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Mediators Between Self-Criticism and Depression: Fear of Compassion, Self-Compassion, and Importance to Others

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This study was an investigation of the relationships between internalized self-criticism and depression and between comparative self-criticism and depression as these relationships are mediated by the fear of self-compassion, fear of compassion from others, self-compassion, and the perception that one is important to others. To examine these relationships, data were gathered via online survey methods from 206 university students at a large public Midwestern university in the United States. The Self-Criticism/Compassion Mediation Model, in which internalized and comparative self-criticism were both modeled to predict depression, was built and tested via structural equation modeling (SEM). In the presence of 4 competing models, this model effectively modeled relationships among the study variables. In the Self-Criticism/Compassion Mediation Model, the fear of self-compassion, and the perception that one is important to others serially mediated the relationship between comparative self-criticism and depression. Additionally, self-compassion partially mediated both the relationship between internalized self-criticism and depression, and the relationship between comparative self-criticism and depression. Implications include the use of the model as a guide to developing evidence-based practice for highly self-critical, depressed clients.

Keywords: self-criticism, depression, fear of compassion, self-compassion, importance to others

There appears to be an undeniable link between self-criticism and depression. According to Beck's Cognitive Theory of Depression (Beck, 1964, 1983), self-criticism leads to and supports depression. People who tend to criticize themselves by blaming themselves when things in their lives do not go right tend to become depressed. The more they criticize themselves, the deeper their depression becomes (e.g., Busch, 2009). However, studies that describe the links between self-criticism and depression do not typically investigate how these links are maintained. Thus, studying the mediators between self-criticism and depression is warranted in that this type of investigation could help identify those internal and external systems that support the self-criticism/depression link. In the introduction to this study, we will examine the theoretical and research underpinnings that denote each of the study variables and the hypothesized relationships among them. We will then provide rationale for the construction of the hypothesized mediation model as well as for four alternative models.

Self-Criticism and Depression

Both theory and research have supported the link between self-criticism and depression. Beck (1964) theorized that depressed people selectively focus on information congruent with their existing negative self-concepts and blame themselves when things go wrong. In support of this theory, researchers have found that people who are overly self-critical are vulnerable to the development of depression (e.g., Cantazaro & Wei, 2010). Moreover, self-critical people tend to feel inadequate, unworthy, and inferior because of their relentless and ruthless self-scrutiny (Blatt & Homann, 1992). Depressed people also tend to have difficulty in changing their negative view of self that maintains their depression (Gilbert & Procter, 2006). However, when people become less self-critical, their depression also tends to lessen (e.g., Beck, Rush, Shaw, & Emery, 1979).

A more thorough examination of the nature of self-criticism has come to the forefront in recent years. In a conceptualization by Thompson and Zuroff (2004; see also Blatt & Blass, 1992), there are two levels of self-criticism that are based on a cognitive distortion that parallels the developmental processes of relational versus self-definition (Thompson & Zuroff, 2004). One level is comparative self-criticism. At this level, one's evaluation of self is founded on one's sense that he or she falls short in comparison with others. Persons who characteristically criticize themselves in this way base their self-judgments on their perceptions of what others think of them. By engaging in comparative self-criticism, they experience disruption in both their interpersonal relationships, as they believe that others are hostile toward and critical of them because they do not measure up (Arieti & Bemporad, 1980; Thompson & Zuroff, 2004), and in their intrapersonal relation-

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ships, as they disparage themselves, believing that others may be justified in their judgment.

The other level is internalized self-criticism. At this level, one's evaluation of self is founded on the sense that one cannot measure up to his or her own idealized standards, even with repeated attempts to do so (Arieti & Bemporad, 1980; Thompson & Zuroff, 2004). Persons who characteristically criticize themselves in this way base their self-judgments on internalized valuations of right and wrong, or good and bad. By engaging in internalized self-criticism, they experience intrapersonal conflict and disruption as they simultaneously become the harsh, rejecting judge and the hapless victim of self-hostility and rage. They also experience interpersonal disruption as they believe that others may see them as they see themselves. Thus, it appears that self-criticism is comprised of two unique but interrelated constructs, and thus, that both levels of self-criticism should be considered when relationships between self-criticism and depression are examined (Thompson & Zuroff, 2004).

Self-Compassion as a Potential Mediator

A potential mediator between self-criticism and depression is self-compassion. Self-compassion is defined as empathy toward oneself wherein people understand their own pain and have the desire to reduce this pain by not judging themselves harshly in the face of their own inadequacies (Neff, 2003a). Self-compassionate people treat themselves with kindness (Neff, 2003a). They realize that failure is part of the common human experience, and they work to not be overwhelmed by self-critical thoughts and negative emotions (Neff, 2003a).

Self-compassion has been shown by research to be negatively related to self-criticism among both college students and psychiatric patients (Gilbert & Procter, 2006; Neff, Rude, & Kirkpatrick, 2007). Although there is some overlap between self-compassion and self-criticism, these constructs are distinct because self-compassion is not about how one evaluates oneself in comparison with one's ideal self or with one's sense of how he or she is being judged by others, but how one relates to oneself in intentional, kind, mindful, and understanding ways (Neff, 2003b). Self-compassion has also been shown to be negatively related to depression among college students and individuals from community clinical samples (MacBeth & Gumley, 2012; Neff, 2003b, 2011). However, the possibility that self-compassion serves as a mediator between self-criticism and depression has not been tested to date.

Fear of Compassion as a Potential Mediator

Another potential mediator between self-criticism and depression is fear of compassion. People fear compassion because they are afraid they will relive painful childhood experiences wherein they did not feel the compassion they so desperately needed (Gilbert, 2010). They also fear compassion because they believe that accepting compassion is a weakness that will make them more vulnerable to pain (Gilbert & Procter, 2006; Martin, 2013). Empirically, the fear of compassion has been linked to self-criticism, depression, anxiety, and stress, as well as self-coldness and an insecure attachment style (Gilbert, McEwan, Matos, & Rivis, 2011).

