

A PROSPECTIVE EXAMINATION OF SELF-COMPASSION AS A
PREDICTOR OF DEPRESSIVE SYMPTOMS IN CHILDREN AND ADOLESCENTS

by

DARREN STOLOW

A dissertation submitted to the
Graduate School – New Brunswick
Rutgers, The State University of New Jersey

In partial fulfillment of the requirements

For the degree of
Doctor of Philosophy
Graduate Program in Psychology

Written under the direction of
Robert A. Karlin, Ph.D.

And approved by

New Brunswick, New Jersey

May, 2015

ABSTRACT OF THE DISSERTATION

A Prospective Examination of Self-Compassion as a Predictor of Depressive Symptoms in Children and Adolescents

by DARREN STOLOW

Dissertation Director:

Robert A. Karlin, Ph.D.

The current longitudinal study examined self-compassion as a predictor of depressive symptoms in children and adolescents using a two time-point design. In addition, the factor structure, reliability, and validity of a version of the Self-Compassion Scale (Neff, 2003a) revised for children were assessed. Self-criticism and self-esteem were also tested as predictors of depressive symptoms to assess for unique effects of self-compassion. During an initial assessment, participants completed measures of depressive symptoms, self-compassion, self-criticism, and self-esteem. Participants subsequently completed a measure of depressive symptoms three months later. Two self-compassion factors emerged from our factor analysis, each showing good reliability and significant cross-sectional relationships with depressive symptoms. However, only the factor comprised of items from the positively-worded self-kindness, common humanity and mindfulness subscales of the revised SCS (SCS-POS) predicted change in depressive symptoms from Time1 to Time 2. More specifically, higher levels of SCS-POS were associated with greater decreases in depressive symptoms over time. The factor comprised of items from the negatively-worded self-judgment, isolation, and over-identification subscales (SCS-NEG) did not predict change in depressive symptoms, nor did self-criticism. When tested simultaneously, the effects of SCS-POS and self-esteem on change in depressive symptoms were reduced in size but remained close to statistical significance ($p < .10$), suggesting that they are related, yet distinct constructs in the context of depressive symptoms in children and adolescents.

Acknowledgments

There are a number of people without whom I might not have made it this far, and to whom I am very grateful.

To Alexandra Bachman, Anne Sokolowksi and Donna Tomaselli, thank you for the kindness you showed me throughout my time at Rutgers and for the tremendous effort you put in administratively (and beyond) to make everything run so smoothly.

To Maurice Elias, Danielle McCarthy, Donald Morgan, and Jami Young, I would like to express my heartfelt appreciation and gratitude to each of you for your warmth and guidance.

To Joseph Cohen, Dana Sheshko, and Irene Zilber - thank you for being exactly the people you are and for your friendship and support.

To T.K., thank you for sharing your uncanny strength with me.

To my family and friends, your love sustains me and I thank you for encouraging me every step of the way.

To the late John Abela - rarely does a day go by that I don't count my blessings for having met you while I was an undergraduate at McGill. I am where I am today, largely, because you believed in me and because you taught me to do the same. From the bottom of my heart, I thank you, my dear mentor and friend.

Finally, to Bob Karlin and David Zuroff – it means the world to me that you both reached out your hands to me when you did. As I move forward in life, I am forever grateful to you both for your abundant support, wisdom and kindness.

Table of Contents

Title Page	i
Abstract	ii
Acknowledgements	iii
Table of Contents	iv
List of Tables and Figures	v
Section I: Introduction	1
Section II: Methods	11
Section III: Results	16
Section IV: Discussion	21
Section V: References	28
Section VI: Tables and Figures	32

List of Tables and Figures

Table 1: Results of Exploratory Factor Analysis for Two Factor Promax Solution	32
Table 2: Cronbach Alphas for the SCS Subscales	33
Table 3: Means, Standard Deviations, and Pearson Correlations between Time 1 Measures	34
Table 4: Mean (and Standard Deviations) for Time 1 Measures by Grade	35
Table 5: Two Self-Compassion Factors, Self-Criticism, and Self-Esteem Predicting Residual Change in CDI Scores from Time 1 to Time 2	36
Figure 1: Results of Scree Test	37

INTRODUCTION

Self-Compassion

Concern over the prevalence and negative sequelae of depressive symptoms in youth has motivated researchers from diverse theoretical orientations to identify vulnerability and protective factors in order to inform treatment and prevention efforts. Self-compassion has recently emerged as a prominent construct in psychological research, with a growing number of studies confirming the inverse relationship between self-compassion and depressive symptoms (see Macbeth & Gumley, 2012 for a recent review). Unfortunately, however, the vast majority of this research has been conducted with adult and college-aged samples. Only one published study to date has specifically examined the association between depressive symptoms and self-compassion in an adolescent sample (Neff & McGehee, 2010), and none has examined the applicability of the construct of self-compassion to depressive symptoms in younger, pre-adolescent samples. Despite the intuitive appeal of extending adult theories of depression to children and adolescents, age-related differences in cognition, emotion and behavior must be taken into account when examining their applicability to younger populations (Digdon & Gotlib, 1985; Garber, 2000). Moreover, the vast majority of research conducted to date on self-compassion has been cross-sectional (Barnard & Curry, 2011), limiting insight into causal mechanisms.

Neff and McGehee (2010) define self-compassion as an ability to “hold one’s feelings of suffering with a sense of warmth, connection, and concern” and propose three components of self-compassion: (1) self-kindness, which refers to “the ability to treat oneself with care and understanding rather than harsh self-judgment,” (2) common

humanity, which refers to “recognizing that imperfection is a shared aspect of the human experience rather than feeling isolated by one’s failures,” and (3) mindfulness, which refers to “holding one’s present-moment experience in balanced perspective rather than exaggerating the dramatic story-line of one’s suffering” (p. 226).

According to Neff (2003a), individuals who are compassionate towards themselves during times of personal difficulty provide themselves with kindness and caring rather than harsh self-judgment. Personal inadequacies and/or failures are approached with understanding and a non-judgmental attitude. Further, Neff and McGehee (2010) affirmed that extending such kindness towards one’s self is appropriate even when one’s suffering is self-created. That is, being kind, gentle and supportive toward oneself is not only adaptive when one’s difficulties are related to events beyond one’s control, but is also appropriate when one may have played a role in contributing to one’s suffering. Broadly similar views have been advanced by other theorists, consistent with the notion that self-compassion entails providing oneself with kindness, empathy and warmth during times of personal difficulty (Barnard & Curry, 2011; Gilbert & Irons, 2005).

By recognizing that *all* humans are imperfect, that we all fail and make mistakes, self-compassionate individuals frame their experience in light of the shared human experience of fallibility and imperfection. In so doing, personal shortcomings are considered from a broad, inclusive perspective, rather than one’s feeling uniquely flawed or defective. Further, by acknowledging that we each endure hardship and failure, self-compassionate individuals feel connected to humanity rather than isolated during these times.

