
4. I felt sad and depressed
5. I felt that I had lost interest in just about everything
6. I felt I wasn't worth much as a person
7. I felt that life wasn't worthwhile
8. I couldn't seem to get any enjoyment out of the things I did
9. I felt down-hearted and blue
10. I was unable to become enthusiastic about anything
11. I felt I was pretty worthless
12. I could see nothing in the future to be hopeful about
13. I felt that life was meaningless
14. I found it difficult to work up the initiative to do things

FMI Mindfulness Scale (Walach, Buchheld, Buttenmuller, Kleinknecht, Schmidt, 2006)

Please check off the response that is most applicable to you using the scale provided:

	Item	Rarely	Occasionally	Fairly Often	Almost Always
1.	I am open to the experience of the present moment.	1	2	3	4
2.	I sense my body, whether eating, cooking, cleaning or talking.	1	2	3	4
3.	When I notice an absence of mind, I gently return to the experience of the here and now.	1	2	3	4
4.	I am able to appreciate myself.	1	2	3	4
5.	I pay attention to what's behind my actions.	1	2	3	4
6.	I see my mistakes and difficulties without judging them.	1	2	3	4
7.	I feel connected to my experience in the here-and-now.	1	2	3	4
8.	I accept unpleasant experiences.	1	2	3	4
9.	I am friendly to myself when things go wrong.	1	2	3	4
10.	I watch my feelings without getting lost in them.	1	2	3	4
11.	In difficult situations, I can pause without immediately reacting.	1	2	3	4
12.	I experience moments of inner peace and ease, even when things get hectic and stressful.	1	2	3	4
13.	I am impatient with myself and others.	1	2	3	4
14.	I am able to smile when I notice how I sometimes make life difficult.	1	2	3	4

Self-Criticism (DEQ) Subscale (Bagby, Parker, Joffe, & Buis, 1994)

Please respond to the following statements using the rating scale below (1 strongly disagree to 7 strongly agree)

(1 strongly disagree, 2 disagree, 3 somewhat disagree, 4 neither agree/disagree, 5 somewhat agree, 6 agree, 7 strongly agree)

1. I often find that I don't live up to my own standards or ideals.
2. Many times I feel helpless
3. There is a considerable difference between how I am now and how I would like to be
4. I tend not to be satisfied with what I have
5. No matter how close a relationship between two people is, there is always a large amount of conflict
6. Often, I feel I have disappointed others
7. I never really feel secure in a close relationship
8. Often, I feel threatened by change

*9. I am very satisfied with myself and accomplishments

SCALE OF PERCEIVED SOCIAL SELF-EFFICACY (Smith & Betz, 2000)

Instructions: Please read each statement carefully. Then decide how much confidence you have that you could perform each of these activities successfully. Mark the appropriate number for your level of confidence.

No Confidence At All	Little Confidence	Moderate Confidence	Much Confidence	Complete Confidence
1	2	3	4	5

1. Start a conversation with someone you don't know very well.
2. Express your opinion to a group of people discussing a subject that is of interest to you.
3. Work on a school, work, community or other project with people you don't know very well.
4. Help to make someone you've recently met feel comfortable with your group of friends.
5. Share with a group of people an interesting experience you once had.
6. Put yourself in a new and different social situation.
7. Volunteer to help organize an event.
8. Ask a group of people who are planning to engage in a social activity (e.g., go to a movie) if you can join them.
9. Get invited to a party that is being given by a prominent or popular individual.
10. Volunteer to help lead a group or organization.
11. Keep your side of the conversation.
12. Be involved in group activities.
13. Find someone to spend a weekend afternoon with.
14. Express your feelings to another person.
15. Find someone to go to lunch with.
16. Ask someone out on a date.
17. Go to a party or social function where you probably won't know anyone.
18. Ask someone for help when you need it.
19. Make friends with a member of your peer group.
20. Join a lunch or dinner table where people are already sitting and talking.
21. Make friends in a group where everyone else knows each other.
22. Ask someone out after s/he was busy the first time you asked.
23. Get a date to a dance that your friends are going to.
24. Call someone you've met and would like to know better.
25. Ask a potential friend out for coffee.

Appendix C
Study One Consent and Debriefing

WILFRID LAURIER UNIVERSITY
INFORMED CONSENT STATEMENT
What are your perceptions of the self in social situations?
Alison Flett, and Dr. Nancy Kocovski, Department of Psychology

The general purpose of this study is to better understand the thoughts and emotions that may be experienced as a result of social interactions. Although the exact purpose of the research study cannot be explained at this time, a full explanation will be provided to you once you have completed the study. This research is being investigated by a Wilfrid Laurier University Masters student, Alison Flett in partial fulfillment of PS699, under the supervision of faculty supervisor Dr. Nancy Kocovski.

INFORMATION

The study will involve completing a number of online self-report questionnaires. First, you will be asked general questions regarding your background (e.g., demographics). Then, you will be provided with additional scales to complete (the following descriptions of these measures are presented here in no particular order). You will be asked questions evaluating your individual thought processes and cognitions (such as self-esteem, self-criticism) and your perceptions about interactions with others (social anxiety, attitudes about relationships). In addition, you will be asked questions that relate to attachment style and personality traits. Lastly, this study will include measures of self-compassion (your level of kindness and understanding towards yourself), and mindfulness (your tendency to be nonjudgmentally aware in the present moment).

The study will take approximately forty minutes to one hour in length to complete. Testing will take place online using the Qualtrics online collection site. Approximately 200 participants from Wilfrid Laurier University will be recruited via PREP to participate in this study.

RISKS

There are no physical risks to participating in this study. Participation in this study, in particular answering some of the questions on the measures being used (e.g,, questions about anxiety, depression, etc), may lead some to feel mild discomfort or embarrassment – these feelings are normal and should only be temporary. If you feel any discomfort or distress, you may choose not to answer specific questions, and you will not be penalized in any way if you do this. Furthermore, if these feelings persist or worsen, or you have any concerns, you may contact the researchers or Wilfrid Laurier's Counselling Services. **Please see *Contact* section for contact information.**

BENEFITS

Participants and the broader research community have the potential to benefit from this study. This research will add to the present body of knowledge about the factors associated with perceptions of social situations, and those that may be related to improved quality of life. Furthermore, participating individuals may learn more about the factors involved in this process.

CONFIDENTIALITY

All data collected in this study are strictly confidential. Names and email addresses will **only** be used to provide feedback regarding the study and the allocation of PREP credits. The principal investigator, Alison Flett, and the research advisor, Dr. Nancy Kocovski, will be the only individuals with access to the data. All participant data from Qualtrics will be downloaded to a password-protected computer in Nancy Kocovski's locked lab at Wilfrid Laurier University. Given that the study is conducted online, it is important to note that confidentiality cannot be guaranteed while data are transmitted over the Internet. The researchers acknowledge that the host of the online survey (Qualtrics) may automatically collect participant data without their knowledge (i.e., IP addresses); however, this information will not be saved or used without participants' consent.

All information you provide will be stored and analyzed separately from any identifying information. A separate, password-protected electronic file will contain your name and email address, along with your randomly assigned identification number. After all data has been collected, PREP credits administered, and feedback has been provided, the file containing participants' names, emails, and identification numbers will be deleted by Alison Flett no later than April 30, 2016. The de-identified electronic data will be retained indefinitely and may be reanalyzed and included in future research studies. Additionally, the results of this study may be published or presented to colleagues. However, all data will be presented in aggregate form.

COMPENSATION

For participating in this study you will receive a PREP credit of 0.50. If you choose to withdraw from this study, you will still be credited .50 PREP credits. Other ways to earn the same amount of credit include participating in other studies or completing a review of a journal article (instructions available on the psychology department website: http://www.wlu.ca/documents/50647/PREP.alt.assignment.pdf).

CONTACT

If you have questions at any time about the study or the procedures, (or you experience adverse effects as a result of participating in this study) you may contact the researcher, Alison Flett, at Department of Psychology 75 University Ave West Waterloo, Ontario N2L 3C5 via email flet2370@mylaurier.ca or via phone (519) 884-0710 x2587. You may also contact the research advisor, Dr. Nancy, Kocovski, at office N2025, by phone (519) 884-0710 x3519, and by e-mail nkocovski@wlu.ca. In addition, **Wilfrid Laurier's**

Counselling Services c/o the Student Wellness Centre can be reached by email wellness@wlu.ca, phone (519) 884-0710 x3146, and in person at the Student Services Building, second floor.

This project has been reviewed and approved by the University Research Ethics Board (REB #4708), which receives funding from the Research Support Fund). If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710 x4994 or rbasso@wlu.ca.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, **you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled**. If you withdraw from the study, please contact the researchers so that you can be sent a copy of the debriefing. You have the right to omit any question(s)/procedure(s) you choose. In the event that you decide you want your data removed from the study, you must immediately contact the researcher, Alison Flett. Your data can only be removed before all data has been collected. Once data collection is complete, all information will be stored without personal identifiers and there will be no way to identify your data.

FEEDBACK AND PUBLICATION

Once we have compiled and analyzed the data, feedback will be provided via email and posted on the psychology bulletin board no later than April 30, 2016. This research will be reported in the principal investigator, Alison Flett's, Masters thesis. In addition, it is possible that this research may be presented at professional conferences and submitted and accepted in a scientific journal by Alison Flett and Dr. Nancy Kocovski. The data may also be available through Open Access, meaning the research is free and available to the public without the stringent restrictions set by copyright agreements. However, all data will be presented in aggregate form only.

CONSENT

I have read and understand the above information. By selecting the "I agree/disagree" box, I indicate whether or not my consent is provided for the present study. We recommend that you save or print a copy of this form for your records.

- **I agree to participate** in this study. ___ [clicking here will lead to study]
- **I do not agree to participate** in this study.___ [clicking here will return to browser]

WILFRID LAURIER UNIVERSITY
DEBRIEFING FORM
What are your perceptions of the self in social situations?
Alison Flett and Dr. Nancy Kocovski, Department of Psychology

General Information:

The information obtained in this form is very important to read. **Concealment** was used in this **non-experimental study**, in which all of the relevant details of the research were not disclosed. Concealment was necessary in order to maintain the integrity of the study's purpose and any research findings. In order to better understand our use of concealment, **please take some time to carefully read the following information**. It is recommended that you save a copy of this form for your records.