The fear of compassion has also been recently shown to be comprised of distinct but related constructs, including the fear

of self-compassion and the fear of compassion from others (Gilbert et al., 2011). Based on theory and research (e.g., Thompson & Zuroff, 2004), it stands to reason that self-critical individuals could be fearful of self-compassion because of the perception that allowing themselves to be compassionate toward themselves could lower their motivation to meet their own or others' impossibly high expectations. Likewise, self-critical individuals could be fearful of compassion from others because accepting this compassion could then also cause them to feel more compassionate toward themselves. Nevertheless, no published research has examined how the links between fear of self-compassion and self-compassion, and fear of compassion from others and self-compassion, operate in maintaining the links between self-criticism and depression.

Importance to Others as an Aspect of Mattering as a Potential Mediator

Mattering is defined as "the perception that, to some degree and in any of a variety of ways, we are a significant part of the world around us" (Elliott, Kao, & Grant, 2004, p. 339). The perception that one is important to others is one of the three aspects of mattering identified by Elliott and colleagues (with the other aspects being that others are aware of an individual, and that others can rely on that individual). When someone is important to others, he or she becomes the object of others' concern and interest. Others try to promote his or her welfare by positive means, and they invest their efforts in him or her (Elliott et al., 2004).

Research has shown that not feeling important to others is associated with elevated levels of depression (Flett, Galfi-Pechenkov, Molnar, Hewitt, & Goldstein, 2012). It is also predictive of suicidal behavior over and above how depressed one is (Joiner et al., 2009). However, no research to date has explored how importance to others is related to self-criticism, although importance to others has been shown to moderate the relationship between negative life stress (which can also lead to self-criticism) and depression (Cohen & Hoberman, 1983). Neither has any research to date explored how importance is related to fear of compassion, although it is reasonable to assume that people who fear compassion may also be less likely to believe that they are important to others because they do not as readily accept the compassion that is offered to them.

Purpose of the Study

Theory and research support hypothetical relationships between self-criticism and depression, and the mediating roles of fear of compassion, self-compassion, and the perception that one is important to others as a dimension of mattering. Understanding how these variables mediate this relationship could help us identify how the self-criticism/depression link is maintained, and could have implications for designing counseling interventions aimed at alleviating depression among self-critical people. The purpose of this study was to construct a hypothesized model that modeled relationships between self-criticism and depression and the proposed mediators just described, and test it using cross-sectional data.

Hypothesized Model

For the hypothesized model (see Figure 1), relationships between internalized self-criticism and depression, and between comparative self-criticism and depression, were serially mediated by fear of self-compassion and fear of compassion from others as initial mediators in mediation chains that then also include self-compassion and perceived importance to others. In the hypothesized model, modeled relationships between each of the variables were based on both theory and prior research findings (e.g., Cantazaro & Wei, 2010; Cohen & Hoberman, 1983; Gilbert et al., 2011; Neff, 2003b; Thompson & Zuroff, 2004). We titled the hypothesized model the Self-Criticism/Compassion Mediation Model.

The theoretical basis for the directionality of the hypothesized model, with internalized and comparative self-criticism predicting depression, is Beck’s Cognitive Theory of Depression (Beck, 1964, 1983; Soygüt & Savasir, 2001). In this theory, Beck proposed that self-criticism leads to depression, and that an overly critical evaluation of oneself is part of the maladaptive belief structure that maintains a depressed state (Beck, 1964, 1983; Soygüt & Savasir, 2001). Longitudinal studies have supported this theoretical formulation. For example, Dunkley, Sanislow, Grilo, and McGlashan (2009) examined the hypothesis that self-criticism predicted depressive symptoms using longitudinal data from a clinical sample. They found that self-criticism uniquely predicted depression after 4 years, after controlling for the effects of Time 1