In the context of Neff's (2003a) definition of self-compassion, mindfulness refers to a non-judgmental and receptive mind state in which negative emotions and thoughts are observed as they arise without exerting effort to suppress, alter or avoid them (Teasdale et al., 2000). In contrast, *over-identification* involves the process of becoming consumed with one's negative emotions and the content of one's negative thoughts, a process that is similar to rumination (Neff, 2003a). Rumination is a style of responding to one's internal experience that has consistently been linked to depression in children and adolescents (e.g., Abela, Brozina & Haigh, 2002; Abela & Hankin, 2011).

Research Support for Self-Compassion

Cross-sectional research conducted with adults suggests that the association between self-compassion and depressive symptoms is robust (see MacBeth & Gumley, 2012, and Barnard & Curry, 2011, for reviews). Convergent findings across studies conducted with both non-clinical, college student samples (Gilbert et al., 2011; Hall et al., 2013; Johnson & O'Brien, 2013; Kyeong, 2013; Mills et al., 2007; Neff, 2003a; Neff, Kirkpatrick, & Rude, 2007; Neff, Pisitsungkagarn, & Hsieh, 2008; Raes, 2010; Roemer et al., 2009; Terry, Leary, & Mehta, 2013; Ying, 2009) and adult clinical samples (Brooks et al., 2012; Costa & Pinto Gouveia, 2011; Krieger et al., 2013; van Dam et al., 2011) indicate an inverse association between depressive symptoms and self-compassion. To date, only one published study has provided a longitudinal examination of the effect of self-compassion on depressive symptoms. Specifically, Raes (2011) assessed whether change in depressive symptoms varied as a function of baseline levels of self-compassion over a 5-month interval in a college-aged sample.

Findings revealed an effect of self-compassion on depressive symptoms, controlling for baseline depression, with higher levels of self-compassion at baseline predicting lesser increases in depressive symptoms over time.

To our knowledge, only one published study has specifically examined the relationship between self-compassion and depressive symptoms in an adolescent sample. This cross-sectional study conducted with youth in middle to late adolescence (Mean age = 15.2, range 14-17) found that self-compassion was associated with lower levels of depressive symptoms (Neff & McGehee, 2010). In the same study, Neff and McGehee (2010) compared the results obtained in their adolescent sample with those obtained in a young adult sample (Mean age = 21.1, range 19-24), yielding no significant age-related differences in the strength of the association between self-compassion and depressive symptoms. Further, consistent with findings obtained in several studies conducted with adults (Macbeth & Gumley, 2012), Neff and McGehee (2010) found that higher levels of self-compassion were associated with lower levels of anxious symptoms among adolescents, suggesting that self-compassion may contribute to other forms of emotional well-being among youth. Research findings to date provide preliminary evidence that theories of depression and self-compassion may be gainfully extended to youth populations. As research interest in the benefits of self-compassion in adults continues to grow, additional research is warranted examining its positive effects on depressive symptoms in children and adolescents.

According to Neff and McGehee (2010), the three components of self-compassion should be highly relevant to the adolescent experience. First, extending kindness, warmth and acceptance toward oneself should result in fewer negative self-

evaluations as adolescents confront “imperfect” aspects of themselves. Researchers note that adolescence is a period characterized by heightened self-evaluative concerns and increased social comparisons (Brown & Lohr, 1987; Harter, 1999; Simmons, Rosenberg & Rosenberg, 1973), highlighting the importance of fostering positive self-attitudes and adaptive forms of self-to-self relating during this developmental stage. Moreover, as noted by Neff and McGehee (2010), the pressures and concerns experienced by older children and adolescents as they develop - such as academic stress, the need to be popular and fit-in with the right peer crowd, body image concerns and concerns with physical appearance - are rife with opportunities for negative impacts on the self-image. Second, according to Neff and McGehee (2010), the common humanity aspect of self-compassion should provide adolescents with a sense of interpersonal connectedness as they encounter adversity or personal limitations, staving off feelings of isolation and personal inadequacy. Finally, the mindful attentional stance taken towards internal experience that is entailed by self-compassion should prevent adolescents from engaging in the depressogenic process of ruminating on or avoiding negative thoughts and emotions. In support of these assumptions, higher levels of self-compassion have been shown to be related to lower levels of negative affect, lower levels of perceived stress, and higher levels of subjective well-being in adolescents between the ages of 14 and 18 (Bluth & Blanton, 2013). Given the relative lack of research conducted on self-compassion in children and adolescents, the primary goal of the current study was to examine self-compassion as a protective factor against the development of depressive symptoms in these populations. More specifically, the current longitudinal study examined self-compassion as a predictor of depressive symptoms in a sample of 5th (9-

10 years), 8th (12-13 years) and 11th (15-16 years) grade children and adolescents. By assessing the effects of self-compassion on depressive symptoms among these three age groups, the current study provided a test of its protective function over the course of the transition from late-childhood through middle-adolescence to late-adolescence. As noted by Abela and Hankin (2008), these transitional periods represent critical windows of time for researchers to obtain insight into the mechanisms underlying youth depression, thereby forestalling the sharp increase in rates of depression observed in middle- to late-adolescence (Hankin et al., 1998) through well-timed and well-informed prevention efforts. Expanding on the preliminary cross-sectional results obtained by Neff and McGehee (2010), the current study tested the hypothesis that higher levels of self-compassion would be associated with lesser increases in depressive symptoms over a 3-month interval.

The majority of research conducted on self-compassion has operationalized the construct using the Self-Compassion Scale (SCS; Neff, 2003a). The SCS is a 26-item self-report measure containing six subscales designed to assess the three bipolar components of self-compassion: (1) Self-Kindness versus (2) Self-Judgment; (3) Common Humanity versus (4) Isolation; and (5) Mindfulness versus (6) Over-Identification. The use of total scores on the SCS is the most common scoring method (Macbeth & Gumley, 2012). Total scores are obtained by reverse scoring the Self-Judgment, Isolation and Over-Identification subscales, then calculating means for each of the six subscales, and finally summing these means to create a total self-compassion score. Such an approach is consistent with Neff's (2003a) conceptualization of self-compassion as a multi-faceted, yet unidimensional construct, entailing the combination

of three interacting components that enhance one another. Consistent with this conceptualization, results from a confirmatory factor analysis conducted with college students indicated that a single higher-order self-compassion factor explained the inter-correlations among the six subscale factors, suggesting that one can examine the six subscales separately or else use an overall score (see Neff, 2003a, for details). At the same time, however, a recent factor-analytic study by Williams et al. (2014) failed to replicate the factor structure reported by Neff (2003a). Specifically, confirmatory factor analyses failed to find acceptable fit for models with one overall self-compassion factor, or a hierarchical model in which the six subscale factors were indicators of a single higher-order self-compassion factor (Williams et al., 2014).

Given the paucity of research on self-compassion conducted with younger samples, it is important to investigate its factor structure, reliability, and construct validity among older children and adolescents. A factor analysis of the SCS was conducted in order to provide insight into whether the constituent components of self-compassion share sufficient variance to form a unitary construct as postulated by Neff (2003a). Further, the reliability of the SCS was assessed by examining the internal consistency of each of the six subscales in the sample as a whole and for each age group. Finally, construct validity was assessed by examining the pattern of associations between the SCS and measures of two constructs with which it would be expected to correlate, self-criticism (Blatt, 2004) and self-esteem (Rosenberg, 1965).