Social anxiety can be conceptualized as an excessive fear of one or more social situations, and stems from a negative fear of evaluation from others. Past studies have shown that social anxiety is related to low levels of self-compassion, otherwise known as an openness to one's own suffering and the desire to heal one's own suffering with kindness. It also involves a non-judgmental understanding of one's pains, failures, inadequacies, etc. so that one's experience is seen in part of the larger human experience. In other words, in times of failure, pain, embarrassment, etc., self-compassionate individuals treat themselves with self-kindness, realize imperfections are part of the larger human experience, and do not become over-identified with painful or embarrassing thoughts.

Although low levels of self-compassion have been considered central to our understanding of social anxiety, a scale has not yet been developed which measures the occurrence of this psychological phenomenon. Therefore, a newly created scale called the Self-Compassion Scale – Social Anxiety (SCS-SA) was used in this study, with the purpose being to examine the psychometric properties of this measure. This scale is designed to assess the extent to which individuals' levels of self-compassion are influenced by social anxiety and perceived negative social interactions.

Procedures:

For this study, you were asked to complete a *demographic questionnaire, the recently developed Self Compassion Scale - Social Anxiety (SCS-SA), the Adaptive Disengagement Scale, the DASS Depression Subscale, the Brief HEXACO inventory, Reynolds Short Form of the Social Desirability Scale, the Social Phobia Inventory, the UCLA Loneliness Scale, the Rosenberg Self-Esteem Scale, the Freiburg Mindfulness Inventory, the Attachment Style Questionnaire, the Self-Criticism Subscale from the Depressive Experiences Questionnaire, the Perceived Social Self-Efficacy Scale, and Neff's Short Form Self Compassion Scale.* Please note that although we collected demographic information during this study, we will only use this information to describe our sample in any publications that may result from this research.

Objectives:

The objectives of this study were twofold. First, we administered several scales in order to examine whether the associations between the SCS-SA and related constructs would relate as expected. Second, through the use of a large sample, we wanted to confirm that items within the recently developed SCS-SA scale would show reliability and validity for future use. It is our hope that the SCS-SA scale can be used to assess the degree to which individuals experience lower levels of self-compassion due to social anxiety and perceived interpersonal difficulties.

The scores obtained from the Self-Compassion Scale – Social Anxiety (SCS-SA) will be compared to scores from each of the measures listed above in order to confirm that the variables relate as predicted. For instance, we predict that overall scores on the Self Compassion Scale – Social Anxiety (SCS-SA) will be positively related to trait mindfulness (the ability to live in the moment and appraise situations in a nonjudgmental way), and self-esteem. In contrast, we expect that overall scores on the SCS-SA will be negatively related to scores of loneliness, self-criticism, and anxious and avoidant attachment styles (as measured by the Experiences in Close Relationships Scale). Individual items from the SCS-SA scale will also be analyzed in order to assess reliability and validity of the newly developed measure.

Thank you for participating in this study. A summary of this study and the results will be e-mailed to you no later than April 30, 2016. A copy of the results from this study will also be posted on the bulletin board outside of N2006 no later than April 30, 2016.

Participation in this study may have led to some feelings of discomfort or embarrassment. However, these feelings are normal and should only be temporary. If they persist or worsen, or you have any concerns, you may contact the researchers or Wilfrid Laurier's Counselling Services.

Counselling Services c/o the Student Wellness Centre
Student Services Building
(519) 884 0710 x3146
wellness@wlu.ca

If you have any questions or comments regarding this study, or your participation in this study, please contact:

Alison Flett
Department of Psychology
Wilfrid Laurier University
E-mail: blac7100@mylaurier.ca
Phone: (519) 884-0710 ext 2587
Lab: N2059

Dr. Nancy Kocovski
Department of Psychology
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Phone: (519) 884-0710 ext 3519
Office: N2025

This study was reviewed and approved by the Research Ethics Board (REB #4708).
If you feel your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, extension 4994 or rbasso@wlu.ca

Appendix D
Study Two Measures

Brief Fear of Negative Evaluation – II (Carleton, Collimore, & Asmundson, 2007)

Read each of the following statements carefully and indicate how characteristic it is of you according to the scale.
1 = Not at all characteristic or true of me.
2 = Slightly characteristic or true of me.
3 = Moderately characteristic or true of me.
4 = Very characteristic or true of me.
5 = Extremely characteristic or true of me.

Characteristic	**Not at all**	**Slightly**	**Moderately**	**Very**	**Extremely**
I worry about what other people will think of me even when I know it doesn't make a difference.	0	1	2	3	4
I am unconcerned even if I know people are forming an unfavorable impression of me.	0	1	2	3	4
I am frequently afraid of other people noticing my shortcomings.	0	1	2	3	4
I rarely worry about what kind of impression I am making on someone.	0	1	2	3	4
I am afraid others will not approve of me.	0	1	2	3	4
I am afraid that people will find fault with me.	0	1	2	3	4
Other people's opinions of me do not bother me.	0	1	2	3	4
When I am talking to someone, I worry about what they may be thinking about me.	0	1	2	3	4
I am usually worried about what kind of impression I make.	0	1	2	3	4
If I know someone is judging me, it has little effect on me.	0	1	2	3	4
Sometimes I think I am too concerned with what other people think of me.	0	1	2	3	4
I often worry that I will say or do the wrong things.	0	1	2	3	4

UCLA LONELINESS SCALE

Reference:
Russell, D , Peplau, L. A.. & Ferguson, M. L. (1978). Developing a measure of loneliness. Journal of Personality Assessment, 42, 290-294.

Scale:
INSTRUCTIONS: Indicate how often each of the statements below is descriptive of you.
O indicates “I often feel this way”
S indicates “I sometimes feel this way”
R indicates “I rarely feel this way”
N indicates “I never feel this way”

1. I am unhappy doing so many things alone O S R N
2. I have nobody to talk to O S R N
3. I cannot tolerate being so alone O S R N
4. I lack companionship O S R N
5. I feel as if nobody really understands me O S R N
6. I find myself waiting for people to call or write O S R N
7. There is no one I can turn to O S R N
8. I am no longer close to anyone O S R N
9. My interests and ideas are not shared by those around me O S R N
10.I feel left out O S R N
11. I feel completely alone O S R N
12. I am unable to reach out and communicate with those around me O S R N
13. My social relationships are superficial O S R N
14. I feel starved for company O S R N
15. No one really knows me well O S R N
16. I feel isolated from others O S R N
17. I am unhappy being so withdrawn O S R N
18. It is difficult for me to make friends O S R N
19. I feel shut out and excluded by others O S R N
20. People are around me but not with me O S R N

Personal Report of Communication Apprehension (PRCA-24; McCroskey, 1982)

DIRECTIONS: This instrument is composed of twenty-four statements concerning feelings about communicating with other people. Please indicate the degree to which each statement applies to you by marking whether you strongly agree (1-SA), agree (2-A), undecided (3-U), disagree (4-D), or strongly disagree (5-SD).

Work quickly; record your first impression.

1. I dislike participating in group discussions.
2. Generally, I am comfortable while participating in group discussions.
3. I am tense and nervous while participating in group discussions.
4. I like to get involved in group discussions.
5. Engaging in a group discussion with new people makes me tense and nervous.
6. I am calm and relaxed while participating in group discussions.
7. Generally, I am nervous when I have to participate in a meeting.
8. Usually I am calm and relaxed while participating in meetings.
9. I am very calm and relaxed when I am called upon to express an opinion at a meeting.
10. I am afraid to express myself at meetings.
11. Communicating at meetings usually makes me uncomfortable.
12. I am very relaxed when answering questions at a meeting.
13. While participating in a conversation with a new acquaintance, I feel very nervous.
14. I have no fear of speaking up in conversations.
15. Ordinarily I am very tense and nervous in conversations.
16. Ordinarily I am very calm and relaxed in conversations.
17. While conversing with a new acquaintance, I feel very relaxed.
18. I'm afraid to speak up in conversations.
19. I have no fear of giving a speech.
20. Certain parts of my body feel very tense and rigid while giving a speech.
21. I feel relaxed while giving a speech.
22. My thoughts become confused and jumbled when I am giving a speech.
23. I face the prospect of giving a speech with confidence.
24. While giving a speech, I get so nervous I forget facts I really know.

Rejection Sensitivity Questionnaire (Short; Downey & Feldman, 1996)

Each of the items below describes things college students sometimes ask of other people. Please imagine that you are in each situation. You will be asked to answer the following questions: 1) How concerned or anxious would you be about how the other person would respond? 2) How do you think the other person would be likely to respond?

Sub Question 1: 1 2 3 4 5 6 (1 being very unconcerned, 6 being very concerned)
Sub Question 2: 1 2 3 4 5 6 (1 being very unlikely, 6 being very likely)

3. You ask your parents for help in deciding what programs to apply to.

How concerned or anxious would you be over whether or not your parents would want to help you? 1 2 3 4 5 6

I would expect that they would want to help me. 1 2 3 4 5 6

8. You approach a close friend to talk after doing or saying something that seriously upset him/her.

How concerned or anxious would you be over whether or not your friend would would to talk with you? 1 2 3 4 5 6

I would expect that he/she would want to talk with me to try to work things out. 1 2 3 4 5 6

10. After graduation, you can't find a job and ask your parents if you can live at home for awhile.

How concerned or anxious would you be over whether or not your parents would want you to come home? 1 2 3 4 5 6

I would expect I would be welcome at home. 1 2 3 4 5 6

13 You call your boyfriend/girlfriend after a bitter argument and tell him/her you want to see him/her.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would want to see you? 1 2 3 4 5 6

I would expect that he/she would want to see me. 1 2 3 4 5 6

14 You ask your parents to come to an occasion important to you.

How concerned or anxious would you be over whether or not your parents would want to come? 1 2 3 4 5 6

I would expect that my parents would want to come. 1 2 3 4 5 6

15. You ask a friend to do you a big favour.

How concerned or anxious would you be over whether or not your friend would do this favour? 1 2 3 4 5 6

I would expect that he/she would willingly do this favour for me. 1 2 3 4 5 6

16. You ask your boyfriend/girlfriend if he/she really loves you.

How concerned or anxious would you be over whether or not your boyfriend/girlfriend would say yes? 1 2 3 4 5 6

I would expect that he/she would answer yes sincerely. 1 2 3 4 5 6

17. You go to a party and notice someone on the other side of the room and then you ask them to dance.

How concerned or anxious would you be over whether or not the person would want to dance with you? 1 2 3 4 5 6

I would expect that he/she would want to dance with me. 1 2 3 4 5 6

Experience of Shame Scale (ESS)
(Andrews, Qian, & Valentine, 2002)

Instructions: Everybody at times can feel embarrassed, self-conscious or ashamed. These questions are about such feelings if they have occurred at any time in the past year. There are no 'right' or 'wrong' answers.