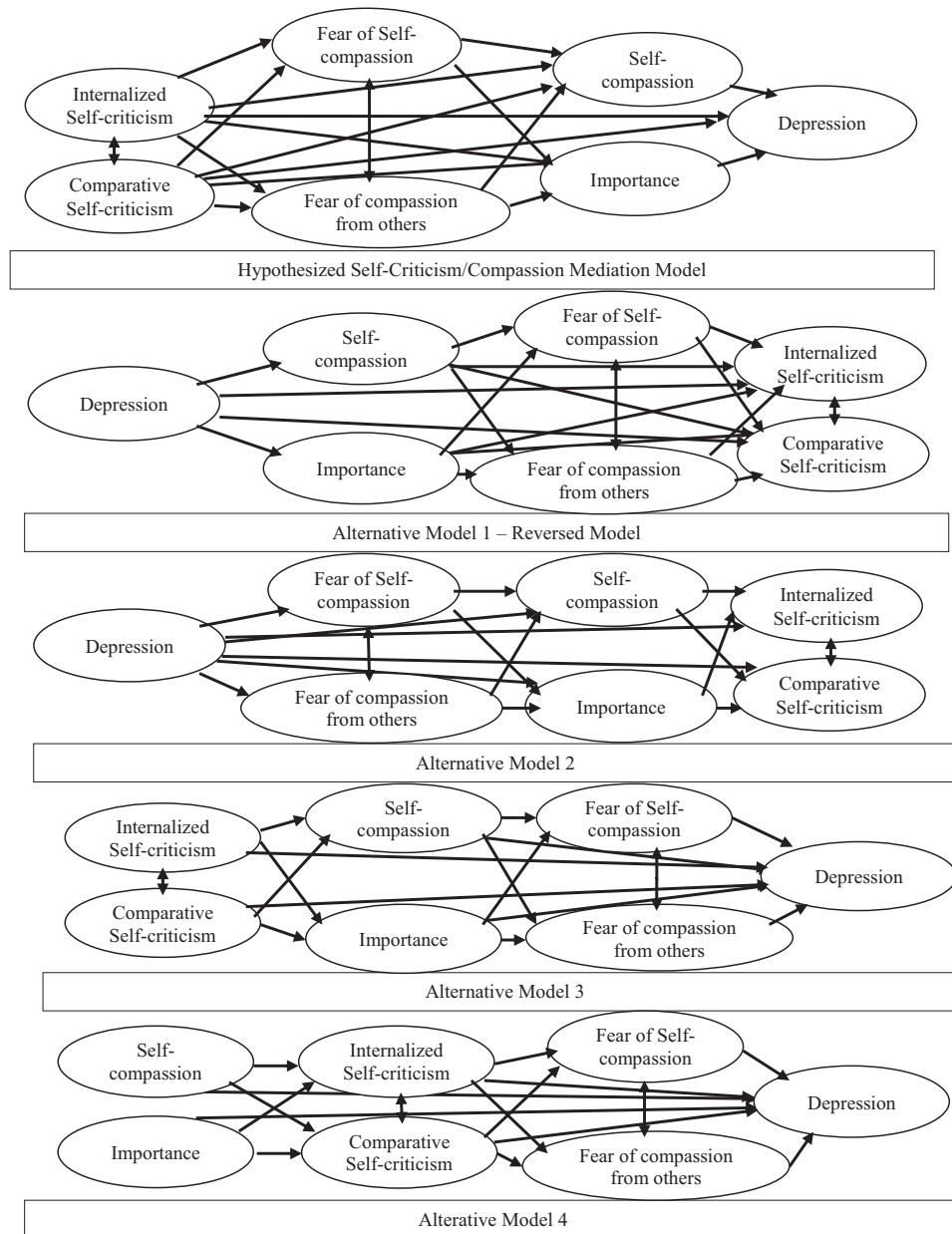


Figure 1. The hypothesized and alternative models.

depression and Time 1 neuroticism. Thus, both theory and research supports the hypothesized directionality in the relationship between self-criticism and depression in the Self-Criticism/Compassion Mediation Model.

The theoretical basis for the hypothesized relationships between fear of self-compassion and self-compassion, and between fear of compassion from others and self-compassion, is Bowlby's Attachment Theory (Bowlby, 1969, 1973, 1980), as extended by Gilbert (2005, 2010) and Gillath, Shaver, and Mikulincer (2005). Gilbert (2005, 2010) hypothesized that people's capacities for receiving compassion are based on their attachment systems. Painful emotional memories, especially among people with insecure attachment styles, can be reactivated when faced with compassion from self or others. This leads to fear, which is then activated prior to feeling any compassion (Gilbert et al., 2011). Fear then becomes a protective mechanism that motivates individuals to eschew compassion in order to avoid becoming vulnerable to more pain. Thus, fear of compassion may have a negative relationship with self-compassion, and could serve as a gatekeeper to self-compassion among people who experienced insecure attachments as children.

Regarding the relationship between the fear of compassion from self and others, and feeling that one is important to others, Bowlby's (1969, 1973, 1980) Attachment Theory also provides a basis for this hypothesized link. Feeling important to other people and feeling that others are truly interested in one's welfare is a powerful way to experience compassion (Rosenberg & McCullough, 1981). However, because people who are afraid of compassion maybe less likely to be able to accept compassion (Gilbert et al., 2011), they may also be less likely to believe that they are important to others because they are not receiving compassion from them. Fear of compassion from self or others then is hypothesized to negatively affect feeling important to others. Thus, the fear of compassion may be the first link in the serially mediated effects of fear of compassion and feeling important to others.

Research, conducted by Rockliff, Gilbert, McEwan, Lightman, and Glover (2008) has partially supported this theory. In this study, there was some indication that people who had higher mean scores on measures of self-criticism, self-coldness, anxious attachment, and psychopathologies tended to have a decrease in heart-rate variability (HRV) after exposure to compassion-focused imagery compared with their HRV prior to exposure. In this group of participants, their blood cortisol levels remained unchanged. People who were more self-compassionate, more self-assured, and had greater ability to depend on others and to experience close relationships had an increase in HRV and a lower blood cortisol level when comparing before and after exposure to compassion-focused imagery. The differences between the two groups were nonsignificant, but were trending in the expected directions. Researchers interpreted these physiological responses to indicate that self-critical people felt threatened when thinking about receiving compassion from themselves or from others.

We have described a hypothesized model that appears to be theoretically sound, logically consistent, and based on prior research; however, it is possible that other models could be as explanatory of relationships among the hypothesized variables. Thus, we also have proposed four alternative models (all alternative models are also shown in Figure 1).

Alternative Model 1

Beck proposed that self-criticism and depression have a directional relationship, with more self-criticism resulting in greater depression (Beck, 1964, 1983; Soygüt & Savasir, 2001). However, it could be possible that greater depression leads to greater self-criticism via the mechanism of depressed persons having diminished capacities to experience feelings of pleasure, reward, or motivation (Heller et al., 2009). Greater depression then could lead to more negative thoughts, including thoughts that are self-critical. It is also possible that the fear of compassion does not serve as the first mediator in a mediation chain with self-compassion and importance as subsequent mediators, but that among persons who are depressed, self-compassion and importance trigger fears of self-compassion. Thus, we constructed a model that was the reverse of the hypothesized model (Alternative Model 1), in which the paths from depression to internalized self-criticism and from depression to comparative self-criticism were mediated by self-compassion and importance, which in turn predicted fear of self-compassion and fear of compassion from others.

Alternative Model 2

Pauley and McPherson (2010) found that anxious and depressed individuals valued self-compassion and compassion from others. However, they also believed that receiving compassion would be difficult because their psychological symptoms negatively impacted their ability to accept this compassion. For example, participants reported that when they began to feel self-compassionate, they replaced this feeling with greater self-criticism, and thus became even more frustrated and angry with themselves. Therefore, the result of this study supports a theoretical model in which depression predicts self-criticism through fear of compassion and lack of compassion from self and others. Consequently, we hypothesized Alternative Model 2, in which the paths from depression to internalized self-criticism and to comparative self-criticism are mediated by fear of self-compassion and fear of compassion from others, which predict self-compassion and importance.