In order to provide a stringent test of the longitudinal hypothesis, self-criticism and self-esteem - two well-established depression vulnerability and protective factors - were entered as covariates in an analysis examining the effect of self-compassion on

depressive symptoms. We sought to determine whether self-compassion exerted a unique effect on depressive symptoms, possibly highlighting its distinctiveness as a protective factor and distinguishing it from important self-related constructs that have been implicated in youth depression.

Cross-sectional research conducted with adults indicates that self-compassion is inversely related to self-criticism (Neff, 2003a). Participants scoring higher on self-compassion showed lower levels of self-criticism (as assessed by the Depressive Experiences Questionnaire (DEQ; Blatt, D'Afflitti & Quinlan, 1976), an expected finding given that a lack of harsh self-judgment is a central feature of self-compassion. According to Neff (2003a), for self-compassionate individuals, experiences of pain and failure are not exacerbated and maintained by harsh self-condemnation, typical of self-critical individuals (Blatt & Zuroff, 1992). In the study by Neff (2003a), it is noteworthy that despite the moderately high negative correlation between self-compassion and self-criticism ($r = -0.65$), self-compassion exerted a unique effect on depressive symptoms after controlling for the effects of self-criticism. To date, however, no studies have examined the association between self-criticism and self-compassion in the context of depressive symptoms in children and adolescents. Thus, it is important to examine to what extent they make unique and/or overlapping contributions to the development of depressive symptoms in these populations.

With respect to the relationship between self-compassion and self-esteem, research suggests that they are related, yet distinct, constructs. For example, in research conducted with adults, the observed correlations between self-esteem and self-compassion have ranged from $r = .58$ (Leary et al., 2007) to $r = .68$ (Neff & Vonk,

2009), suggesting overlap as well as distinctiveness. As noted by Neff (2003b), self-compassion and self-esteem both entail positive feelings towards the self and thus an association between the two constructs is to be expected. At the same time, however, from both an empirical and theoretical perspective, important differences have been noted between the two constructs. For example, self-compassion has been shown to be associated with lower levels of depressive and anxious symptoms (Neff, 2003a), as well as lower levels of negative affect (Leary et al., 2007), after partialling out the effects of self-esteem. Such results suggest that self-compassion promotes well-being in ways that are distinct from those of self-esteem. From a theoretical perspective, whereas self-esteem rests upon positive evaluations of the self, self-compassion does not. As noted by Neff and Vonk (2009), self-compassion can embrace all aspects of personal experience, including one's personal shortcomings, weaknesses and failures. Self-esteem has also been defined as the degree to which the self is judged to be competent in important life domains (Rosenberg, 1965). As such, self-esteem may be dependent on the attainment of desired goals and therefore may be vulnerable to fluctuations following setbacks or failure, whereas self-compassion may allow for greater emotional resilience when setbacks and failure occur, serving a protective function precisely when self-esteem fails. For these reasons, as well as several others (see Neff, 2003b; Neff, 2008; Neff & Vonk, 2009; and Persinger, 2012 for discussions), self-compassion has been described as a "healthier alternative" to self-esteem. No studies to date have examined the relationship between self-compassion and self-esteem in the context of depressive symptoms in children and adolescents. Thus, it is important to examine to

what extent they make unique and/or overlapping contributions to the development of depressive symptoms in these populations.

Goals of the current study

In sum, the goals of the current study were: (1) to examine the factor structure, reliability, and construct validity of the SCS in children and adolescents; (2) to provide a longitudinal examination of self-compassion as a predictor of depressive symptoms in children and adolescents; (3) to examine the unique contribution of self-compassion to depressive symptoms after controlling for self-criticism and self-esteem.

METHODS

Participants:

Participants included 193 children and adolescents (Mean age = 13 years, $SD = 2.4$ years) recruited from Middlesex County, New Jersey, school districts. The sample consisted of youth participating in a larger longitudinal research project examining vulnerability to depression conducted at Rutgers University. At the time of their participation in the present study, participants were in the fifth (Mean age = 9.9 years, $SD = .61$ years), eighth (Mean age = 12.7 years, $SD = .58$ years) or eleventh (Mean age = 16 years, $SD = .56$ years) grade. Youth evidencing severe learning or psychiatric problems that were likely to interfere with the completion of a lab-based assessment were excluded from the current study. Final determinations for suitability for inclusion were made by a Ph.D. level psychologist based on diagnostic reports provided by trained research assistants conducting the first lab-based assessments. The total sample was approximately evenly divided by sex (males: 41.0%, females: 59.0%) and grade (fifth: 27.5%, eighth: 40.0%, eleventh: 32.5%). The ethnic composition of the total sample was as follows: 58.0% Caucasian, 17.0% African-American, 14.5% Asian, 6.0% Hispanic, 4.0% Multi-ethnic, and 0.5% of other descent. Total annual family income ranged from \$10,000 to \$350,000 USD (Mean \$109,675; Median \$100,000; $SD = \$65,750$).

Procedure:

The current study was embedded within the context of a larger, 3-year longitudinal research project examining cognitive, interpersonal and genetic vulnerability to depression. Written assent was provided by each youth at the start of the

larger research project. At that time, parents provided informed written consent for their own and their child's participation, and as well as provided demographic information. The data used in the current study were drawn from the 18- and 21-month assessment periods of this larger research project, referred to here as Time 1 and Time 2, respectively. The procedure consisted of youth (accompanied by one parent) visiting the laboratory for the Time 1 assessment. At Time 1, each youth participant completed the following questionnaires: (a) Children's Depression Inventory (CDI; Kovacs, 1981), (b) Self-Compassion Scale (SCS; Neff, 2003a), (c) Children's Depressive Experiences Questionnaire, the measure of self-criticism (CDEQ; Abela & Taxel, 2001), and (d) the Self-Esteem Questionnaire (SEQ; Rosenberg, 1965). A follow-up assessment (Time 2) evaluating depressive symptoms (CDI) occurred 3 months following the Time 1 assessment (retention rate = 85%). The Institutional Review Board at Rutgers University approved all procedures. Youth and their participating parent were financially reimbursed for their participation.

Measures:

Depressive symptoms: Children's Depression Inventory (CDI; Kovacs, 1981). The CDI consists of 27 items assessing the cognitive, affective, and behavioral symptoms of depression. Each item contains three statements that increase in symptom severity, for example, (a) I am sad once in a while, (b) I am sad many times, and (c) I am sad all the time. For each item, children are asked to select the statement that best describes how they were thinking and feeling in the past week. Each item is scored from 0 to 2 with a higher score indicating greater symptom severity. Total possible scores range from 0 to 54, with a score of 13 indicating mild depression and a score of 19

indicating severe depression (Kovacs, 1981). At Time 1, participants' scores ranged from 3 to 22 ($M = 7.43$, $SD = 5.05$) in fifth graders, 4 to 34 ($M = 9.12$, $SD = 5.53$) in eighth graders, and 4 to 29 ($M = 11.76$, $SD = 6.05$) in eleventh graders. At Time 1, we obtained Cronbach alphas of .84, .85 and .86 for fifth, eighth and eleventh graders, respectively. Corresponding alphas of .71, .76 and .73 were obtained at Time 2 in each age group.