Please indicate the response which applies to you.

1 = not at all 2 = a little 3 = moderately 4 = very much

1. Have you felt ashamed of any of your personal habits?
2. Have you worried about what other people think of any of your personal habits?
3. Have you tried to cover up or conceal any of your personal habits?
4. Have you felt ashamed of your manner with others?
5. Have you worried about what other people think of your manner with others?
6. Have you avoided people because of your manner?
7. Have you felt ashamed of the sort of person you are?
8. Have you worried about what other people think of the sort of person you are?
9. Have you tried to conceal from others the sort of person you are?
10. Have you felt ashamed of your ability to do things?
11. Have you worried about what other people think of your ability to do things?
12. Have you avoided people because of your inability to do things?
13. Do you feel ashamed when you do something wrong?
14. Have you worried about what other people think of you when you do something wrong?
15. Have you tried to cover up or conceal things you felt ashamed of having done?
16. Have you felt ashamed when you said something stupid?
17. Have you worried about what other people think of you when you said something stupid?
18. Have you avoided contact with anyone who knew you said something stupid?
19. Have you felt ashamed when you failed at something which was important to you?
20. Have you worried about what other people think of you when you fail?
21. Have you avoided people who have seen you fail?
22. Have you felt ashamed of your body or any part of it?
23. Have you worried about what other people think of your appearance?
24. Have you avoided looking at yourself in the mirror?
25. Have you wanted to hide or conceal your body or any part of it?

Appendix E
Study Two Consent and Debriefing

WILFRID LAURIER UNIVERSITY
INFORMED CONSENT STATEMENT
What are your perceptions of the self in social situations?
Alison Flett, and Dr. Nancy Kocovski, Department of Psychology

The general purpose of this study is to better understand the thoughts and emotions that may be experienced as a result of social interactions. Although the exact purpose of the research study cannot be explained at this time, a full explanation will be provided to you once you have completed the study. This research is being investigated by a Wilfrid Laurier University Masters student, Alison Flett in partial fulfillment of PS699, under the supervision of faculty supervisor Dr. Nancy Kocovski.

INFORMATION

The study will involve completing a number of online self-report questionnaires. First, you will be asked general questions regarding your background (e.g., demographics). Then, you will be provided with additional scales to complete (the following descriptions of these measures are presented here in no particular order). You will be asked questions about your perceptions of interactions with others (related to social anxiety, your reactions to rejection and willingness to communicate, etc.) In addition, you will be asked questions that relate to your cognitions and general mood state (how you perceive evaluation from others, your feelings of loneliness, etc.) The study will take approximately forty minutes to one hour in length to complete. Testing will take place online using the Qualtrics online collection site. Approximately 200 participants from Wilfrid Laurier University will be recruited via PREP to participate in this study.

RISKS

There are no physical risks to participating in this study. Participation in this study, in particular answering some of the questions on the measures being used (e.g,, questions about anxiety, loneliness, etc), may lead some to feel mild discomfort or embarrassment – these feelings are normal and should only be temporary. If you feel any discomfort or distress, you may choose not to answer specific questions, and you will not be penalized in any way if you do this. Furthermore, if these feelings persist or worsen, or you have any concerns, you may contact the researchers or Wilfrid Laurier's Counselling Services. **Please see *Contact* section for contact information.**

BENEFITS

Participants and the broader research community have the potential to benefit from this study. This research will add to the present body of knowledge about the factors associated with perceptions of social situations, and those that may be related to improved quality of

life. Furthermore, participating individuals may learn more about the factors involved in this process.

CONFIDENTIALITY

All data collected in this study are strictly confidential. Names and email addresses will **only** be used to provide feedback regarding the study and the allocation of PREP credits. The principal investigator, Alison Flett, and the research advisor, Dr. Nancy Kocovski, will be the only individuals with access to the data. All participant data from Qualtrics will be downloaded to a password-protected computer in Nancy Kocovski's locked lab at Wilfrid Laurier University. Given that the study is conducted online, it is important to note that confidentiality cannot be guaranteed while data are transmitted over the Internet. The researchers acknowledge that the host of the online survey (Qualtrics) may automatically collect participant data without their knowledge (i.e., IP addresses); however, this information will not be saved or used without participants' consent.

All information you provide will be stored and analyzed separately from any identifying information. A separate, password-protected electronic file will contain your name and email address, along with your randomly assigned identification number. After all data has been collected, PREP credits administered, and feedback has been provided, the file containing participants' names, emails, and identification numbers will be deleted by Alison Flett no later than April 30, 2016. The de-identified electronic data will be retained indefinitely and may be reanalyzed and included in future research studies. Additionally, the results of this study may be published or presented to colleagues. However, all data will be presented in aggregate form.

COMPENSATION

For participating in this study you will receive a PREP credit of 0.50. If you choose to withdraw from this study, you will still be credited .50 PREP credits. Other ways to earn the same amount of credit include participating in other studies or completing a review of a journal article (instructions available on the psychology department website: http://www.wlu.ca/documents/50647/PREP.alt.assignment.pdf).

CONTACT

If you have questions at any time about the study or the procedures, (or you experience adverse effects as a result of participating in this study) you may contact the researcher, Alison Flett, at Department of Psychology 75 University Ave West Waterloo, Ontario N2L 3C5 via email flet2370@mylaurier.ca or via phone (519) 884-0710 x2587. You may also contact the research advisor, Dr. Nancy, Kocovski, at office N2025, by phone (519) 884-0710 x3519, and by e-mail nkocovski@wlu.ca. In addition, **Wilfrid Laurier's Counselling Services** c/o the Student Wellness Centre can be reached by email wellness@wlu.ca, phone (519) 884-0710 x3146, and in person at the Student Services Building, second floor.

This project has been reviewed and approved by the University Research Ethics Board (REB #4708), which receives funding from the Research Support Fund). If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710 x4994 or rbasso@wlu.ca.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, **you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled**. If you withdraw from the study, please contact the researchers so that you can be sent a copy of the debriefing. You have the right to omit any question(s)/procedure(s) you choose. In the event that you decide you want your data removed from the study, you must immediately contact the researcher, Alison Flett. Your data can only be removed before all data has been collected. Once data collection is complete, all information will be stored without personal identifiers and there will be no way to identify your data.

FEEDBACK AND PUBLICATION

Once we have compiled and analyzed the data, feedback will be provided via email and posted on the psychology bulletin board no later than April 30, 2016. This research will be reported in the principal investigator, Alison Flett's, Masters thesis. In addition, it is possible that this research may be presented at professional conferences and submitted and accepted in a scientific journal by Alison Flett and Dr. Nancy Kocovski. The data may also be available through Open Access, meaning the research is free and available to the public without the stringent restrictions set by copyright agreements. However, all data will be presented in aggregate form only.

CONSENT

I have read and understand the above information. By selecting the "I agree/disagree" box, I indicate whether or not my consent is provided for the present study. We recommend that you save or print a copy of this form for your records.

- **I agree to participate** in this study. ___ [clicking here will lead to study]
- **I do not agree to participate** in this study.___ [clicking here will return to browser]

WILFRID LAURIER UNIVERSITY
DEBRIEFING FORM
What are your perceptions of the self in social situations?
Alison Flett and Dr. Nancy Kocovski, Department of Psychology

General Information:

The information obtained in this form is very important to read. **Concealment** was used in this **non-experimental study**, in which all of the relevant details of the research were not disclosed. Concealment was necessary in order to maintain the integrity of the study's purpose and any research findings. In order to better understand our use of concealment, **please take some time to carefully read the following information**. It is recommended that you save a copy of this form for your records.

Social anxiety can be conceptualized as an excessive fear of one or more social situations, and stems from a negative fear of evaluation from others. Past studies have shown that social anxiety is related to low levels of self-compassion, otherwise known as an openness to one's own suffering and the desire to heal one's own suffering with kindness. It also involves a non-judgmental understanding of one's pains, failures, inadequacies, etc. so that one's experience is seen in part of the larger human experience. In other words, in times of failure, pain, embarrassment, etc., self-compassionate individuals treat themselves with self-kindness, realize imperfections are part of the larger human experience, and do not become over-identified with painful or embarrassing thoughts.

Although low levels of self-compassion have been considered central to our understanding of social anxiety, a scale has not yet been developed which measures the occurrence of this psychological phenomenon. Therefore, a newly created scale called the Social Self-Compassion Scale (SSCS) was used in this study, with the purpose being to examine the psychometric properties of this measure. This scale is designed to assess the extent to which individuals' levels of self-compassion are influenced by social anxiety and perceived negative social interactions.

Procedures:

For this study, you were asked to complete a *demographic questionnaire, the recently developed Social Self-Compassion Scale (SSCS), Social Interaction Anxiety Scale, the Brief Fear of Negative Evaluation Scale, the UCLA Loneliness Scale, the Social Phobia Inventory, the Social Phobia Scale, the Behavioural Inhibition Behavioural Activation Scale, the Personal Report of Communication Apprehension Scale, the Rejection Sensitivity Questionnaire, Experience of Shame Scale, Liebowitz Social Anxiety Scale, and Neff's Short Form Self Compassion Scale.* Please note that although we collected demographic information during this study, we will only use this information to describe our sample in any publications that may result from this research.