Alternative Model 3

Another potential formulation of the mediated effects between self-criticism and depression is based on studies that report that those who are more self-critical experience fear during compassion-focused imagery (e.g., Rockliff et al., 2008). The results of this study supported an alternative model in which self-criticism predicts depression, and in which the fear of compassion is triggered by experiencing self-compassion and compassion from others.

Alternative Model 4

Based on Bowlby's Attachment Theory (Bowlby, 1969, 1973, 1980), a final alternative explanation could be that feeling less compassion could contribute to individuals' overly self-critical attitudes. In this case, these individuals would be more likely to fear compassion due to their negative view of themselves in comparison with others or due to their own self-perceived violation of their personal standards. Thus, the paths from self-compassion and importance to fear of self-compassion and to fear

of compassion from others would be mediated by internalized and comparative self-criticism, which would then contribute to depression.

Method

Participants

A total of 260 university students at a large public Midwestern university in the United States were participants in the study. They were recruited through student e-mail lists, psychology classes, and flyers on campus. Those who volunteered completed an online survey. No students were excluded based on any demographic or other characteristics. Recruitment continued until the sample size reached the minimum level of 15 cases per each measured indicator (in this case $15 \text{ Cases} \times 13 \text{ Measured Indicator} = 195$; Stevens, 2002). Participants were restricted to answer all items. Additionally, the number of students who did not complete the survey are unknown to the researchers. Because only completed surveys were recorded by the online survey system we used, we were unable to calculate attrition. Students who completed the survey were offered a chance to win an online gift card in a raffle.

Of the participants who completed the survey, 38 (18.4%) were men and 168 (81.6%) were women, with ages ranging from 17 to 52 years ($M = 21.42$ years; $SD = 4.128$). The unequal ratio of women to men was likely caused by sampling from colleges of liberal arts and education, which are primarily populated by women. There were 37 (18.0%) freshmen, 43 (20.9%) sophomores, 62 (30.1%) juniors, and 64 (31.1%) seniors. With regard to ethnicity, 174 (84.5%) were European Americans, 14 (6.8%) were Asian Americans, 8 (3.9%) were multiracial Americans, 4 (1.9%) were African Americans, 4 (1.9%) were international students, and 2 (1.0%) were Hispanic Americans.

Measures

Self-criticism. The Levels of Self-Criticism Scale (LOSC; Thompson & Zuroff, 2004) was used to assess self-criticism. The LOSC is a 22-item instrument, with items measured on a 7-point Likert scale ranging from 1 (*not at all like me*) to 7 (*extremely like me*). The LOSC consists of two subscales, which represent the two levels of self-criticism identified by Thompson and Zuroff (2004). The subscales are Comparative Self-Criticism (CSC; 12 items) and Internalized Self-Criticism (ISC; 10 items). Higher scores indicate more intense self-criticism. Sample items are "I am very irritable when I have failed" (ISC), and "I have a nagging sense of inferiority" (CSC).

Adequate reliability has been reported for the LOSC, with coefficient alphas ranging from .81 to .84 for the CSC and .87 to .88 for the ISC in samples of college students (Thompson & Zuroff, 2004). Construct validity has been demonstrated using extratest measures of self-criticism and perfectionism. In the current study, coefficient alphas were .81 for the CSC, and .89 for the ISC. To assess self-criticism within the measurement model, we created three parcels for the CSC and three for the ISC using random assignment of all scale items without replacement (Kishton & Widaman, 1994). We used these parcels as observed variables for the CSC and ISC latent variables. The internal con-

sistencies of the parcels were .46–.62 for the CSC and .60–.79 for the ISC.

Depression. The Self-Rating Depression Scale (SDS; Zung, 1965) is a 20-item instrument widely used in research to assess depression. Items are measured on a 4-point Likert scale ranging from 1 (*a little of the time*) to 4 (*most of the time*). Higher scores indicate more severe depression. Construct validity has been assessed using clinical evaluations, self-report characteristics, and EEG responses to auditory stimulation during sleep, with high correlations between constructs measured by each of these measures and the SDS. According to Zung (1965), a cutoff score of 50 or greater indicates clinical depression.

The scale has been validated among younger patients, emerging adults, and geriatric patients. In this current study, approximately 90% of the male participants and approximately 90% of the female participants obtained scores that were lower than this clinical cutoff score, with the mean score across all participants = 38.18 ($SD = 9.382$). Thus, following the convention set by Cantazaro and Wei (2010), the mean score for this current sample should be considered a representation of nonclinical depression such as would be found in any population of college students.

Internal consistency for the SDS has been shown to be .84 in a sample of college students (Cantazaro & Wei, 2010). In this current study, the coefficient alpha was .86. Item parcels representing the three domains measured by this scale (affective, cognitive, and somatic) were used to represent observed variables for the latent variable depression in the measurement model. (See Kitamura, Hirano, Chen, & Hirata, 2004 for further explanation of the method used for assigning items to parcels.) The internal consistency of the parcels was .52–.80.

Self-compassion. The 26-item Self-Compassion Scale (SCS; Neff, 2003b) was used to assess self-compassion. The SCS has six subscales that measure the three dimensions of self-compassion identified by Neff (2003b) and their theoretically derived opposite dimensions (Neff, 2003b). Thus, the subscales measured the self-compassion dimensions of self-kindness, common humanity and mindfulness, and their opposite dimensions of self-judgment, isolation, and overidentification. Following the instrument scoring convention outlined by Neff (2003b), the overall self-compassion scale score was calculated for each participant by coding the items comprising self-kindness, common humanity and mindfulness as 1 (*almost never*) to 5 (*almost always*), then "reverse coding the responses to the negatively worded items comprising the self-judgment, isolation, and overidentification subscales. Means were then calculated for each of the six subscales, and then the means were summed to create a self-compassion total score" (Neff, 2003b). Higher scores indicate greater self-compassion. A sample item is "I try to be loving toward myself when I'm feeling emotional pain."