Self-Compassion: Self-Compassion Scale (SCS; Neff, 2003a). A revised, child-suitable version of the original SCS, adapted by Amy Saltzman (K. Neff, personal communication, August 25, 2014) was used in order to ensure comprehension across all participants. The original SCS is a 26-item self-report questionnaire designed to assess self-compassion and includes six subscales: Self-Kindness (5 items, e.g., "I try to be understanding and patient towards those aspects of my personality I don't like"); Self-Judgment (5 items, e.g., "I'm disapproving and judgmental about my own flaws and inadequacies"); Common Humanity (4 items, e.g., "I try to see my failings as part of the human condition"); Isolation (4 items, e.g., "When I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the world"); Mindfulness (4 items, e.g., "When something painful happens I try to take a balanced view of the situation"); and Over-Identification (4 items, e.g., "When I'm feeling down I tend to obsess and fixate on everything that's wrong"). Responses on the SCS are given on a 5-point scale ranging from "Almost Never" to "Almost Always." Past research using the original SCS with middle- to late-adolescents (Bluth & Blanton, 2013) indicates that the individual subscales demonstrate moderate levels of internal consistency (Cronbach alphas: self-kindness (0.64), self-judgment (0.83), common

humanity (0.76), isolation (0.78), mindfulness (0.72), and over-identification (0.74). Alphas of 0.83 (Bluth & Blanton, 2013) and 0.90 (Neff & McGehee, 2010) have been obtained for the full 26-item SCS in adolescents. Good test-retest reliability has been found in adults over three-week ($r = .93$; Neff, 2003a) and five-month intervals ($r = .71$; Raes, 2011), suggesting trait-like stability over time.

Although the original SCS has been used in samples of youth in middle- to late-adolescence (Neff & McGehee, 2010; Bluth, 2012), the language used in the measure is not accessible to younger child samples. For the current study, each of the 26 items of the original SCS was reworded in order to ensure comprehension across all participants. In all cases, revisions retained the original meaning(s) of each item from the SCS. For example, items containing the words “flaws and inadequacies” were rephrased using the term “not good enough” to make the concept more accessible. Other advanced or abstract words, phrases, or concepts, such as “part of the human condition” (replaced with “part of life”) and “feeling emotional pain” (replaced with “feeling sad, angry, lonely or afraid”) were similarly simplified to ensure comprehension. As with all of the measures used in the current study, children in grade 5 were offered the option of having a research assistant read aloud each item. Across all grade levels, respondents were invited to request clarification from a research assistant on any questionnaire item as needed. Cronbach alphas obtained in the current study for each of the six SCS subscales are presented in Table 2.

Self-Criticism: Children’s Depressive Experiences Questionnaire (CDEQ; Abela & Taxel, 2001). The CDEQ is a 24-item self-report questionnaire designed to assess personality predispositions to depression, including dependency and self-

criticism. Items on the CDEQ consist of selected items from the original 66-item DEQ measure (Blatt, D’Afflitti, & Quinlan, 1976) and are worded for youth. For the current study, only the 12-item self-criticism subscale was used. Examples of these items include: “I am only happy when I am succeeding at things” and “If I am not good at everything I do, I get mad at myself”. Items are rated on 3-point scale, including 0 (*not true for me*), 1 (*sort of true for me*) and 2 (*really true for me*). Total scores on the CDEQ range from 0 to 24 with higher scores representing higher levels of self-criticism. Past research conducted with a 20-item CDEQ indicates that it possesses moderate internal consistency (Adams et al., 2009). In the current study, we obtained alphas of .79, .82 and .89 for fifth, eighth and eleventh graders, respectively, indicating good internal consistency.

Self-Esteem: Self-Esteem Questionnaire (SEQ; Rosenberg, 1965). A 5-item SEQ was used to assess global self-esteem. For each item, subjects are asked to respond on a 4-point scale ranging from 0 (*strongly agree*) to 3 (*strongly disagree*). Total scores range from 0 to 15, with higher scores representing higher levels of self-esteem. The 10-item SEQ has shown moderate to high internal consistency in child and adolescent samples (Abela, Brozina & Haigh, 2002; Abela & Taylor, 2003). In the current study, Cronbach alphas of .70, .81 and .85 were obtained for fifth, eighth and eleventh graders, respectively, indicating good internal consistency.

RESULTS

Factor Structure of the SCS

The 26 items of the SCS were subjected to a Principal Components Analysis with an oblique rotation (Promax) using SPSS v. 22. The scree test was applied to determine the number of factors. As may be seen in Figure 1, the scree test suggests the inclusion of two factors, with eigenvalues of 7.44 and 5.67, respectively. Table 1 provides factor loadings after the Promax rotation for each item of the SCS. Factor 1 is comprised of items from the Self-Judgment, Isolation and Over-Identification subscales of the SCS. Factor 2 consists of items from the Self-Kindness, Common Humanity and Mindfulness subscales. Because item 22 loaded on both factors, scores on this item were not included when calculating participants' scores on the Mindfulness subscale of the SCS. All remaining items loaded onto their respective factors and all factor loadings were of reasonable magnitude ($> .40$). No cross-loading exceeded $.32$. The two factors derived from the SCS did not correlate with one another ($r = -0.03$). Given this lack of relationship between the two factors, there was no rationale to combine them into a single self-compassion score.

Reliability and Construct Validity of the SCS

In order to assess the reliability of the six subscales of the SCS, Cronbach alphas were calculated to evaluate their internal consistency. Results of these analyses for the sample as a whole and for each grade are presented in Table 2. In general, the reliabilities for the six subscales in the sample as a whole exceeded $.70$, with the exception of the mindfulness subscale (Cronbach's $\alpha = .54$), which displayed poor

reliability across each age group. The over-identification subscale similarly yielded poor reliability in the grade 5 age group (Cronbach's $\alpha = .56$).

Consistent with the results obtained in the factor analysis of the SCS, two self-compassion scores were calculated for each participant. Specifically, participants' scores on each of the positive subscales of the SCS - Self-Kindness, Common Humanity and Mindfulness - were averaged and then summed to create a Self-Compassion-Positive Subscales score (SCS-POS). The same method was used to calculate a Self-Compassion-Negative Subscales score (SCS-NEG) from participants' responses on the Self-Judgment, Isolation and Over-Identification items on the SCS. In the sample as a whole, reliability analyses indicated high levels of internal consistency for SCS-POS (Cronbach's $\alpha = .87$) and SCS-NEG (Cronbach's $\alpha = .92$). Similarly high levels of internal consistency for SCS-POS (Cronbach's $\alpha = .82, .89$, and $.87$) and SCS-NEG (Cronbach's $\alpha = .89, .91$, and $.93$) were obtained in separate analyses conducted for each grade.