Objectives:

The objectives of this study were twofold. First, we administered several scales in order to examine whether the associations between the SSCS and related constructs would relate as expected. Second, through the use of a large sample, we want to confirm that items within the recently developed SSCS scale show reliability and validity for future use. It is our hope that the SSCS scale can be used to assess the degree to which individuals experience lower levels of self-compassion due to social anxiety and perceived interpersonal difficulties.

The scores obtained from the Social Self-Compassion Scale (SSCS) will be compared to scores from each of the measures listed above in order to confirm that the variables relate as predicted. For instance, we predict that overall scores on the Social Self-Compassion Scale (SSCS) will be negatively related to reported levels of social anxiety, shame and loneliness, and rejection sensitivity. Individual items from the SSCS scale will also be analyzed in order to assess reliability and validity of the newly developed measure.

Thank you for participating in this study. A summary of this study and the results will be e-mailed to you no later than April 30, 2016. A copy of the results from this study will also be posted on the bulletin board outside of N2006 no later than April 30, 2016.

Participation in this study may have led to some feelings of discomfort or embarrassment. However, these feelings are normal and should only be temporary. If they persist or worsen, or you have any concerns, you may contact the researchers or Wilfrid Laurier's Counselling Services.

Counselling Services c/o the Student Wellness Centre
Student Services Building
(519) 884 0710 x3146
wellness@wlu.ca

If you have any questions or comments regarding this study, or your participation in this study, please contact:

Alison Flett
Department of Psychology
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E-mail: blac7100@mylaurier.ca
Phone: (519) 884-0710 ext 2587
Lab: N2059

Dr. Nancy Kocovski
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Office: N2025

This study was reviewed and approved by the Research Ethics Board (REB #4708).
If you feel your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, extension 4994 or rbasso@wlu.ca.

Appendix F
Study Three Measures

Negative Self-Portrayal Scale (NSPS; Moscovitch & Huyder, 2012)

According to the scale provided below, please write the number in the blank space beside each item to indicate the degree to which you are concerned about the following aspects of yourself when you are in anxiety-provoking social situations (e.g. talking to someone who is a stranger; giving a speech in front of an audience; answering a question in class; etc.).
1 ---------- 2 ---------- 3 ---------- 4 ---------- 5
Not at all Slightly Moderately Very Extremely concerned

In social situations (in which I feel anxious), it will become obvious to other people that I am: _____
1. stuttering _____
2. poorly dressed _____
3. boring _____
4. sweating _____
5. physically unattractive _____
6. losing control of my emotions _____
7. blushing _____
8. speaking with a trembling voice _____
9. blemished (i.e., my appearance) _____
10. interpersonally ineffective _____
11. weird-looking _____
12. lacking personality _____
13. fat _____
14. unable to express myself _____
15. twitching (i.e. my facial muscles) _____
16. frozen _____
17. humourless _____
18. reserved _____
19. aloof _____
20. stupid _____
21. socially awkward _____
22. having a bad hair day _____
23. speaking incoherently _____
24. lacking social skills _____
25. fidgeting _____
26. unfashionable _____
27. ugly

Brief Narcissistic Personality Inventory (NPI; Ames, Rose, & Anderson, 2006)

Read each pair of statements below and place an "X" by the one that comes closest to describing your feelings and beliefs about yourself. You may feel that neither statement describes you well, but pick the one that comes closest. Please complete all pairs.

1. ___ I really like to be the center of attention
___ It makes me uncomfortable to be the center of attention

2. ___ I am no better or no worse than most people
___ I think I am a special person

3. ___ Everybody likes to hear my stories
___ Sometimes I tell good stories

4. ___ I usually get the respect that I deserve
___ I insist upon getting the respect that is due me

5. ___ I don't mind following orders
___ I like having authority over people

6. ___ I am going to be a great person
___ I hope I am going to be successful

7. ___ People sometimes believe what I tell them
___ I can make anybody believe anything I want them to

8. ___ I expect a great deal from other people
___ I like to do things for other people

9. ___ I like to be the center of attention
___ I prefer to blend in with the crowd

10. ___ I am much like everybody else
___ I am an extraordinary person

11. ___ I always know what I am doing
___ Sometimes I am not sure of what I am doing

12. ___ I don't like it when I find myself manipulating people
___ I find it easy to manipulate people

13. ___ Being an authority doesn't mean that much to me
___ People always seem to recognize my authority

14. ___ I know that I am good because everybody keeps telling me so
___ When people compliment me I sometimes get embarrassed

15. ___ I try not to be a show off
___ I am apt to show off if I get the chance

16. ___ I am more capable than other people
___ There is a lot that I can learn from other people

General Mattering Scale (Rosenberg & McCullough, 1981)

Choose the rating you feel is best for you and circle the number provided.

1 = Not at all
2 = A little
3 = Somewhat
4 = A lot

1. How important do you feel you are to other people?	0	1	2	3
2. How much do you feel other people pay attention to you?	0	1	2	3
3. How much do you feel others would miss you if you went away?	0	1	2	3
4. How interested are people generally in what you have to say?	0	1	2	3
5. How much do other people depend on you?	0	1	2	3

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1. On the whole, I am satisfied with myself. SA A D SD
2.* At times, I think I am no good at all. SA A D SD
3. I feel that I have a number of good qualities. SA A D SD
4. I am able to do things as well as most other people. SA A D SD
5.* I feel I do not have much to be proud of. SA A D SD
6.* I certainly feel useless at times. SA A D SD
7. I feel that I'm a person of worth, at least on an equal plane with others.
SA A D SD
8.* I wish I could have more respect for myself. SA A D SD
9.* All in all, I am inclined to feel that I am a failure. SA A D SD
10. I take a positive attitude toward myself. SA A D SD

Self-Critical Rumination Scale (Smart, Peters, & Baer, 2016)

Please rate each of the proposed new SCRS items for how well it reflects the construct of self-critical rumination, using a 4-point scale (1 = not at all, 4 = very well).

1. My attention is often focused on aspects of myself that I'm ashamed of
2. I always seem to be rehashing in my mind stupid things that I've said or done
3. Sometimes it is hard for me to shut off critical thoughts about myself
4. I can't stop thinking about how I should have acted differently in certain situations
5. I spend a lot of time thinking about how ashamed I am of some of my personal habits.
6. I criticize myself a lot for how I act around other people.
7. I wish I spent less time criticizing myself.
8. I often worry about all of the mistakes I have made
9. I spend a lot of time wishing I was different.
10. I often berate myself for not being as productive as I should be.

RYFF'S PSYCHOLOGICAL WELL-BEING SCALES (PWB), 42 ITEM VERSION (ABBOTT, PLOUBDIS, HUPPERT, KUH, WADSWORTH & CROUDACE, 2006)

PLEASE INDICATE YOUR DEGREE OF AGREEMENT (USING A SCORE RANGING FROM 1-6) TO THE FOLLOWING SENTENCES. STRONGLY DISAGREE → STRONGLY AGREE

1. I AM NOT AFRAID TO VOICE MY OPINIONS, EVEN WHEN THEY ARE IN OPPOSITION TO THE OPINIONS OF MOST PEOPLE. 1 2 3 4 5 6
2. IN GENERAL, I FEEL I AM IN CHARGE OF THE SITUATION IN WHICH I LIVE. 1 2 3 4 5 6
3. I AM NOT INTERESTED IN ACTIVITIES THAT WILL EXPAND MY HORIZONS. 1 2 3 4 5 6
4. MOST PEOPLE SEE ME AS LOVING AND AFFECTIONATE. 1 2 3 4 5 6
5. I LIVE LIFE ONE DAY AT A TIME AND DON'T REALLY THINK ABOUT THE FUTURE. 1 2 3 4 5 6
6. WHEN I LOOK AT THE STORY OF MY LIFE, I AM PLEASED WITH HOW THINGS HAVE TURNED OUT. 1 2 3 4 5 6
7. MY DECISIONS ARE NOT USUALLY INFLUENCED BY WHAT EVERYONE ELSE IS DOING. 1 2 3 4 5 6
8. THE DEMANDS OF EVERYDAY LIFE OFTEN GET ME DOWN. 1 2 3 4 5 6
9. I THINK IT IS IMPORTANT TO HAVE NEW EXPERIENCES THAT CHALLENGE HOW YOU THINK ABOUT YOURSELF AND THE WORLD. 1 2 3 4 5 6
10. MAINTAINING CLOSE RELATIONSHIPS HAS BEEN DIFFICULT AND FRUSTRATING FOR ME. 1 2 3 4 5 6
11. I HAVE A SENSE OF DIRECTION AND PURPOSE IN LIFE. 1 2 3 4 5 6
12. IN GENERAL, I FEEL CONFIDENT AND POSITIVE ABOUT MYSELF. 1 2 3 4 5 6
13. I TEND TO WORRY ABOUT WHAT OTHER PEOPLE THINK OF ME. 1 2 3 4 5 6
14. I DO NOT FIT VERY WELL WITH THE PEOPLE AND THE COMMUNITY AROUND ME.
1 2 3 4 5 6
15. WHEN I THINK ABOUT IT, I HAVEN'T REALLY IMPROVED MUCH AS A PERSON OVER THE YEARS. 1 2 3 4 5 6
16. I OFTEN FEEL LONELY BECAUSE I HAVE FEW CLOSE FRIENDS WITH WHOM TO SHARE MY CONCERNS. 1 2 3 4 5 6
17. MY DAILY ACTIVITIES OFTEN SEEM TRIVIAL AND UNIMPORTANT TO ME. 1 2 3 4 5 6
18. I FEEL LIKE MANY OF THE PEOPLE I KNOW HAVE GOTTEN MORE OUT OF LIFE THAN I HAVE. 1 2 3 4 5 6
19. I TEND TO BE INFLUENCED BY PEOPLE WITH STRONG OPINIONS. 1 2 3 4 5 6
20. I AM QUITE GOOD AT MANAGING THE MANY RESPONSIBILITIES OF MY DAILY LIFE. 1 2 3 4 5 6
21. I HAVE THE SENSE THAT I HAVE DEVELOPED A LOT AS A PERSON OVER TIME. 1 2 3 4 5 6
22. I ENJOY PERSONAL AND MUTUAL CONVERSATIONS WITH FAMILY MEMBERS OR FRIENDS. 1 2 3 4 5 6
23. I DON'T HAVE A GOOD SENSE OF WHAT IT IS I'M TRYING TO ACCOMPLISH IN LIFE. 1 2 3 4 5 6
24. I LIKE MOST ASPECTS OF MY PERSONALITY. 1 2 3 4 5 6
25. I HAVE CONFIDENCE IN MY OPINIONS, EVEN IF THEY ARE CONTRARY TO