Internal consistency for the overall SCS has ranged from .92 to .94 in undergraduate student samples (Neff, 2003b; Neff, Hsieh, & Dejitterat, 2005), with a 3-week test-retest reliability of .93 (Neff, 2003b). Discriminant validity was demonstrated via measures of self-esteem with between-groups differentiation found in levels of self-compassion (Neff, 2003b). For this current study, Cronbach's alpha was .92. In the measurement model, the linear combination of scores from each of these pairs of scales (self-kindness and the reverse scored self-judgment, common humanity and the reverse scored isolation, and mindfulness and the reverse scored over-

dentification) were used as observed variables for the latent variable, self-compassion. The internal consistency of the parcels was .77–.86.

Importance to others as an aspect of mattering. Importance to others as an aspect of mattering was measured using the 10-item Importance Scale of the Mattering Index (Elliott et al., 2004). Items are measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A sample item is “People do not care what happens to me” (reverse scored). Internal consistency for the importance subscale has ranged from .79 to .86 in samples of college students (Elliott et al., 2004; Raque-Bogdan, Ericson, Jackson, Martin, & Bryan, 2011). In this current study, the coefficient alpha was .83. Because the importance subscale is unidimensional, three parcels of items were constructed through random assignment of all scale items without replacement (Kishton & Widaman, 1994). These parcels were then used to represent the observed variables in the measurement model for the latent variable. The internal consistency of the parcels was .45–.63.

Fear of compassion. The Fear of Compassion Instrument (Gilbert et al., 2011) is comprised of three subscales: fear of compassion for self (FOCS; 17 items), fear of compassion from others (FOCO; 15 items), and fear of giving compassion to others (10 items). However, we used only the FOCS and the FOCO subscales, as these measured the constructs that related directly to the purpose of our research. Sample items are “I worry that if I start to develop compassion for myself I will become dependent on it” (FOCS) and “I try to keep my distance from others even if I know they are kind” (FOCO). Items for both subscales are measured on a 5-point Likert scale ranging from 1 (*don't agree at all*) to 5 (*completely agree*). Gilbert and colleagues reported that Cronbach's alphas for these subscales ranged from .85 to .92 in samples of college students and counselors. In this study, the coefficient alpha was .95 for the FOCS and .91 for the FOCO subscales. Three parcels were created for each subscale. Internal consistency of the parcels was .85–.85 for the FOCS and .75–.80 for the FOCO items.

Data Analysis

To assess model fit, we followed Anderson and Gerbing's (1988) recommendations, which were to use a two-step process when conducting structural equation modeling (SEM) analyses. They proposed that conducting a confirmatory factor analysis (CFA) of the underlying measurement model prior to evaluating the structural model is preferable to evaluating both models simultaneously. This process allows researchers to specify relationships among all observed to latent variables in order to provide evidence

of both convergent and discriminant validity of the hypothesized constructs (Campbell & Fiske, 1959). Then, if the convergent and discriminant validity estimates are acceptable, the test of the structural model is a confirmatory analysis of nomological validity (Cronbach & Meehl, 1955).

Regarding sample size for this study, SEM in general requires at least 15 cases per each measured indicator (in this case 15 Cases \times 13 Measured Indicators = 195; Stevens, 2002). Therefore, we judged that the current study had an adequate sample size for conducting SEM analyses ($N = 206$). Because the chi-square statistic is sensitive to sample size, we also evaluated both the CFA and SEM models using the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the Tucker Lewis index (TLI). The RMSEA is a population based statistic, which estimates how well a model fits to the data in comparison with no model at all (Jöreskog, & Sörbom, 1993). The CFI and the TLI are sample-based statistics that compare hypothetical models to alternative models, such as null or independence models. RMSEA values $< .05$ indicate a good fit of the model to the data. Values between .05 and .10 indicate an adequate fit, and values $> .10$ indicate a poor fit (MacCallum, Browne, & Sugawara, 1996). Values greater than .90 for CFI and TLI indicate an adequate fit (Bentler & Bonnet, 1980; Hu & Bentler, 1999).

Results

Prior to conducting the SEM analyses, descriptive statistics, including means, standard deviations, skewness, and kurtosis, were obtained, and Pearson correlation coefficients were computed among all study variables (see Table 1). Given that skewness and kurtosis ranged between ± 1.3 , we assumed that the data were normally distributed. All variables were strongly and significantly associated with one another; however, there was no evidence of multicollinearity (with no bivariate correlation > 1.85 ; Lei & Wu, 2007).

Next, using analysis of variance (ANOVA), we found no significant differences in internalized self-criticism, comparative self-criticism, fear of self-compassion, fear of compassion from others, self-compassion, importance, or depression as a function of gender, $F(1, 204)$ range = .021 to 3.773, $p > .05$; year in college, $F(3, 202)$ range = .121 to 1.483, $p > .05$; or ethnic group, $F(5, 200)$ range = .632 to 1.407, $p > .05$. Despite having unbalanced data, the Levene test statistic for homogeneity of variance was not significant at the .01 level for gender, with $p = .055$ to $p = .983$. Neither was the Levene test significant for year in school, with $p =$

Table 1
The Descriptive Statistics and Intercorrelations of the Study Variables

	Mean	SD	Skewness	Kurtosis	1	2	3	4	5	6
1. Internalized self-criticism	42.46	11.113	.160	-.255						
2. Comparative self-criticism	39.15	10.926	.316	-.459	.586***					
3. Depression	38.18	9.382	.616	.097	.504***	.606***				
4. Fear of self-compassion	28.99	11.300	.839	.473	.514***	.609***	.552***			
5. Fear of compassion from others	27.66	9.269	.564	-.112	.503***	.717***	.595***	.759***		
6. Self-compassion	81.21	19.581	-.206	-.646	-.752***	-.627***	-.644***	-.579***	-.573***	
7. Importance	40.05	5.616	-.879	1.238	-.312***	-.506***	-.516***	-.580***	-.605***	.414***

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

.065 to $p = .992$, or for ethnic group, with $p = .103$ to $p = .980$, indicating that there were no serious violations of homogeneity of variance for these variables.