In order to assess the construct validity of the two self-compassion factors, correlational analyses were conducted examining their associations with Time 1 depressive symptoms, self-criticism, and self-esteem. Results of these analyses can be seen in Table 3, in addition to the means and standard deviations of all variables for the sample as a whole. Lower levels of depressive symptoms were associated with higher scores on SCS-POS, whereas higher levels of depressive symptoms were associated with higher scores on SCS-NEG. SCS-NEG, but not SCS-POS, correlated significantly with CDEQ-SC. That is, higher levels of self-criticism were associated with higher scores on the three combined negative subscales of the SCS ($r = .67$), while no relation

was found between self-criticism and the combined scores on the three positive subscales ($r = -.11$). The strength of the relationship between self-criticism and SCS-NEG was significantly greater than the strength of the association between self-criticism and SCS-POS, Steiger's $Z = 6.70$, $p < .001$. In addition, both SCS-NEG and SCS-POS correlated significantly with SEQ, with higher levels of self-esteem being associated with higher scores on the positive subscales of the SCS and with lower scores on the negative subscales. Of note, however, although the correlations between self-esteem and scores on the positive and negative subscales of the SCS were significant, the size of these associations were small ($r = .23$) to moderate ($-.62$), respectively. The correlation between SCS-NEG and self-esteem was significantly stronger than the correlation between SCS-POS and self-esteem, $Z = 4.62$, $p < .001$.

With respect to age differences, as can be seen in Table 3, older participants reported significantly higher levels of depressive symptoms, SCS-NEG and self-criticism, and lower levels of self-esteem, than younger participants. Means and standard deviations for Time 1 variables are presented by grade in Table 4.

With respect to gender differences, t-tests were conducted to compare the scores of boys and girls on all study variables. Girls reported higher levels of SCS-NEG ($M = 7.29$, $SD = 2.69$) than boys ($M = 6.25$, $SD = 2.35$), $t(189) = -2.75$, $p < .01$. Girls similarly reported significantly higher levels of self-criticism ($M = 20.27$, $SD = 5.26$) than boys ($M = 18.80$, $SD = 4.32$), $t(189) = -2.03$, $p < .05$. No gender differences were observed in levels of depressive symptoms, SCS-POS or self-esteem (both $p > .05$).

Longitudinal Analyses

Prior to conducting the longitudinal analyses, a 3×2 repeated measures ANOVA was conducted with one between-subjects factor (Age, with 3 levels) and one within-subjects factor (Time, with 2 levels). A significant main effect was found for Time, $F(1, 190) = 38.55, p < .001$, indicating that in the sample as a whole, Time 2 CDI scores were significantly lower than Time 1 CDI scores. The Age \times Time interaction was not significant, $F(2, 190) = 2.11, p = .12$, indicating that all three age groups experienced similar levels of decline in their baseline levels of depressive symptoms over the 3-month interval.¹

In order to test whether the two self-compassion factors predicted change in depressive symptoms over time, we conducted hierarchical multiple regression analyses. In all cases, the dependent variable was Time 2 CDI scores. First, Time 1 CDI scores were entered into the equation. This controlled for differences between participants in symptom levels at Time 1. Second, in separate regression analyses, the self-related variable of interest (i.e., SCS-POS, SCS-NEG, CDEQ-SC, and SEQ) was entered into the second step of the model. Last, in order to examine unique effects, a regression analysis was conducted with all four self-related variables entered simultaneously into the second step of the model. To examine possible moderating effects of age, we regressed Time 2 CDI scores on Time 1 CDI scores, SCS-POS, Age, and the SCS-POS \times Age interaction. Similar analyses were conducted to examine the effect of SCS-NEG and the SCS-NEG \times Age interaction. Gender was similarly evaluated for any main effects and/or interactions with SCS-POS and SCS-NEG. None

¹ As noted by Twenge & Nolen-Hoeksema (2002), decreases in depressive symptoms over time with successive administrations of the CDI within a longitudinal study are not uncommon.

of the main effects or two-way interactions involving age or gender were significant. Therefore, for the sake of simplicity, results in Table 5 are presented for the entire sample.

Table 5 presents unstandardized (B) and standardized (β) regression coefficients for the potential predictors. As can be seen, SCS-POS scores were a significant predictor of change in CDI scores from Time 1 to Time 2 when entered in the second step of the hierarchical regression. Higher levels of SCS-POS predicted greater decreases in CDI scores over time, controlling for age, gender, and Time 1 depressive symptoms ($\beta = -.13, p < .05$). SCS-NEG scores were not a significant predictor of change in depressive symptoms from Time 1 to Time 2. CDEQ-SC scores were also not a significant predictor of change in CDI scores from Time 1 to Time 2. However, SEQ scores were a significant predictor of change in CDI scores from Time 1 to Time 2. Higher levels of self-esteem predicted greater decreases in CDI scores over time, controlling for age, gender, and Time 1 depressive symptoms ($\beta = -.21, p < .01$).

When all four potential predictors were allowed to compete with one another by being entered simultaneously in the second step of the regression, none of the self-related variables remained significant predictors of change in depressive symptoms from Time 1 to Time 2. However, the effects of SCS-POS ($p = .076$) and self-esteem ($p = .063$) remained trends, with each predicting a nearly significant amount of unique variance in change in depressive symptoms.

DISCUSSION

There were six principal findings to which we wish to draw attention. First, two distinct factors emerged from our factor analysis of the SCS, one comprised of 12 items from the positive subscales of the SCS (SCS-POS) and one comprised of 13 items from the negative subscales (SCS-NEG). Second, reliability analyses indicated that the two SCS factors displayed adequate reliability in research with children and adolescents. Third, the factors demonstrated good construct validity, exhibiting associations with self-criticism and self-esteem, as well as with depressive symptoms. Fourth, children and adolescents possessing higher levels of a combination of self-kindness, common humanity and mindfulness (SCS-POS) exhibited greater decreases in depressive symptoms over time than those with lower levels of these positive aspects of self-compassion. At the same time, however, higher levels of self-judgment, isolation and over-identification (SCS-NEG) – the combined negative aspects of self-compassion – did not influence levels of depressive symptoms over time. Fifth, consistent with past cross-sectional research conducted using adult samples, self-esteem and SCS-POS appear to be distinct, yet related, constructs. Finally, SCS-POS and self-esteem both exhibited a protective function in the context of depressive symptoms in children and adolescents.

With respect to the factor structure of the SCS, our finding that the positive and negative subscales formed two distinct and orthogonal factors was not expected in light of past research conducted with adult samples. In the majority of these studies, self-compassion was operationalized as a unitary construct based on Neff's (2003a) original theory. In the current study, the positively-worded items comprising the self-kindness,

common humanity and mindfulness subscales of the SCS adhered as SCS-POS, and the negatively-worded items comprising the self-judgment, isolation and over-identification subscales adhered as SCS-NEG. SCS-POS and SCS-NEG were unrelated to each other, suggesting that they are not mutually exclusive within an individual. That is, the presence or absence of one factor does not determine the presence or absence of the other. For example, as noted by Neff (2003a), “a person may tend not to judge himself, but that doesn’t necessarily mean that he takes proactive steps to be kind to himself either.” (p.234). Similar reasoning may be applied to the Common Humanity vs. Isolation and Mindfulness vs. Over-Identification bipolar components (see Neff (2003a). It is possible that the current results simply reflect an age-related difference in the factor structure of the SCS. Replication of this finding in child and adolescent samples would be required, however, before drawing such a conclusion. It is also possible that the current findings indicate a need to re-examine the factor structure of the SCS in general, regardless of age or other demographic variables. This notion would be consistent with the findings of recent research conducted with adults (Williams et al. 2014) that failed to replicate the factor analytic findings obtained by Neff (2003a).