THE GENERAL CONSENSUS. 1 2 3 4 5 6
26. I OFTEN FEEL OVERWHELMED BY MY RESPONSIBILITIES 1 2 3 4 5 6
27. I DO NOT ENJOY BEING IN NEW SITUATIONS THAT REQUIRE ME TO CHANGE MY OLD FAMILIAR WAYS OF DOING THINGS. 1 2 3 4 5 6
28. PEOPLE WOULD DESCRIBE ME AS A GIVING PERSON, WILLING TO SHARE MY TIME WITH OTHERS. 1 2 3 4 5 6
29. I ENJOY MAKING PLANS FOR THE FUTURE AND WORKING TO MAKE THEM A REALITY. 1 2 3 4 5 6
30. IN MANY WAYS, I FEEL DISAPPOINTED ABOUT MY ACHIEVEMENTS IN LIFE. 1 2 3 4 5 6
31.
IT'S DIFFICULT FOR ME TO VOICE MY OWN OPINIONS ON CONTROVERSIAL MATTERS. 1 2 3 4 5 6
32. I HAVE DIFFICULTY ARRANGING MY LIFE IN A WAY THAT IS SATISFYING TO ME.
1 2 3 4 5 6
33. FOR ME, LIFE HAS BEEN A CONTINUOUS PROCESS OF LEARNING, CHANGING, AND GROWTH. 1 2 3 4 5 6
34. I HAVE NOT EXPERIENCED MANY WARM AND TRUSTING RELATIONSHIPS WITH OTHERS. 1 2 3 4 5 6
35. SOME PEOPLE WANDER AIMLESSLY THROUGH LIFE, BUT I AM NOT ONE OF THEM 1 2 3 4 5 6
36. MY ATTITUDE ABOUT MYSELF IS PROBABLY NOT AS POSITIVE AS MOST PEOPLE FEEL ABOUT THEMSELVES. 1 2 3 4 5 6
37.
I JUDGE MYSELF BY WHAT I THINK IS IMPORTANT, NOT BY THE VALUES OF WHAT OTHERS THINK IS IMPORTANT. 1 2 3 4 5 6
38. I HAVE BEEN ABLE TO BUILD A HOME AND A LIFESTYLE FOR MYSELF THAT IS MUCH TO MY LIKING. 1 2 3 4 5 6
39. I GAVE UP TRYING TO MAKE BIG IMPROVEMENTS OR CHANGES IN MY LIFE A LONG TIME AGO. 1 2 3 4 5 6
40. I KNOW THAT I CAN TRUST MY FRIENDS, AND THEY KNOW THEY CAN TRUST ME.
1 2 3 4 5 6
41. I SOMETIMES FEEL AS IF I'VE DONE ALL THERE IS TO DO IN LIFE. 1 2 3 4 5 6
42. WHEN I COMPARE MYSELF TO FRIENDS AND ACQUAINTANCES, IT MAKES ME FEEL GOOD ABOUT WHO I AM. 1 2 3 4 5 6

The Self-Pity Scale of the StreBverarbeitungsfragebogen (SVF; Janke et al., 1985; English translation: W. Janke, personal communication, March 26, 2001 from Stober, 2003)

Items are answered on a 5-point scale from not at all (0) to very likely (4). Scores are computed by summing across items.

When I feel upset by something or somebody, or when something has thrown me off balance…
I feel a little sorry for myself.
I envy others to whom such things don't happen.
I have the feeling that luck is never on my side.
I can't understand why I am always the one who has bad luck.
I think that bad things always seem to happen to me.
I ask myself why this had to happen to me of all people.

Appendix G
Study Three Consent and Debriefing

WILFRID LAURIER UNIVERSITY
INFORMED CONSENT STATEMENT
Views of the Self in Social Situations
Alison Flett, and Dr. Nancy Kocovski, Department of Psychology

The general purpose of this study is to better understand the thoughts and emotions that may be experienced as a result of social interactions. Although the exact purpose of the research study cannot be explained at this time, a full explanation will be provided to you once you have completed the study. This research is being investigated by a Wilfrid Laurier University Masters student, Alison Flett in partial fulfillment of PS699, under the supervision of faculty supervisor Dr. Nancy Kocovski.

INFORMATION

The study will involve completing a number of online self-report questionnaires. First, you will be asked general questions regarding your background (e.g., demographics). Then, you will be provided with additional scales to complete (the following descriptions of these measures are presented here in no particular order). You will be asked questions about your perceptions of interactions with others (related to social anxiety, how you tend to react to negative social situations, etc.) In addition, you will be asked questions that relate to your cognitive style, and overall well being. The study will take approximately one hour to complete. Testing will take place online using the Qualtrics online collection site. Approximately 200 participants from Wilfrid Laurier University will be recruited via PREP to participate in this study.

RISKS

There are no physical risks to participating in this study. Participation in this study, in particular answering some of the questions on the measures being used (e.g., questions about anxiety, loneliness, etc.), may lead some to feel mild discomfort or embarrassment – these feelings are normal and should only be temporary. If you feel any discomfort or distress, you may choose not to answer specific questions, and you will not be penalized in any way if you do this. Furthermore, if these feelings persist or worsen, or you have any concerns, you may contact the researchers or Wilfrid Laurier's Counselling Services. **Please see *Contact* section for contact information.**

BENEFITS

Participants and the broader research community have the potential to benefit from this study. This research will add to the present body of knowledge about the factors associated with perceptions of social situations, and those that may be related to improved quality of life. Furthermore, participating individuals may learn more about the factors involved in this process.

CONFIDENTIALITY

All data collected in this study are strictly confidential. Names and email addresses will **only** be used for allocation of PREP credits and to send study feedback. The principal investigator, Alison Flett, and the research advisor, Dr. Nancy Kocovski, will be the only individuals with access to the data. All participant data from Qualtrics will be downloaded to a password-protected computer in Nancy Kocovski's locked lab at Wilfrid Laurier University. Given that the study is conducted online, it is important to note that confidentiality cannot be guaranteed while data are transmitted over the Internet. The researchers acknowledge that the host of the online survey (Qualtrics) may automatically collect participant data without their knowledge (i.e., IP addresses); however, this information will not be saved or used without participants' consent.

All information you provide will be stored and analyzed separately from any identifying information. A separate, password-protected electronic file will contain your name and email address, along with your randomly assigned identification number. After all data have been collected and PREP credits administered, the file containing participants' names, emails, and identification numbers will be deleted by Alison Flett no later than August 31st, 2016. The de-identified electronic data will be retained indefinitely and may be reanalyzed and included in future research studies. As such, it is possible that secondary data analysis may be conducted on the de-identified data obtained from this study for use in future research. Additionally, the results of this study may be published or presented to colleagues. However, all data will be presented in aggregate form.

COMPENSATION

For participating in this study you will receive a PREP credit of 0.50. If you choose to withdraw from this study, you will still be credited .50 PREP credits. Other ways to earn the same amount of credit include participating in other studies or completing a review of a journal article (instructions available on the psychology department website: http://www.wlu.ca/documents/50647/PREP.alt.assignment.pdf).

CONTACT

If you have questions at any time about the study or the procedures, (or you experience adverse effects as a result of participating in this study) you may contact the researcher, Alison Flett, at Department of Psychology 75 University Ave West Waterloo, Ontario N2L 3C5 via email flet2370@mylaurier.ca or via phone (519) 884-0710 x2587. You may also contact the research advisor, Dr. Nancy, Kocovski, at office N2025, by phone (519) 884-0710 x3519, and by e-mail nkocovski@wlu.ca. In addition, **Wilfrid Laurier's Counselling Services** c/o the Student Wellness Centre can be reached by email wellness@wlu.ca, phone (519) 884-0710 x3146, and in person at the Student Services Building, second floor.

This project has been reviewed and approved by the University Research Ethics Board (REB #4953), which receives funding from the Research Support Fund). If you feel you have not been treated according to the descriptions in this form, or your rights as a

participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710 x4994 or rbasso@wlu.ca.

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FEEDBACK AND PUBLICATION

Once we have compiled and analyzed the data, feedback will be sent to participants via email by Aug 31st, 2016. This research will be reported in the principal investigator, Alison Flett's, Masters thesis. In addition, it is possible that this research may be presented at professional conferences and submitted and accepted in a scientific journal by Alison Flett and Dr. Nancy Kocovski. The data may also be available through Open Access, meaning the research is free and available to the public without the stringent restrictions set by copyright agreements. However, all data will be presented in aggregate form only.

CONSENT

I have read and understand the above information. By selecting the "I agree/disagree" box, I indicate whether or not my consent is provided for the present study. We recommend that you save or print a copy of this form for your records.

- **I agree to participate** in this study. ___ [clicking here will lead to study]
- **I do not agree to participate** in this study.___ [clicking here will return to browser]

WILFRID LAURIER UNIVERSITY
DEBRIEFING FORM
Views of the Self in Social Situations
Alison Flett and Dr. Nancy Kocovski, Department of Psychology

General Information:

The information contained in this form is very important to read. **Concealment** was used in this **non-experimental study**, in which all of the relevant details of the research were not disclosed. Concealment was necessary in order to maintain the integrity of the study's purpose and any research findings. In order to better understand our use of concealment, **please take some time to carefully read the following information**. It is recommended that you save a copy of this form for your records.