Measurement Model

To analyze the measurement model, we used maximum likelihood estimation with no missing data. Goodness of fit statistics indicated that the model fit the data adequately, $\chi^2(168) = 380.617, p = .000, CFI = .936, TLI = .920, RMSEA = .079, 90\% CI [.068, .089]$. All loadings of the observed variables on the latent variables, $\beta = .711$ to $.936$, were statistically significant, $p < .001$, suggesting that all observed indicators adequately measured their respective latent variables (see Figure 2).

Structural Models

We calculated goodness of fit and confidence interval statistics for the hypothesized and the alternative models (see Table 2). Then, we compared the best fit model to the measurement model to see if it accounted for the data adequately. Additionally, we used bootstrap methods to examine mediation chains. Taylor, MacKinnon, and Tein (2008) indicated that several methods for evaluating single-mediator effects have been proposed and studied (e.g., Shrout & Bolger, 2002), but there has been less research conducted on longer mediational chains. These researchers introduced and compared different methods to evaluate a three-path mediated effect by

extending methods used to evaluate a two-path mediated effect, and indicated that resampling methods such as bootstrapping are preferable because measures of accuracy, such as confidence intervals, can be estimated.

Our hypothesized model best fit the data and, when compared with the measurement model, accounted for the data adequately. When comparing the hypothesized model to the measurement model using the Chi-Square Difference Test (Hu & Bentler, 1999), we found that the hypothesized model also provided a more parsimonious explanation of the data than did the measurement model, $\Delta\chi^2 = 1.082, \Delta df = 3, p > .05$. Therefore, the hypothesized model was not modified. Alternative Model 1, which was the reverse of the hypothesized model and therefore its equivalent, had identical fit indices (with the slight differences reported in Table 2 due to rounding errors).

In the Self-Criticism/Compassion Mediation Model (see Figure 3), significant β weights ranged from $.216$ to $.897, p < .05$. The path from comparative self-criticism to depression was serially mediated by fear of self-compassion and importance. This path was also partially mediated by self-compassion. Additionally, the path from internalized self-criticism to depression was partially mediated by self-compassion; however, there were no serial mediators between these two variables. The analysis of 1,000 bootstrap samples confirmed that the standardized indirect (mediating) effects were significant (a) from internalized self-criticism to depression, $\beta = .324, 95\% CI [.097, .654], p < .01$, (b) from

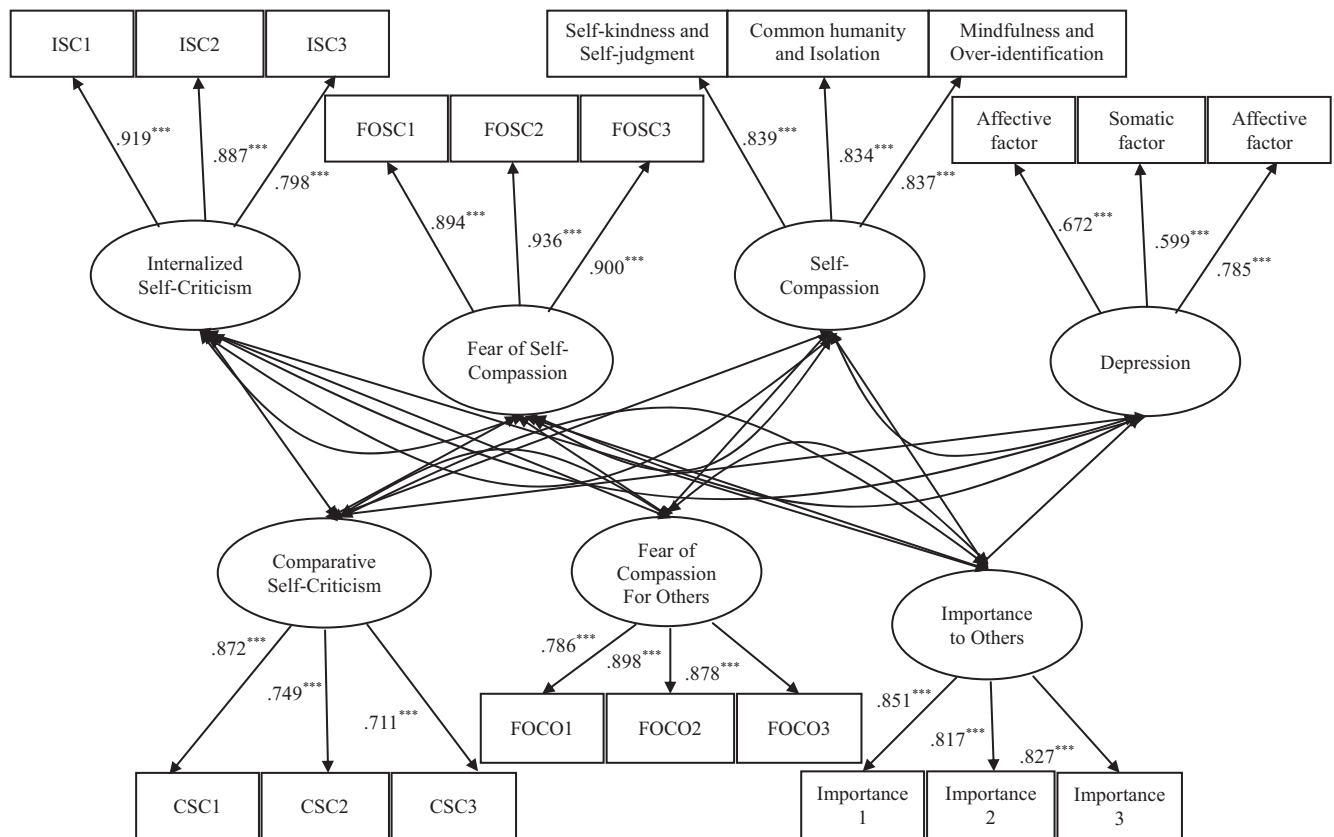


Figure 2. The measurement model. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2
Goodness of Fit Statistics of Measurement, Hypothesized, and Alternative Models