In terms of the reliability of the six subscales of the SCS, with the exception of the Mindfulness subscale, most exhibited adequate internal consistency, yielding Cronbach alphas within the acceptable range. Specifically, our findings indicated that SCS items assessing the Self-Kindness, Self-Judgment, Common Humanity, and Isolation subscales, respectively, are measuring the same underlying concepts. At the same time, however, the Mindfulness subscale exhibited low reliabilities across age groups. In addition, the Over-Identification subscale exhibited low reliability in grade 5

children, yet exhibited adequate reliability in older children and adolescents. Taken together, these results suggest that the revised version of the SCS used in the current study represents an adequately reliable measure for use with children and adolescents. However, caution should be taken when interpreting results based on the Mindfulness subscale of this version of the SCS – as well as its posited maladaptive corollary, over-identification - particularly among younger children. With the exception of the Mindfulness subscale, findings from the reliability analyses conducted by Bluth and Blanton (2013) on each of the six subscales of the original SCS - administered to adolescents between the ages of 14 and 18 - were broadly similar to those obtained in the current study. For research with child and adolescent samples, a more reliable measure assessing the specific skills entailed by the multifaceted construct of mindfulness may be indicated for researchers specifically interested in this area (see Greco, Baer & Smith, 2011).

With respect to construct validity, both SCS-POS and SCS-NEG were associated with concurrent depressive symptoms. More specifically, higher levels of depressive symptoms at Time 1 were associated with higher levels of SCS-NEG at Time 1. In addition, lower levels of depressive symptoms at Time 1 were associated with higher levels of SCS-POS at Time 1. The relationship between self-criticism and SCS-NEG was significant and substantive ($r = .67$), suggestive of similarities between these constructs. The relationship between self-esteem and SCS-POS was significant yet modest ($r = .23$), suggesting that while they share some characteristics, they appear to be relatively distinct constructs. Consistent with Neff (2003b), both self-esteem and self-compassion entail having positive feelings towards the self. Such positive feelings

may, in turn, engender expressions of warmth and kindness towards the self. At the same time, however, it is possible that esteeming oneself highly does not necessarily come bundled with a corresponding ability to treat oneself with warmth and kindness. Furthermore, neither the capacity to recognize the universality of one's experience of adversity and/or suffering in the world, nor the ability to adopt a mindful awareness of one's negative internal experiences, is necessarily concomitant with self-valuing. In addition, while the positive correlation between SCS-POS and self-esteem was significant yet modest, the negative correlation between self-esteem and SCS-NEG was significant and robust. This may suggest that esteeming oneself highly is associated with an absence of harsh self-judgment – a finding that is further supported by the robust negative correlation between self-esteem and self-criticism – as well as a decreased inclination towards isolation during times of adversity and a reduced tendency to become carried away with one's negative internal experience. Taken together, this pattern of associations suggests that the presence of the positive components of self-compassion may be less readily apparent in the individual with self-esteem than the absence of the negative ones. Future research conducting more fine-grained analyses examining the associations between the various subscales of the SCS and the SEQ may help to shed greater light on these findings.

In terms of our longitudinal analyses of the two self-compassion factors, the combination of the positive subscales of the SCS (SCS-POS) predicted change in depressive symptoms, while the combination of the negative ones did not. These results suggest that while a combination of self-kindness, common humanity and mindfulness is predictive of greater decreases in depressive symptoms over time in children and

adolescents, the combination of self-judgment, isolation and over-identification does not confer vulnerability to depressive symptoms among this population. This pattern of results was consistent across age and gender, suggesting that they may be broadly applicable across boys and girls between the ages of 9 and 16. The finding that SCS-NEG did not predict change in depressive symptoms was unexpected. However, it was consistent with our finding that self-criticism - the other vulnerability factor assessed in the current study – similarly did not predict levels of depressive symptoms over time. It is possible that these results were simply anomalous and that subsequent studies will reveal a different pattern. At the same time, it is possible that the vulnerability (i.e., self-criticism and SCS-NEG) and protective factors (i.e., self-esteem and SCS-POS) assessed in the current study functioned differently. Vulnerability factors may exert depressogenic effects in the presence of stress – requiring an analysis of the vulnerability \times stress interaction – while protective factors exert a main effect on depressive symptoms, independent of stress. Although this explanation is consistent with the current pattern of findings, future research and replication is required before drawing such a conclusion.

The finding that the effects of SCS-POS ($p = .076$) and self-esteem ($p = .063$) were reduced to trend levels when both were entered into the model suggests that they may be exerting their protective functions through partly similar mechanisms. At the same time, they each continued to approach conventional levels of significance in what may be considered a highly conservative test. Therefore, the current results suggest that they each warrant future research examining their unique and common aspects in the context of depressive symptoms in children and adolescents.

Several limitations of the current study should be noted. First, the absence of stress or social support data necessitated a focus on main effects when assessing vulnerability and protective factors on child and adolescent depressive symptoms. Additional interactive models should be explored in future research, such as conducting vulnerability-stress analyses based on reports of stressors. Such an approach would be theoretically congruent with Neff's conceptualization of self-compassion as a protective factor in the context of personal adversity or suffering, aspects of experience that may be obtained and coded based on interview-based assessments of stressful life events. Second, the study used a two time-point design and therefore lacks the statistical power and precision that is afforded by analyses based on multiple assessments over longer periods of time. Third, the SCS was administered once and therefore the relative stability of self-compassion over time could not be assessed. Fourth, depressive symptoms were the sole dependent variable, while future research may benefit from examining the role of self-compassion in the context of additional types of symptoms commonly observed among children and adolescents in clinical and non-clinical contexts, such as anxiety or externalizing symptoms. Fifth, the current study used a sample of children and adolescents exhibiting sub-clinical levels of depressive symptoms and thus the extent to which our findings can be generalized to those experiencing clinically significant levels of symptoms remains unknown. Finally, to the best of our knowledge, the current study represents the first to operationalize self-compassion as two distinct and orthogonal factors in a child and adolescent sample and therefore comparisons to other studies investigating the predictive validity of this construct in this way is not possible. As a result, our findings are in need of further

replication. Thus, given the relative scarcity of research conducted to date on self-compassion in children and adolescents, as well as the absence of comparative longitudinal studies, guarded optimism may be appropriate before drawing strong conclusions about the effects of self-compassion on depressive symptoms in these populations.