Social anxiety can be conceptualized as an excessive fear of one or more social situations, and stems from a negative fear of evaluation from others. Past studies have shown that social anxiety is related to low levels of self-compassion, otherwise known as an openness to one's own suffering and the desire to heal one's own suffering with kindness. It also involves a non-judgmental understanding of one's pains, failures, inadequacies, etc. so that one's experience is seen in part of the larger human experience. In other words, in times of failure, pain, embarrassment, etc., self-compassionate individuals treat themselves with self-kindness, realize imperfections are part of the larger human experience, and do not become over-identified with painful or embarrassing thoughts.

Although low levels of self-compassion have been considered central to our understanding of social anxiety, a scale has not yet been developed which measures the occurrence of this psychological phenomenon. Therefore, a newly created scale called the Social Self-Compassion Scale (SSCS) was used in this study, with the purpose being to examine the psychometric properties of this measure. This scale is designed to assess the extent to which individuals' levels of self-compassion are influenced by social anxiety and perceived negative social interactions.

Procedures:

For this study, you were asked to complete a *demographic questionnaire, the recently developed Social Self-Compassion Scale (SSCS), the Negative Self-Portrayal Scale, the Narcissistic Personality Inventory, the Rosenberg Self-Esteem Scale, the Self-Critical Rumination Scale, Ryff's Psychological Well-being Scale, Janis and Fields Feelings of Inadequacy Scale, the State Self-esteem Scale, the Unconditional Self-Acceptance Scale, the Self-pity Subscale, the Rumination about an Interpersonal Offence Scale, the Extended Satisfaction with Life Scale, the Self-compassion Scale (SCS), and the Social Phobia Inventory (SPIN).* Please note that although we collected demographic information during this study, we will only use this information to describe our sample in any publications that may result from this research.

Objectives:

The objectives of this study were twofold. First, we administered several scales in order to examine whether the associations between the SSCS and related constructs would relate as expected. Second, through the use of a large sample, we want to confirm that items within the recently developed SSCS scale show reliability and validity for future use. It is our hope that the SSCS scale can be used to assess the degree to which individuals experience lower levels of self-compassion due to social anxiety and perceived interpersonal difficulties.

The scores obtained from the Social Self-Compassion Scale (SSCS) will be compared to scores from each of the measures listed above in order to confirm that the variables relate as predicted. For instance, we predict that overall scores on the Social Self-Compassion Scale (SSCS) will be negatively related to reported levels of self-critical rumination, and negative self-portrayal, and will be positively related to unconditional self-acceptance and satisfaction with life. We also expect that the SSCS will show discriminant validity in that it will only be moderately (and not strongly) related to constructs that may be seen as related to social self-compassion, such as narcissism, self-pity, and self-esteem. Finally, we expect that the SSCS will be more predictive of socially relevant outcomes such as social life satisfaction, beyond the original Self-Compassion Scale by Neff (SCS; 2003).

Thank you for participating in this study. A copy of the results from this study will be emailed to participants no later than August 31st, 2016.

Participation in this study may have led to some feelings of discomfort or embarrassment. However, these feelings are normal and should only be temporary. If they persist or worsen, or you have any concerns, you may contact the researchers or Wilfrid Laurier's Counselling Services.

Counselling Services c/o the Student Wellness Centre
Student Services Building
(519) 884 0710 x3146
wellness@wlu.ca

If you have any questions or comments regarding this study, or your participation in this study, please contact:

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Office: N2025

This study was reviewed and approved by the Research Ethics Board (REB #4953).
If you feel your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, extension 4994 or rbasso@wlu.ca.

Appendix H

Regression Results for All Variables: Studies 1 through 3

Scale	β	ΔR^2	*p-value*
Adaptive Disengagement	.397	.083	≤ .01
Depression Anxiety Stress Scale: Depression Subscale	-.151	.012	.09
Freiberg Mindfulness Inventory	.151	.012	.06
Depressive Experiences Questionnaire: Self-Criticism Subscale	-.212	.024	≤ .01
Personal Report of Communication Apprehension	-.306	.050	≤ .01
Perceived Social Self-Efficacy Scale	.359	.068	≤ .01
UCLA Loneliness Scale	.205	.020	.02
Brief Fear of Negative Evaluation	-.463	.104	≤ .01
Rejection Sensitivity Questionnaire	-.361	.063	≤ .01
Experience of Shame Scale	-.296	.043	≤ .01
Mattering	.377	.050	≤ .01
Revised Ryff's Psychological Well-being Scale	.279	.027	≤ .01
Self-Pity Scale	-.176	.011	.04
Self-Critical Rumination Scale	-.331	.039	≤ .01
Self-Esteem	.006	.000	.95
Narcissism	.200	.014	.05
Negative Self-Portrayal	-.282	.028	≤ .01

Note. Degree of additional variance Social Self-Compassion Scale contributes above short-form Self-Compassion Scale.

Appendix I
Study Four Pre-Measures

State Social Anxiety (Kashdan & Steger, 2006)

Directions: Please read the following items and indicate how frequently you experience these thoughts in the last day using the scale below.

1= Very Slightly / Not at all
2 = A Little
3 = Moderately
4= Very Much
5 = Extremely

1. I worried about what other people thought of me 1 2 3 4 5
2. I was afraid other people noticed my shortcomings 1 2 3 4 5
3. I was afraid that others did not approve of me 1 2 3 4 5
4. I was worried that I would say or do the wrong things. 1 2 3 4 5
5. When I was talking to someone, I was worried about what they were thinking of me. 1 2 3 4 5
6. I felt uncomfortable and embarrassed when I was the center of attention. 1 2 3 4 5
7. I found it hard to interact with people. 1 2 3 4 5

Anticipatory Processing Questionnaire (Vassilopoulos, 2004)

According to recent research findings, most people experience anxiety before entering a social
event-activity (such as a party, dating, acquaintance with unknown people). Thinking **about the conversation you will have with another participant shortly, please answer the questions below.**

1. How much anxiety are you currently experiencing?
2. Do you find yourself thinking about the upcoming conversation a lot?
3. Do the thoughts and ideas about the conversation keep coming into your head even when you do not wish to think about it again?
4. Do you find the thoughts are interfering with your concentration?
5. How negative are your thoughts/ideas about the upcoming interaction?
6. Are you finding it difficult to forget about the conversation?
7. Are you trying to stop thinking about the upcoming interaction?
8. If you are thinking about the conversation, over and over again, are you finding your anxiety is increasing more and more?
9. If you are thinking about the conversation, over and over again, are you finding your anxiety is decreasing more and more?
10. Are you trying to form some predictions and/or estimates about the conversation (the course and outcome of the event, consequences, etc)?
11. How negative are these predictions/estimates?
12. While thinking about the conversation, are you trying to predict in every detail your behaviour and the other person's reactions, as if you are watching a movie in which you are the protagonist?
13. How much are you trying to think of ways that you might deal with/avoid particular problems during the social interaction?
14. Have you recalled any past similar social situations (e.g. prior parties or dates)?
15. How negative are these recollections?
16. How positive are these recollections?
17. Do you anticipate you will avoid the upcoming conversation completely? Yes/No
18. If no, are you wishing that you could avoid the event?

All of the items are scored from 0 (not at all) to 100 (extremely), using a visual analogue scale. The only exception is item 17, which had a Yes/No response format and is excluded from the final score.

Positive Beliefs About Anticipatory Processing Questionnaire
(Vassilopoulos, Brouzos, & Moberly, 2015)

1234 Do not agree → Agree very much

The recurrent thoughts I have before an impending social interaction help me . . .

1. Know if others might think I am weird or odd.
2. Know if there is something I can say or do to avert a possible failure.
3. Predict if I will appear witty.
4. Know if I will make a fool of myself.
5. Detect past mistakes and failures, in order to avoid repeating them.
6. Find ways to hide my anxiety and nervousness.
7. Know if I will make a good impression to others.
8. Develop a detailed plan about how exactly I am going to behave.
9. Being prepared for unpleasant or embarrassing situations.
10. Know what other people imagine about me or expect from me.
11. Find ways to save face in case I make a fool of myself.
12. Control my emotions and somatic reactions.
13. Find ways to initiate discussion with others.
14. Know if I will fit in well with others.
15. Know if they will ask me to reveal too much personal information.
16. Rehearse what I am going to say in the interaction
17. Know if I will find myself in an embarrassing situation.
18. Know with accuracy how things might turn out.
19. Develop an escape plan if the situation becomes extremely uncomfortable.
20. Remain vigilant and alert.
21. Decide whether I will avoid this event or not.

Positive Beliefs about Rumination Scale (Watkins & Moulds, 2005)
Adapted for Social Anxiety (Wong & Moulds, 2010)

Adapted Items are written in italics. Participants rate the items (see Table 1) on a 4- point Likert scale (1 = Do not agree to 4 = Agree very much).

1. I need to think about things to find answers to how I feel
   I need to think about my interactions with other people to find answers to how I feel
2. Thinking about things helps me to understand past mistakes and failures
   Thinking about my interactions with other people helps me to understand past mistakes and failures
3. I need to think about the causes of the feelings I experience
   I need to think about what I do in social situations to find the causes of my feelings
4. Thinking about my emotions helps me to recognize the triggers for how I feel
   Thinking about my emotions in social situations helps me to recognize the triggers for how I feel
5. I need to think about things that have happened in the past to make sense of them
   I need to think about social situations that have happened in the past to make sense of them
6. In order to understand my feelings, I need to think about my life
   In order to understand my feelings, I need to think about how I do in social situations
7. Thinking about the past helps me to prevent future mistakes and failures
   Thinking about past social interactions helps me to prevent future mistakes and failures
8. Thinking about the past helps me to work out how things could have been better
   Thinking about past social interactions helps me to work out how things could have been done better
9. Thinking about my problems helps me to focus on the most important things
   Thinking about how I do in social situations helps me to focus on the most important things

Maryland State Depression – State Scale (MTSD-S)
(Chiappelli, Nugent, Thangavelu, Searcy, & Hong, 2014)

Instruction: This scale asks your general experience of depression. Please read each question carefully and then circle the number to indicate how you felt in the recent week, that is, in the past 7 days. There are no right or wrong answers. Do not spend too much time on any one statement but give the rating that most closely describes your recent feelings.