	χ^2	df	p	CFI	TLI	RMSEA [90% CI]
Measurement model	380.617	168	.000	.936	.920	.079 [.068, .089]
Hypothesized model	381.699	171	.000	.937	.923	.078 [.067, .088]
Alternative model 1 (The reversed model)	388.620	171	.000	.935	.920	.079 [.068, .089]
Alternative model 2	404.658	173	.000	.931	.916	.081 [.071, .091]
Alternative model 3	420.292	173	.000	.926	.910	.084 [.073, .094]
Alternative model 4	436.987	173	.000	.921	.904	.086 [.076, .096]

Note. CI = confidence interval; CFI = comparative fit index; TLI = Tucker Lewis index; RMSEA = root mean square error of approximation.

comparative self-criticism to importance, $\beta = -.459$, 95% CI $[-.876, -.115]$, $p < .05$, (c) from comparative self-criticism to depression, $\beta = .373$, 95% CI $[.186, .625]$, $p < .01$, and (d) from fear of self-compassion to depression, $\beta = .138$ [95% CI: .005, .372], $p < .05$.

Discussion

In this current study, the Self-Criticism/Compassion Mediation Model was assessed in order to examine the mediating effects of fear of self-compassion, fear of compassion from others, self-compassion, and the feeling that one is important to others on the relationships between internalized and comparative self-criticism and depression. Although the hypothesized relationships were only partially supported, results showed that when comparing the hypothesized Self-Criticism/Compassion Mediation Model to Alternative Models 2, 3, and 4, the hypothesized model best fit the data. These results indicate that fear of self-compassion, but not fear of compassion from others, as well as self-compassion and importance are significant mediators between self-criticism and depression, although they serve different mediating roles depending on whether comparative self-criticism or internalized self-criticism is being examined. These results also support Beck's (1964, 1983) theory regarding the relationship between self-criticism and depression, and provide evidence that self-criticism, in this case both

comparative and internalized self-criticism, predicts and maintains depression.

The reverse model (Alternative Model 1), which provides evidence that depression leads to self-criticism, was equivalent in fit to the hypothesized model. In a cross-sectional study, there is no way to differentiate between the two. However, since the hypothesized model has greater theoretical support than the reverse model (Beck, 1964, 1983), given that in Beck's view, negative, self-critical cognitions about oneself cause depression rather than being generated by depression, we judged the hypothesized model to be the model that was the more effective of the two in describing relationships among the psychological constructs being examined.

The three other alternative models also fit the data adequately, suggesting that there may be multiple pathways to depression. However, the Compassion/Self-Criticism Mediation Model produced better fit indices than Alternative Models 2, 3, and 4. It is more consistent with theory, and it best described the structure and patterns in the data. Therefore, counselors may want to use the model as a starting point when exploring the etiology of their clients' depression.

In the hypothesized model, the relationship between comparative self-criticism and depression was serially mediated by fear of self-compassion and importance. These results suggest that there is a unique path to depression among people who criticize them-

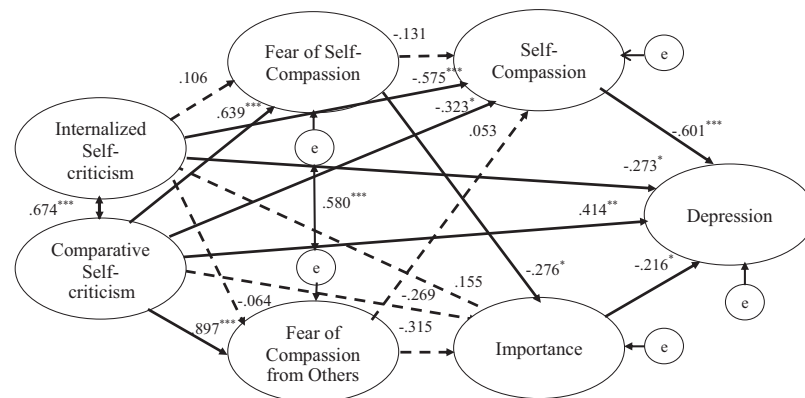


Figure 3. The Self-Criticism/Compassion Mediation Model (final model). Solid lines: significant paths, dash line: nonsignificant paths, e: structural error terms. In each structural model tested, bidirectionality between fear of self-compassion and fear of compassion from others was assumed, but because they are endogenous variables, we could not calculate their correlation coefficients within the model. Instead, we correlated their structural error terms (e1 and e2). In the Self-Criticism/Compassion Mediation Model (final model), this correlation coefficient was .580. * $p < .05$. ** $p < .01$. *** $p < .001$.

selves because they do not live up to others' perceived expectations of them. This is related to becoming afraid of self-compassion because they believe they cannot measure up to their own internal standards either. This is then associated with a transference of negative emotions onto others resulting in the individual feeling unimportant to others, which is then associated with depression. These mediated results suggest that it is this system of fear of self-compassion and feeling less important to others that is one mechanism that leads to and sustains depression among people who engage in comparative self-criticism. Therefore, as other researchers have suggested (e.g., Gilbert & Procter, 2006), people who are depressed may be able to be helped by addressing their fear of self-compassion and how they feel about their relative importance to other people.