Self-compassion continues to grow as an increasingly well-recognized construct within the field of mental health, both in terms of basic and applied research and clinical practice. Based on the findings of the current study, researchers interested in developing a better understanding of the factors that contribute to depressive symptoms in children and adolescents appear to have at their disposal an adequate method of assessing this construct. In addition, our results suggest that fostering the development of the positive aspects of self-compassion in these populations may confer benefits in the context of depressive symptoms. Further, our results suggest that self-compassion exerts positive effects on depressive symptoms comparable to yet independent from those of self-esteem, and thus “self-compassion enhancement” may represent a viable alternative or adjunct to self-esteem enhancement when considering targets for treatment and prevention efforts. Future research examining the effects of self-compassion on additional symptom outcomes is warranted. Such research may serve to highlight the extent of self-compassion’s reach beyond depressive symptoms in protecting children and adolescents from undue distress in its various forms across life’s inevitable setbacks and challenges over the course of development.

REFERENCES

- Abela, J.R.Z., & Hankin, B.L. (2008). Cognitive vulnerability to depression in children and adolescents: A developmental psychopathology approach. In J. R. Z. Abela & B. L. Hankin (Eds.), *Handbook of child and adolescent depression* (pp. 35–78). NY:Guilford.
- Abela, J.R.Z., Brozina, K., & Haigh, E.P. (2002). An examination of the response styles theory of depression in third and seventh grade children: A short-term longitudinal study. *Journal of Abnormal Child Psychology*, 30, 515-527.
- Abela, J.R.Z., & Hankin, B.L. (2011). Rumination as a vulnerability factor to depression during the transition from early to middle adolescence: a multi-wave longitudinal study. *Journal of Abnormal Psychology*, 120, 259–271.
- Abela, J.R.Z. & Taxel, E. (2001, June). Vulnerability to specific life events: Personality predispositions to depression in schoolchildren. Paper presented at the meeting of the Canadian Psychological Association, Quebec City, Canada.
- Abela, J.R.Z. & Taylor G. (2003). Specific vulnerability to depressive mood reactions in schoolchildren: The moderating role of self-esteem. *Journal of Clinical Child and Adolescent Psychology*, 32, 408-418.
- Adams, P., Abela, J.R.Z., Auerbach, R., & Skitch, S. (2009). Self-criticism, dependency, and stress reactivity: An experience sampling approach to testing Blatt and Zuroff's (1992) theory of personality predispositions to depression in high-risk youth. *Personality and Social Psychology Bulletin*, 35, 1440-1452.
- Barnard, L.K. & Curry, J.F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology*, 15, 289-303.
- Blatt, S. J. (2004). Experiences of depression: Theoretical, clinical and research perspectives. Washington, DC: American Psychological Association.
- Blatt, S. J., D'Afflitti, J. P., & Quinlan, D. M. (1979). Experiences of depression in normal young adults. *Journal of Abnormal Psychology*, 85, 383–389.
- Blatt, S. J., & Zuroff, D. C. (1992). Interpersonal relatedness and self-definition: Two prototypes for depression. *Clinical Psychology Review*, 12, 527–562.
- Bluth, K. & Blanton, P.W. (2013). Mindfulness and Self-Compassion: Exploring Pathways to Adolescent Emotional Well-Being. *Journal of Child and Family Studies*, 23, 1298-1309.
- Brooks, M., Kay-Lambkin, F., Bowman, J. & Child, S. (2012). Self-compassion amongst clients with problematic alcohol use. *Mindfulness*, 3, 308-317.

- Brown, B., & Lohr, M.J. (1987). Peer-group affiliation and adolescent self-esteem: An integration of ego-identity and symbolic-interaction theories. *Journal of Personality and Social Psychology*, 52, 47–55.
- Costa, J., & Pinto Gouveia, J. (2011). Acceptance of pain: Using the chronic pain acceptance questionnaire to identify patients' subgroups. *Clinical Psychology and Psychotherapy*, 18, 292–302.
- Digdon, N., & Gotlib, I.H. (1985). Developmental considerations in the study of childhood depression. *Developmental Review*, 5, 162–199.
- Garber, J. (2000). Development and depression. In A. J. Sameroff, M. Lewis, & S. M. Miller (Eds.), *Handbook of Developmental Psychopathology* (pp. 467–490). New York: Kluwer.
- Gilbert, P., & Irons, C. (2005). Focused therapies for shame and self-attacking. In P. Gilbert (Ed.), *Compassion: Conceptualizations, research and use in psychotherapy* (pp. 263–325). London: Brunner-Routledge.
- Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2011). Fears of compassion: Development of three self-report measures. *Psychology & Psychotherapy: Theory, Research and Practice*, 84, 239–255.
- Greco, L., Baer, R. & Smith, G.T. (2011). Assessing mindfulness in children and adolescents: Development and validation of the Child and Adolescent Mindfulness Measure (CAMM). *Psychological Assessment*, 23, 606–614.
- Hall, C., Row, K.A., Wuensch, K.L. & Godley, K.R. (2013). The role of self-compassion in physical and psychological well-being. *The Journal of Psychology: Interdisciplinary and Applied*, 147, 311–323.
- Hankin, B.L., Abramson, L.Y., Moffitt, T.E., Silva, P.A., McGee, R., & Angell, K.A. (1998). Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10 year longitudinal study. *Journal of Abnormal Psychology*, 107, 128–140.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: The Guilford Press.
- Johnson, E.A. & O'Brien, K.A. (2013). Self-compassion soothes the savage ego-threat system: Effects on negative affect, shame, rumination, and depressive symptoms. *Journal of Social & Clinical Psychology*, 32, 939–963.
- Kovacs, M. (1981). Rating scales to assess depression in school children. *Acta Paedopsychiatrica*, 46, 305–315.

- Krieger, T., Altenstein, D., Baettig, I., Doerig, N. & Holtforth, M.G. (2013). Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. *Behavior Therapy*, 44, 501-513.
- Kyeong, L.W. (2013). Self-compassion as a moderator of the relationship between academic burnout and psychological health in Korean cyber university students. *Personality and Individual Differences*, 54, 899-902.
- Leary, M.R., Tate, E.B., Adams, C.E., Allen, A.B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, 92, 887-904.
- Macbeth, A. & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, 32, 545-552.
- Mills, A., Gilbert, P., Bellew, R., McEwan, K., & Gale, C. (2007). Paranoid beliefs and self-criticism in students. *Clinical Psychology & Psychotherapy*, 14, 358-364.
- Neff, K.D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223-250.
- Neff, K.D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85-101.
- Neff, K.D. (2008). Self-compassion: Moving beyond the pitfalls of a separate self-concept. In J. Bauer & H.A. Wayment (Eds.) *Transcending Self-Interest: Psychological Examinations of the Quiet Ego* (pp. 95-106). APA Books, Washington DC.
- Neff, K.D., Kirkpatrick, K., & Rude, S. S. (2007). Self-compassion and its link to adaptive psychological functioning. *Journal of Research in Personality*, 41, 139-154.
- Neff, K.D., Pisitsungkagarn, K., & Hsieh, Y. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology*, 39, 267- 285.
- Neff, K.D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of Personality*, 77, 23-50.
- Neff, K.D. & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity*, 9, 225-240.