Rating Scale:
Not at all
<1 day
1-2 days
3-4 days
5-7 days

1. It is hard for me to feel happy
2. I have lost interest in enjoyable activities
3. My appetite changes a lot depending on my mood
4. I sleep much more than usual because of my mood
5. I feel sluggish and slow
6. I feel sad
7. I have no energy for anything
8. I cry because my mood is low
9. I can not get motivated
10. I am burdened with feelings of guilt
11. I don't sleep enough when my mood is low because I think of negative thoughts
12. The blues stay with me no matter what I do
13. I spend less time doing activities or hobbies than I used to because my mood is low
14. I feel that I want to die
15. I have a heavy feeling in my arms or legs when my mood is down
16. My weight goes up or down a lot depending on my mood
17. Even though I did not do anything wrong, I have felt that I deserved to be punished
18. I have no hope for my future

State Trait Anxiety Inventory – State
(Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983).

A number of statements which people have used to describe themselves are given below. Read each statement and then check the appropriate square to the right of the statement to indicate how you feel right now, that is, at this moment while anticipating the ***upcoming recorded conversation with another participant.***

Statement	Not at All	Somewhat	Moderately So	Very Much So
1. I feel calm	1	**2**	3	4
2. I feel secure	1	2	3	4
3. I am tense	1	2	3	4
4. I feel strained	1	2	3	4
5. I feel at ease	1	2	3	4
6. I feel upset	1	2	3	4
7. I am presently worrying over possible misfortunes	1	2	3	4
8. I feel satisfied	1	2	3	4
9. I feel frightened	1	2	3	4
10. I feel comfortable	1	2	3	4
11. I feel self-confident	1	2	3	4
12. I feel nervous	1	2	3	4
13. I am jittery	1	2	3	4
14. I feel indecisive	1	2	3	4
15. I am relaxed	1	2	3	4
16. I feel content	1	2	3	4
17. I am worried	1	2	3	4
18. I feel confused	1	2	3	4
19. I feel steady	1	2	3	4
20. I feel pleasant	1	2	3	4

Appendix J – Study Four 1st Writing Exercise

Instructions for Writing Exercises (All Participants)

In one to two sentences, please recall a time when first meeting someone (face to face) went poorly and made you feel badly as a result. Please recall an instance in which you felt mainly responsible for how the interaction went.

For example, you could describe a mistake in how you initially approached or treated another person (i.e. avoiding eye contact, trying to prevent further interaction, prematurely judging someone without getting to actually know them). Alternatively, you could describe a mistake in how you initially reacted or responded to another person (i.e. not listening closely enough and forgetting important details of what has been said, speaking out of turn or saying something out of character, appearing 'closed off' and negative). These are merely topic suggestions – you can choose to write about any experience you have had.

Appendix K – Study Four 2nd Writing Exercise

Writing Exercises – Varies by Condition (3 minutes for each exercise, total 12 minutes)

Social Self-Compassion Reflection Condition:

"Imagine that you are talking to yourself about this conversation from a compassionate, kind, and understanding perspective. What would you say? Keeping in mind that suffering and failure are natural, shared parts of the human experience, what would you say to a friend faced with the same social situation?

"In the space below, please write a paragraph to yourself (as if you are addressing yourself) expressing kindness and understanding regarding the event you described above."

Self-Esteem Reflection Condition:

"Imagine that you are talking to yourself about this conversation by focusing on your positive (rather than negative) qualities. What would you say?"

"In the space below, please write a paragraph describing your positive social characteristics. What are some of your other social strengths?"

Appendix L – Study Four Post-Measures

The Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) PANAS Questionnaire

This scale consists of a number of words that describe different feelings and emotions. Read each item and then list the number from the scale below next to each word. Indicate to what extent you feel this way right now, that is, at the present moment.

1 2 3 4 5 Very Slightly or Not at All A Little Moderately Quite a Bit Extremely

1. Interested _____
2. Distressed _____
3. Excited _____
4. Upset _____
5. Strong _____
6. Guilty _____
7. Scared _____
8. Hostile _____
9. Enthusiastic _____
10. Proud _____
11. Irritable _____
12. Alert _____
13. Ashamed _____
14. Inspired _____
15. Nervous _____
16. Determined _____
17. Attentive _____
18. Jittery _____
19. Active _____
20. Afraid _____

Subjective Units of Distress Scale (Wolpe, 1982)

Direction Prior to Conversation:

Please indicate the highest level of distress you had **while anticipating the conversation with another participant** from 0-100

0	25	50	75	100
No distress	Mild distress	Moderate distress	Significant distress	Highest Possible distress

	DISTRESS (0-100)
Please record your level of distress at this moment	

Appendix M – Study Four 3rd Writing Exercise

Writing Prompts Following Manipulation (5 minutes total)

(a) Have you learned anything from the bad social interaction and if so, what? Have you applied what you've learned to more recent social situations?

(b) do you feel the situation went badly more so due to your social qualities or the situation itself?

From Breines and Chen (2012): On a scale ranging from 1 (strongly disagree) to 7 (strongly agree), please rate the extent to which you agree with the following statements:

"I am committed to not repeating this behavior (or anything like it) again"
"I will do my best to never do something like this again"
"I wish I could go back and erase what happened"
"Realistically, it is likely that I will do something like this again in the future" (reverse)

Appendix N – Study Four 4th Writing Exercise, Mood Booster and Suspicion Probe

Mood Booster: Feelings and Thoughts

Please answer the questions below. Please not that there are no right or wrong answers for this exercise.

1. Think about a time in your life when you felt a positive emotion, such as joy. Please briefly describe the event in the space provided below.

_____

2. Think about one of your happiest/best memories. Please briefly describe the memory in the space provided below.

_____

3. Think about all the things that make you happy. Name three of them (It can be anything at all).

_____

_____

_____

4. Now that you have completed the study, **please briefly describe what main question you believe this study was investigating** (i.e. what was the hypothesis)?

Appendix O
Study Four Consent and Debriefing

WILFRID LAURIER UNIVERSITY
INFORMED CONSENT STATEMENT
Reflecting on Social Relationships
Alison Flett, and Dr. Nancy Kocovski, Department of Psychology

The general purpose of this study is to better understand how people react and respond to past and novel social interactions. Although the exact purpose of the research study cannot be explained at this time, a full explanation will be provided to you once you have completed the study. This research is being investigated by a Wilfrid Laurier University Master's student, Alison Flett in partial fulfillment of PS699, under the supervision of faculty supervisor, Dr. Nancy Kocovski.

INFORMATION

The experimental study will involve participating within one in-lab session on the Wilfrid Laurier Waterloo campus. First, you will be asked general questions regarding your background (e.g., demographics). To participate in this study, you must have already completed Wilfrid Laurier University's mass testing, which took place online. Then, you will be provided with additional scales to complete that ask you questions such as your perceptions and attitudes towards interactions with others and your current mood state, cognitive style and overall well being. You will then complete a short writing exercise that asks you to reflect on a past, negative social experience. Following this exercise, you will be asked to complete a couple more self-report questionnaires about your current state and a final writing exercise that asks you to further reflect on the negative social experience that you previously described. The self-report questionnaires will be completed within the lab using the Qualtrics online collection site. Lastly, you will be asked to interact with another participant in the study for five minutes. This conversation will be video recorded so that the primary investigator can later rate the conversation using various social criteria. Each participant will also independently rate the quality of the conversation after it has taken place.

The study will take approximately one hour in length to complete. Approximately 90 participants from Wilfrid Laurier University (who have completed mass testing) will be recruited via PREP to participate in this study.

RISKS

There are no physical risks to participating in this study. As a result of participating in this research, you may experience feelings of discomfort or embarrassment. However, these feelings are normal and should only be temporary. If these feelings persist or worsen, or you have any concerns, you may contact the researcher or Wilfrid Laurier's Counseling Services. The researcher, **Alison Flett**, can be reached by phone (519) 884-0710 extension 2587, by e-mail flet2370@mylaurier.ca, and in person at N2059. The research supervisor,

Dr. Nancy Kocovski, can be reached by phone (519) 884-0710 ext. 3519, by email nkocovski@wlu.ca, and in person at N2025. In addition, **Wilfrid Laurier's Counseling Services** can be reached by phone (519) 884-0710 ext. 2338, and in person at the Student Services Building, second floor. Please note that although various data was collected during this study, the information you have provided will be stored and analyzed separately from any identifying information

BENEFITS

Participants and the broader research community have the potential to benefit from this study. This research will add to the present body of knowledge about the factors associated with perceptions of social situations, and those that may be related to improved quality of life. Furthermore, participating individuals may learn more about the factors involved in this process.

CONFIDENTIALITY

All data collected in this study are strictly confidential, and your participation in this study will remain undisclosed. The principal investigator, Alison Flett, and the research advisor, Dr. Nancy Kocovski, will be the only individuals with access to the data. All data, including video recordings, will be retained on password protected computers in Dr. Nancy Kocovski's locked lab at Wilfrid Laurier University. In addition, the raw data will be retained in locked cabinets in Dr. Nancy Kocovski's locked lab. Given that part of the study is conducted online using Qualtrics, it is important to note that confidentiality cannot be guaranteed while data are transmitted over the Internet. The researchers acknowledge that the host of the online survey (Qualtrics) may automatically collect participant data without their knowledge (i.e., IP addresses); however, this information will not be saved or used without participants' consent.