The fear of compassion from others did not mediate effects in the hypothesized model. This could be because fear of self-compassion is a stronger personality construct given that individuals must always deal with the ways in which they experience themselves. However, future studies need to be conducted to clarify why the fear of compassion from others was absent from any mediation chains in this model.

Additionally, the findings that self-compassion partially mediates relationships between internalized self-criticism and depression and between comparative self-criticism and depression suggest that people who are self-critical and who are also depressed can benefit from attempts to be kind and understanding toward themselves. Those who are depressed, because they feel judged by others and because they are not able to meet their own internal standards, can also benefit from conscious efforts to treat themselves with kindness and to evaluate their lack of perceived perfection in the light of the imperfections of others. They can also benefit by being mindful of their thoughts and feelings, without resisting or overidentifying with them.

The results of this study highlight the respective roles of fear of compassion, self-compassion, and perceived importance to others as these variables mediate the relationship between self-criticism and depression. These results also extend the results of previous studies in which reducing people's fears of compassion and feelings of unimportance to others, and in which increasing their self-compassion, are all associated with less depression (e.g., Cantazaro & Wei, 2010; Mongrain, 1998).

Until self-critical clients understand the mechanisms that underlie their self-criticism, and until they understand how their fear of compassion is operating in their lives, they might not benefit from counseling interventions that are designed to help them develop self-compassion and to help them feel important to others (e.g., Mayhew & Gilbert, 2008). Therefore, the mediating roles of self-compassion, fear of compassion, and importance (as an aspect of mattering) between self-criticism and depression are notable findings that could assist counselors in helping self-critical people become less depressed.

Limitations

Because the current study used a nonexperimental, cross-sectional design, causality among study variables cannot be assumed. Directionality of the process of mediation also cannot be confirmed. Additionally, analysis of mediation in cross-sectional models can lead to inaccurate and even opposite results from

accurate longitudinal models (e.g., Maxwell, Cole, & Mitchell, 2011). Therefore, the results of this study should be interpreted with caution.

Additionally, only self-report data were used in the current study. Thus, monomethod bias could influence the interpretation of the results. Finally, only college students in one Midwestern university who were primarily White females participated in the study. Although no significant gender or ethnic differences were found among the study variables, the generalizability of the results of this study may be limited. While there were no mean differences, we did not test whether or not there were the same relations among the variables across gender. Therefore, given these limitations, the results of this study should be interpreted with caution.

Recommendations for Future Research

Recommendations for future research include examining the Self-Criticism/Compassion Mediation Model using longitudinal data in order to further estimate and confirm mediational effects. They also include examining the model within other populations including clinical, age-difference, ethnic, and cultural populations. Extant research examining cross-cultural differences in self-criticism have been a particularly fruitful area of study. For example, cross-cultural differences in self-criticism, social support, self-compassion, and depression have been found among Americans, Thai, and Taiwanese (Neff, Pisitsungkagarn, & Hsieh, 2008), and among Asians, Asian Americans, and European Americans (Taylor et al., 2004). Based on the cross-cultural differences reported in these studies, it could be possible that future research would find cross-cultural differences in the Self-Criticism/Compassion Mediation Model.

Recommendations for future research also include extending the model by including other variables that represent attachment styles (Bowlby, 1969, 1973, 1980; Gilbert, 2005, 2010). Recently, Cantazaro and Wei (2010) found that self-criticism fully mediated the relationship between attachment anxiety and depression and partially mediated the relationship between attachment avoidance and depression. Self-compassion and mattering were also found to partially mediate the relationship between attachment and mental health (Raque-Bogdan et al., 2011). Thus, the Self-Criticism/Compassion Mediation Model could be examined by comparing the effectiveness of the model in describing relationships between self-criticism and depression between people who have higher or lower levels of attachment anxiety and avoidance. Moreover, the model could be extended by included attachment style variables in order to investigate whether more secure attachment styles moderated individuals' fear of compassion, self-compassion, and feeling important to others as these variables mediated the relationship between self-criticism and depression.

Recommendations for Practice

Recommendations for practice center around addressing clients' self-critical behavior, fear of compassion, lack of self-compassion, and not believing that they are important to others (Rayle, 2006). Results of this study indicate that among self-critical people who engage in comparative self-criticism and who are depressed, fear of self-compassion serves as the gatekeeper for feeling important to others. Thus, it is important for counselors to help clients

acknowledge their fear of self-compassion in order to further realize how self-criticism keeps them trapped in this fear, and to understand how this fear could be a major obstacle to their welfare.

Helping them also understand that receiving compassion is not a weakness, and that they are worthy to receive self-compassion could be helpful to being less self-critical and being less depressed. Experiencing empathy from counselors could be a corrective experience that challenges self-critical people's fear of compassion through counselors' modeling of compassion toward them. This could help them develop self-compassion by experiencing what it is like to receive compassion in a less threatening setting. It also could help them understand and reflect on what it is like to be important to others, so that they can recognize this facet of social support in their lives and learn to seek it out when needed.

Specific psychotherapies, such as compassion-focused interventions (e.g., Gilbert & Irons, 2004; Gilbert & Procter, 2006), could be also used to help self-critical clients learn to become less afraid of compassion. Developing therapies such as these could be even more important when treating self-critical people who are depressed, because clients who suffer from these symptoms tend to be less responsive to already established treatments such as interpersonal or cognitive-behavioral therapy (Gilbert & Procter, 2006).

Conclusion

The Self-Compassion/Mediation Model has been shown to effectively model relationships among self-criticism, depression, fear of compassion, self-compassion, and the importance dimension of mattering. Findings from this study both confirm the results of previous studies and extend our knowledge base, especially in regards to how fear of compassion interacts with the other model variables. Understanding relationships among these variables can provide guidance for future research and practice as well. It is our hope that the identification of mechanisms that initiate and maintain depression, via the construction and investigation of the Self-Compassion/Mediation Model, will help counselors develop evidenced-based practice strategies for their self-critical clients who are depressed.

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