- Persinger, J. (2012). An alternative to self-esteem: Fostering self-compassion in youth. *Communique*, 40, 20-23.
- Raes, F. (2010). Rumination and worry as mediators of the relationship between self-compassion and depression and anxiety. *Personality and Individual Differences*, 48, 757–761.
- Raes, F. (2011). The effect of self-compassion on the development of depression symptoms in a non-clinical sample. *Mindfulness*, 2, 33–36.
- Roemer, L., Lee, J. K., Salters-Pedneault, K., Erisman, S. M., Orsillo, S. M., & Mennin, D. S. (2009). Mindfulness and emotion regulation difficulties in generalized anxiety disorder: Preliminary evidence for independent and overlapping contributions. *Behavior Therapy*, 40, 142–154.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Simmons, R.G., Rosenberg, F., & Rosenberg, M. (1973). Disturbance in the self-image at adolescence. *American Sociological Review*, 38, 553–568.
- Teasdale, J.D., Segal, Z.V., Williams, J.M., Rigeway, V.A., Soulsby, J.M., & Lau, M.A. (2000). Prevention of relapse/recurrence in major depression by mindfulness-based cognitive therapy. *Journal of Consulting & Clinical Psychology*, 68, 615–623.
- Terry, M.L., Leary M.R., & Mehta, S. (2013). Self-compassion as a buffer against homesickness, depression, and dissatisfaction in the transition to college. *Self and Identity*, 12, 278-290.
- Twenge, J.M. & Nolen-Hoeksema, S. (2002). Age, gender, race, socioeconomic status, and birth cohort differences on the children's depression inventory: a meta-analysis. *Journal of Abnormal Psychology*, 111, 578-588.
- van Dam, N.T., Sheppard, S.C., Forsyth, J.P., & Earleywine, M. (2011). Self-compassion is a better predictor than mindfulness of symptom severity and quality of life in mixed anxiety and depression. *Journal of Anxiety Disorders*, 25, 123–130.
- Williams, M.J., Dalgleish, T., Karl, A., & Kuyken, W. (2014). Examining the factor structures of the five facet mindfulness questionnaire and the self-compassion scale. *Psychological Assessment*, 26, 407-418.
- Ying, Y. (2009). Contribution of self-compassion to competence and mental health in social work students. *Journal of Social Work Education*, 45, 309–323.

TABLE(S)

Table 1. Results of Exploratory Factor Analysis for Two Factor Promax Solution

Items	Factor 1	Factor 2
Eigenvalue	7.44	5.67
% of variance	28.62	21.83
% of cumulative variance	28.62	50.45
1. SJ	.806	
8. SJ	.772	
16. SJ	.770	
6. O	.767	
21. SJ	.753	
2. O	.733	
25. I	.733	
4. I	.700	
11. SJ	.693	
18. I	.682	
13. I	.624	
24. O	.560	
20. O	.544	
22. M	-.407	.350
19. SK		.728
7.. CH		.725
3. CH		.720
10. CH		.700
5. SK		.693
14. M		.681
23. SK		.659
12. SK		.633
26. SK		.600
9. M		.567
15. M		.496
17. CH		.488

Note. SJ= Self-Judgment; I=Isolation; O=Over-Identification;
M=Mindfulness; CH=Common Humanity; SK=Self-Kindness.

Table 2. Cronbach Alphas for the SCS Subscales

Subscale	Cronbach's Alpha (full sample)	Gr.5	Gr.8	Gr.11
Self-Kindness	.79	.67	.87	.80
Common Humanity	.79	.72	.83	.75
Mindfulness	.54	.39	.52	.59
Self-Judgment	.87	.73	.83	.90
Isolation	.82	.70	.82	.78
Over-Identification	.71	.56	.76	.68

Table 3. Means, Standard Deviations, and Pearson Correlations between Time 1 Measures

	1	2	3	4	5	6
1. T1 CDI	-					
2. SCS-POS	-.15*	-				
3. SCS-NEG	.58**	.07	-			
4. CDEQ-SC	.48**	-.11	-.67**	-		
5. SEQ	-.63**	.23*	-.62**	-.59**	-	
6. AGE	.31**	.11	.33**	.29**	-.23**	-
Mean (full sample)	9.52	8.88	6.86	19.68	16.84	13.04
SD	5.81	2.33	2.60	4.94	2.69	2.42

Note. T1 CDI = Time 1 Children's Depression Inventory; SCS-POS = Self-Compassion Scale – Positive Subscales; SCS-NEG = Self-Compassion Scale-Negative Subscales; CDEQ-SC = Children's Depressive Experiences Questionnaire – Self-Criticism Subscale; SEQ = Self-Esteem Questionnaire.

p<.05* p<.01**

Table 4. Means (and Standard Deviations) for Time 1 Measures by Grade

Variable	Gr.5	Gr.8	Gr.11
T1 CDI	7.43 (5.05)	9.12 (5.53)	11.76 (6.05)
SCS-POS	8.35 (2.22)	9.05 (2.51)	9.10 (2.14)
SCS-NEG	12.55 (2.11)	10.95 (2.43)	10.22 (2.71)
CDEQ-SC	18.02 (4.16)	19.25 (4.16)	21.57 (5.79)
SEQ	17.53 (2.42)	16.99 (2.73)	16.08 (2.69)

Note. T1 CDI = Time 1 Children's Depression Inventory; SCS-POS = Self-Compassion Scale – Positive Subscales; SCS-NEG = Self-Compassion Scale-Negative Subscales; CDEQ-SC = Children's Depressive Experiences Questionnaire – Self-Criticism Subscale; SEQ = Self-Esteem Questionnaire.

Table 5. Two Self-Compassion Factors, Self-Criticism, and Self-Esteem Predicting Residual Change in CDI Scores from Time 1 to Time 2.

Order of entry	Predictor	<i>B</i>	<i>SE</i>	β	<i>sr</i> ²
1A	T1 CDI	.34	.04	.55	.30
1A	Age	.16	.09	.11	.01
1A	Gender	.14	.42	.02	.00
2A	SCS-POS	-.19	.09	-.13	.01*
2B	SCS-NEG	.15	.10	.10	.00
2C	CDEQ-SC	.06	.05	.09	.00
2D	SEQ	-.29	.10	-.21	.03**
2E	SCS-POS	-.18	.10	-.11	.01
2E	SCS-NEG	.11	.13	.08	.00
2E	CDEQ-SC	-.02	.06	-.02	.00
2E	SEQ	-.22	.12	-.16	.01

Note. T1 CDI = Time 1 Children's Depression Inventory; SCS-POS = Self-Compassion Scale – Positive Subscales; SCS-NEG = Self-Compassion Scale-Negative Subscales; CDEQ-SC = Children's Depressive Experiences Questionnaire – Self-Criticism Subscale; SEQ = Self-Esteem Questionnaire; GENDER = Coded variable (1 = male, 2 = female). * $p < .05$, ** $p < .01$

Figure 1. Results of Scree Test