Although you will be asked to provide your name and e-mail address, this information will *only* be used to provide feedback regarding the research and the allocation of PREP credits. After data collection has been completed, no later than April 15th, 2017, your name will be deleted and your e-mail address will not be associated with any of the data. The hard copy raw data (including video recordings) and consent forms will be retained for seven years and destroyed by the principal investigator or the research supervisor by April 15, 2024. The results of this study may be published or presented to colleagues. However, all data will be presented in aggregate form. The electronic data from the questionnaires will be retained indefinitely, and may be reanalyzed and included in future research studies. As such, it is possible that secondary data analysis may be conducted on the de-identified data obtained from this study for use in future research. However, these data will *not* contain any personal identifiers. Rather, each participant's set of data will be randomly given an identification number.

COMPENSATION

For participating in this study you will receive 1.0 PREP credit. If you begin the study and choose to withdraw from it, you will still be credited 1.0 PREP credit. Other ways to earn

the same amount of credit include participating in other studies or completing a review of a journal article (instructions available on the psychology department website: http://www.wlu.ca/documents/50647/PREP.alt.assignment.pdf).

CONTACT

If you have questions at any time about the study or the procedures (or you experience adverse effects as a result of participating in this study) you may contact the researcher, Alison Flett via email flet2370@mylaurier.ca or phone (519) 884-0710 x2587. You may also contact the research advisor, Dr. Nancy, Kocovski, at office N2025, by phone (519) 884-0710 x3519 and by e-mail nkocovski@wlu.ca. In addition, **Wilfrid Laurier's Counselling Services** c/o the Student Wellness Centre can be reached by email wellness@wlu.ca, phone (519) 884-0710 x3146, and in person at the Student Services Building, second floor.

This project has been reviewed and approved by the University Research Ethics Board (REB #5054), which receives funding from the Research Support Fund. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710 x4994 or rbasso@wlu.ca.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, **you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled**. If you withdraw from the study, you will receive a copy of the final debriefing form. You have the right to omit any question(s)/procedure(s) you choose. In the event that you decide you want your data removed from the study, you must immediately contact the researcher, Alison Flett. Your data can only be removed before all data has been collected. Once data collection is complete, all information will be stored without personal identifiers and there will be no way to identify your data.

FEEDBACK AND PUBLICATION

Once we have compiled and analyzed the data, feedback will be sent to participants via PREP by April 15, 2017. This research will be reported in the principal investigator, Alison Flett's, Masters thesis. In addition, it is possible that this research may be presented at professional conferences and submitted and accepted in a scientific journal, authored by Alison Flett and Dr. Nancy Kocovski. The data may also be available through Open Access, meaning the research is free and available to the public without the stringent restrictions set by copyright agreements. However, all data will be presented in aggregate form only.

CONSENT

I have read and understand the above information. I have received a copy of this form. I agree to participate in this study.

Participant Name (as it appears in PREP)

_____

Participant Email (as it appears in PREP)

_____

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

WILFRID LAURIER UNIVERSITY
DEBRIEFING FORM
Reflecting on Social Relationships
Alison Flett and Dr. Nancy Kocovski, Department of Psychology

The information obtained in this form is very important to read. Some **deception** was used in this study, in which you were not necessarily told the truth about aspects of the study. **Concealment** was also used, in which all of the relevant details of the research were not disclosed. Both the deception and concealment were necessary in order to maintain the integrity of the study's purpose and any research findings. In order to better understand our use of deception and concealment, **please take some time to carefully read the following information**.

Based on completion of mass testing, you were eligible to participate in this **experimental research study**. You had completed the Social Phobia Inventory (SPIN), which we used as a baseline assessment for social anxiety. Mass-testing data on the SPIN were retained and linked to the further data that you provided in-lab. However, once data were matched, all data were de-identified to ensure confidentiality.

Self-compassion can be conceptualized as an openness to one's own suffering and the desire to heal one's own suffering with kindness. A study conducted by Breines and Chen (2012) found that participants most frequently reported experiencing social difficulties (i.e. lack of confidence, social anxiety, shyness, insecurity in relationships) when asked to reflect on any personal weakness of their choosing. In line with this past research, we have reasoned that the self-compassion construct is particularly relevant to certain life domains, in this case interpersonal contexts. That is, we believe that being socially self-compassionate, otherwise known as being kind and understanding towards oneself after experiencing negative social interactions with others, is predictive of unique outcomes beyond a general sense of self-compassion. As such, we created the Social Self-Compassion Scale (SSCS), which measures whether one tends to be self-compassionate after experiencing adverse social situations. Items from this scale were adapted from the short-form Self-Compassion Scale (SCS) by Raes, Pommier, Neff, and Van Gucht (2011). In previous studies, we have found preliminary evidence for the reliability and validity of this newly developed measure, as it relates to constructs as expected. We have also found that the SSCS is uniquely predictive of outcomes (such as social anxiety, fear of negative evaluation, communication apprehension, rejection sensitivity) above and beyond the SCS, and just as predictive (if not more predictive than the original SCS) of outcomes such as shame and loneliness. However, only self-report studies have been conducted thus far using the SSCS. As such, the purpose of this study was to examine whether social self-compassion could be experimentally manipulated. More specifically, based on the study design by Breines and Chen (2012), we aimed to examine whether social self-compassion is linked to increased self improvement motivation with respect to beliefs that social shortcomings can be changed, and most importantly, whether manipulating social self-compassion leads to unique outcomes.

Procedure:

You were informed in the recruitment advertisement and at the beginning of the experiment itself that you would be later engaging in a five-minute conversation with another participant on videotape. You were informed that this conversation would be independently rated by the other participant after the conversation had ended, and would also be rated by the primary investigator based on a set of social criteria.

You were first asked to complete a *demographic questionnaire.* Information on demographics was collected in order to examine whether there were any pre-existing differences between participants in different experimental groups. You were then asked to complete *the short-form Self-Compassion Scale, the Social Self-Compassion Scale, State Social anxiety, Anticipatory Processing Questionnaire, Positive Beliefs about Anticipatory Processing Questionnaire, Positive Beliefs about Rumination Questionnaire (adapted for social anxiety), the Maryland State Depression Scale, and the State Trait Anxiety Inventory.* Upon completion of these questionnaires, you were asked to participate in a short writing exercise adapted from a study by Breines and Chen (2012). Your first writing task involved identifying a time when meeting someone for the first time (face-to-face) went poorly and resulted in you feeling badly. Then, you were randomly assigned to one of three experimental conditions. Those in the social self-compassion condition were asked to imagine talking to themselves about the negative social interaction from a compassionate and understanding perspective. Those in this condition were also asked to write a paragraph to themselves from a compassionate perspective regarding the event they described, and also asked to indicate what they thought they would say to a friend who had experienced this same situation. Those in the self-esteem control condition were asked to imagine that they were talking to themselves about the conversation by focusing on their positive, rather than their negative qualities. They were also asked to write a paragraph to themselves which focuses on their positive (rather than their negative) social characteristics. Lastly, those in the second control condition did not receive any reflection instructions after identifying a negative social experience. After the experimental manipulation, you were then asked to complete the *Positive and Negative Affect Scale (PANAS)* and the *Subjective Units of Distress Scale (SUDS).* Then, you completed a second writing exercise related to the past negative event that you had previously described. In this exercise, questions asked whether anything had been learned from the negative social situation previously described, and whether you felt this event could mainly be explained by your personal, social inadequacies, or by situational factors. We also asked you to rate the extent to which you did not wish to repeat the same mistake within future social interactions.

At this point, you were informed that the conversation was not actually going to take place, and thus, not be recorded or rated. You were also asked what you thought the true purpose of the experiment was, in order to confirm that the manipulation was successful. In effect, the reasoning for this was that we wanted to make sure that participants' responses were not influenced in such a way that the effectiveness of the experiment could be brought into question.

Although you were initially told that the video recording obtained during your conversation would be retained for seven years, no video was ever taken. This deception was necessary as the conversation task would not have been anxiety provoking had you known you would not be recorded interacting with another participant. Please note that no data was collected from any video recordings.

Participation in this study may have led to some temporary feelings of discomfort or embarrassment. For this reason, we included a short mood-boosting exercise at the end of the study to help alleviate these feelings.

We are expecting to replicate past results showing the SSCS tends to be more predictive of interpersonally related outcomes as compared to the SCS. In addition, we are expecting to find that those in the social self-compassion condition are more likely to report being highly motivated to correct (and not repeat) the past social mistake they have described as compared to the two control conditions. Most importantly, however, we are anticipating that following the first recall writing task and the main experimental manipulation, those in the social self-compassion condition will report unique outcomes. As compared to the other two control conditions, we are expecting that those in the social self-compassion condition will report lower levels of maladaptive outcomes such as state anxiety and subjective distress, while also reporting higher levels of adaptive outcomes such as positive affect. Ultimately, if social self-compassion is uniquely related to these outcomes, we believe it will be informative with respect to identifying potential risk and resilience factors. In addition, we believe that such research may help signify the need for tailored, preventative interventions for those suffering from a relative lack of social self-compassion.
Thank you for participating in this study. A summary of this study and the results will be e-mailed to you via PREP no later than April 15, 2017.

As stated previously, participation in this study may have led to some feelings of discomfort or embarrassment. However, these feelings are normal and should only be temporary. If they persist or worsen, or you have any concerns, you may contact the researchers or Wilfrid Laurier's Counselling Services.

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If you have any questions or comments regarding this study, or your participation in this study, please contact:

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This study was reviewed and approved by the Research Ethics Board (REB #5054).

If you feel your rights as a participant in research have been violated during the course of this project, you may contact Dr. Robert Basso, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, ext 4994 or rbasso@wlu.ca.
If you are interested in further readings about this topic, you can visit the Anxiety Disorders section of your Introduction to Psychology textbook:

Weiten, W., & McCann, D. (2015). *Psychology: Themes and variations* (4th Canadian ed.). Toronto: Thomson & Nelson.

Alternatively, you can also visit this link from St Joseph's Healthcare, Anxiety Treatment and Research Clinic:

http://www.stjoes.ca/health-services/mental-health-addiction-services/mental-health-services/anxiety-treatment-research-clinic-atrc-/definitions-and-useful-links/social-anxiety-disorder

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